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Experiences with New Forest and Environmental Laws in European Countries with Economies in Transition

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Franz Schmithüsen / Georg Iselin / Dennis Le Master

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PREFACE

The 3rd International Symposium on "Experiences with new forest and environmental laws in European countries with economies in transition" was held in Jundola – Educational and Experimental Forestry at the University of Forestry (Bulgaria), 12 - 17 June, 2001. It was sponsored by the USDA Forest Service, additional support was provided by the ETH Zurich, the German-Bulgarian Forestry Project and the Bulgarian-Swiss Forestry Project. The Symposium was organized by the University of Forestry, Sofia (Assoc. Prof. Dr. Nickola Stoyanov) and IUFRO 6.13.00 (Peter Herbst). Altogether thirty-six participants representing seventeen countries participated in the 2001 Symposium.

Following two previous meetings in Ossiach (Austria), 1998 and 1999, the objective was to promote the exchange of information amongst researchers and practitioners active in forest law and environmental legislation in Eastern and Central European countries with economies in transition. It provided a forum for the exchange of experiences concerning the formulation, implementation and administration of newly adopted forest and forest related laws. It created an opportunity for participants from various countries, to get familiar with the new legal situation, and to identify open questions and impending problems. .

The symposium started with formal well-come speeches by Vice Minister Milko Stanchev (Ministry of Agriculture and Forests, Sofia) and Rector Prof. Dr. Dimitar Kolarov (University of Forestry, Sofia). The key note address on forest related policies and legislation was presented by Prof. Dr. Franz Schmithüsen from the Swiss Federal Institute of Technology Zurich (ETH). Country sessions followed and we were happy to welcome more new countries as Yugoslavia, Armenia, Bosnia and Herzegovina. We also had presentations from participants who had attended previous meetings with research papers on recent developments in Latvia, Lithuania, the Czech Republic, the Slovak Republic, Slovenia, Romania, Ukraine and Bulgaria. An interesting view from outside Europe was provided by our colleagues from Japan presenting a paper on "Forest Legislation in a Constitutional State - the Japanese Example".

The 2001 Symposium was again a success. I wish to express my thanks to all that have contributed to make it an interesting, useful and enjoyable event. Particular thanks are due to our colleague, Prof. Dr. Nickola Stoyanov for his friendly and patient support in organising the meeting, and to Prof. Dr. Dimitar Kolarov, Rector of the University of Forestry in Sofia for his hospitality in making available to us the facilities of the university in Jundola.

Everybody felt that there was a high demand for a follow-up in order to continue the discussions on open questions (left open and new ones) and to consider latest developments concerning the sector. I am glad to announce that IUFRO 6.13.00 will be in the position to cover this demand, following invitations by group members and participants, and to announce the 4th International Symposium on "Experiences with new forest and environmental laws in European countries with economies in transition" to be held in Latvia, August 2002. We also will organise the 5th International Symposium on "Experiences with new forest and environmental laws in European countries with economies in transition" in May 2003 in the Czech Republic.

Peter Herbst,

Leader IUFRO Research Group 6.13.00

REPUBLIC OF BULGARIA

MINISTRY OF AGRICULTURE AND FORESTS

NATIONAL BOARD OF THE FORESTS

To the Third International Symposium “The Experience of the Countries inTransition In the Field of the Forest and Environmental Legislation” Yundola, 12-16 June 2001,

Dear Participants in the Symposium,
Dear Guests,
Ladies and Gentlemen,
Esteemed Colleagues,

I would like first to say how pleased and honoured I am to be here and to welcome you to Bulgaria. I would like also to extend the regards of the Ministry of Agriculture and Forests and the National Board of the Forests to the organizers, participants and guests of the Third International IUFRO - Symposium on “The Experience of the Countries in Transition in the Field of Forest and Environmental Legislation”.

Since the beginning of the democratic changes in Bulgaria in 1989, our country has faced the extremely important issue of legislative amendments.

Up to 1997 the forestry sector had been functioning on the basis of provisions of the Forest Act of 1958 with state property of forest at hand.

By adopting the programme “Bulgaria 1997 – 2001”, the government of the United Democratic Forces determined the general priorities in forests and the forestry sector as a whole:

- Speeding up ownership restoration of the forests and lands within the state forest area;
- Management and utilization of state and private forests while balancing the economic and ecological factors of sustainable development;
- Separation of the state and economic activities in forestry;
- Privatization of structures in forestry;
- Adjustment of timber prices as well as the prices of other forest products to the international ones according to market principles;
- Observance of international treaties and conventions on biodiversity conservation and protected areas.

To fulfill these priorities, the forestry sector had to pass throgh an extremely hard and constantly changing phase. Fulfilment was based on the requirements for a general change in the legal and by-legal base in the field of the forestry. The staff occupied in forestry had to face the serious challenge to develop normative documents, in which apart from well-known and traditional requirements related to forest management, completely new market-driven elements and mechanisms, pluralism in property, etc, had to be introduced. Along with this and in accordance with national strategy for EU accession, recently enacted legal documents had to be harmonized with their Community equivalents.

It is obvious that a reform of such size entails development of a significant legislative framework, which supposes much intellectual labour and time. Three laws have been enacted by the National Board of the Forests and adopted by the Parliament, namely the Act on Restoration of Ownership of the Forests and Lands in the State Forest Area (1997), the Forest Act (1997) and the Act on Hunting and Game Conservation (2000) that has become the real basis for implementation of the priorities of forest sector reform. The Act on Protected Areas (1998) has been developed by means of our active assistance. 7 regulations (guidelines), 11 orders, 6 instructions and numerous ordinances, tariffs, methods and rules within the sector of forestry and hunting have been endorsed. In the field of nature protection legislation, experts working with National Board of the Forests took part in developing of draft-law on biodiversity, by which two conventions and directives of the EU will be applied on a national scale. The National Plan for biodiversity conservation was endorsed and the foundations of ecological forest certification were set down.

It is appropriate here to point out that carrying out this work out was possible only with the active participation of both scientific workers and practitioners in forestry. The utilization of this potential supported by information exchange and analyses of the legislation of the member-states as well as other countries in transition, provided the opportunity for accomplishment of the main tasks of Bulgarian forest reform. Of certain importance was the application of the related results to the two international symposiums organized by working group 06.13.00 of IUFRO that took place in Ossiach in June 1998 and September-October 1999.

Despite the enormous law-making activity, there are several issues that will be improved and up-dated in due course. This is a logical consequence of law applied in practice and analyzed and assessed from a scientific viewpoint. This will allow for consideration of some inefficient mechanisms of the past for establishment of more favourable forms and methods for simplification of the work in forests. This regard, we rely very much on the work of the Third International Symposium made easier and better by this forum being convened in Bulgaria.

We consider this Symposium not only as a responsibility but also as a positive assessment of the results achieved by Bulgaria during its development toward democracy and a market economy, especially in the field of forestry and nature protection legislation. We are convinced that the plenary reports and information exchange in forestry and nature protection legislation produced by this forum will lead to lots of important results and conclusions.

The latter will subsequently contribute to improvement and harmonization of the forestry legal framework so it should be much better basis for sustainable development under unified European criteria.

I wish you successful and fruitful symposium and a nice stay in Bulgaria! Good luck!

Milko Stanchev,

engineer of forestry,

Deputy Minister of Ministry of Agriculture and Forests

PROF. DR. DIMITAR KOLAROV

RECTOR

UNIVERSITY OF FORESTRY, SOFIA

Dear Mr. Vice-Minister,

Dear Mr. Herbst,

Dear participants in the Third International Symposium of IUFRO Research Group 6.13.00 titled “Experiences with New Forest and Environmental Laws in European Countries with Economies in Transition”.

Allow me to welcome you here to the “G. Avramov” facilities in Jundola.

Bulgaria has a long tradition in Forestry. Several years ago we celebrated two anniversaries related to forestry: 100 years since establishment of organized forestry activities in Bulgaria and 75 years since establishment of University education in Forestry.

Many important legislative documents have been elaborated and improved during this period: the Forest Act, the Act for Nature Protection and other documents. Our country has a rich experience regarding these topics, and this experience could be applied. After the beginning of the transitional period to a market economy and the changes in the political and social life of the country, many professors and assistant professors participated in the work of establishment of base for a new forestry and environmental legislation.

It is a honor for us, that IUFRO Research Group 6.13.00 has chosen Bulgaria to be a host of the third International Symposium.

I hope here in the beautiful forests of the Rila and the Rhodopes, participants in the Symposium will have an opportunity to present their experiences concerning forestry and nature protection legislation of their countries and will share their experiences with their foreign colleagues. I believe the Symposium focuses on a very important contemporary problem, and I also believe that it will fulfil its objectives.

Allow me to welcome participants in the Symposium once again and to express my best wishes for a very fruitful and pleasant meeting. I believe the results and recommendations of the Symposium will contribute to development of forestry and nature protection legislation in Bulgaria and in European countries in transition to a market economy.

I wish you success.

Prof. Dr. Dimitar Kolarov
Rector
University of Forestry, Sofia

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FORESTRY LEGISLATION IN CENTRAL AND EASTERN EUROPE: A COMPARATIVE OUTLOOK

ALI MEKOUAR AND ASTRID CASTELEIN
DEVELOPMENT LAW SERVICE FAO, ROME[1]

SUMMARY

Following the political changes of the early 1990s, most of the countries of Central and Eastern Europe have adopted new forestry legislation. This study begins with a brief examination of the reasons that have led to this rapid replacement of existing forestry legislation, as well as the constraints which such reforms have encountered (Section I).

Section II of the study examines how developments in the forestry legislation of these countries relate to international developments currently taking place. The overall opening up of Central and Eastern European countries to international contacts and co-operation has influenced the formulation of domestic policies and legislation, and international initiatives (such as those which led to the adoption of the Rio Forest Principles) have been well received. Harmonization of forestry laws of these countries with those of the European Community, with a view to future accession, is not necessary at this stage, since Community legislation is mainly limited to the regulation of forestry financing programmes. Nevertheless, Community legislation envisages forestry as one aspect of integrated rural development, which is an overall approach that the countries of Central and Eastern Europe may wish to follow.

Section III examines how six principal issues are treated in the emerging forestry legislation of the region. The analysis shows that sustainable development of forests is generally an express objective of the legislation. One of the most complex issues concerns the establishment of a legal regime for private forests, whether natural forests which may have been distributed to former owners or otherwise privatized, or planted forests. Excessively stringent rules (such as the imposition of detailed management plans still prepared by the administration) may discourage private forestry activities, and are difficult to implement and enforce. In most of the laws studied, integrated, participatory forest management has not yet replaced the traditional emphasis on technical forest management, although some innovations in this regard have been introduced.

Among the final considerations is the necessity for appropriate subsidiary legislation, and for a sustained commitment by governments to implementation of the newly designed legal strategies (Section IV).

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[1] This paper was originally authored by Maria Teresa Cirelli in 1998 and published as an FAO Legal Paper Online (http://www.fao.org/Legal/default.htm). Taking account of legal developments since then in the region, it was updated in May 2001 by Ali Mekouar from the FAO Development Law Service. Preparatory research work was contributed by Astrid Castelein.

INTRODUCTION

In the wake of the political and economic reforms of the early 1990's, most of the countries of Central and Eastern Europe have adopted new forestry legislation[2]. This process of replacing existing forest laws has taken place at surprising speed. Indeed, the issue of forestry legislation was often tackled before other complex issues also requiring urgent legislative attention.

In most cases, the perceived need for new forest laws has been related to reforms in the area of land tenure, mainly the recognition of private property rights, and has followed on the heels of the adoption of new land legislation and legal reforms aimed at privatizing various aspects of the economy. The influence of these trends on forest policy and law has varied from country to country. In some cases privatization has extended to the ownership of forest resources and lands. In other cases, however, while the trend has been to distribute *agricultural* holdings among farmers or former owners, some governments have decided to retain the ownership of *forest* resources and lands.[3] Nevertheless, even in such cases, the new laws almost always provide for some form of privatization in the forestry sector, for example by allowing individuals or private companies to engage in forestry, with a reduction of State involvement in activities like logging, processing, marketing and fixing of prices, and with a growing openness to foreign competition. Although specific strategies have varied from one country to another, the general intention has been to restructure over-controlled and often inefficient State properties and enterprises.

Sometimes the adoption of new forestry legislation has also been seen by newly established governments as a way of giving further proof of their commitment to the new course, and demonstrating their effectiveness in dealing with such complex land issues.

In any case, new forestry legislation was perceived as an urgent necessity and was often hastily adopted. The success of such an approach faced many constraints. Existing expertise in the concerned countries was ill-suited for the purposes of designing whole-scale legal reforms in the forest sector, since that expertise had been developed almost entirely within previously existing systems. In some cases, previously instilled ideas have made it difficult to achieve substantial reform. In Armenia, for example, an extremely conservationist policy imposed by the central Government while the Republic was part of the Soviet Union has continued to exert its influence over the newly independent Armenian Government, making it reluctant to provide for *any* form of exploitation of forests in the new forest policy and legislation.

Even where technical assistance in forestry law was sought from abroad, or where the experiences of market economies were closely considered, the complexity and

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[2] A list of the legislation examined for this study is set forth at the end. Armenia was included because of the similarity of its conditions to those of the European countries considered.

[3] For example, in Estonia the restitution programme is expected to lead to a privatization of 40-50% of the country's forests. In Hungary, 40% of the forests currently belong to private owners, although large forest areas, ecologically valuable areas and strictly protected forests remain the property of the State. Other countries are currently considering restitution to former owners or other forms of transfer of ownership of State forests which would lead to an even wider privatization (probably over 50% in Romania and up to 80% in Slovenia). In Albania and Armenia, the administration has not envisaged such wide privatization schemes for forest land, allowing only the creation of newly established "private" forests.

unprecedented nature of the transformations that these countries were undergoing made it difficult to identify clear, satisfactory policy arrangements.

The initial general assumption that privatization would consist of a transfer of ownership and that this, in itself, would lead to a revitalization of the economy has proven to be simplistic. Privatization, rather, required the establishment of a specific regime based on a balance between State action and private initiative, with a clear determination of each party's rights and responsibilities. Legislation was therefore crucial, but time was also required to assess the consequences of particular privatization programmes or policies, and to readjust them as necessary.[4]

The difficulties of identifying appropriate forest policy options were thus reflected in the formulation of new forestry legislation. In many cases the newly adopted legislation left a lot of the substantive regulation to the subsidiary legislation or to other texts to be subsequently adopted. This was appropriate to the extent that numerous issues required experimentation before they could be dealt with in detail in legislation. On the other hand, there remained significant loopholes in the emerging legal regimes. For example, in Russia and in some of the Republics of the former Soviet Union, as in Armenia, the newly adopted legislation practically ignored private forests, being based on the assumption that separate legislation would deal with them at a later stage. In the case of Russia, the "Principles of Forest Legislation" adopted in 1993 were already replaced by the Forest Code of 1997, but the latter still only addresses private forestry marginally.

Furthermore, various problems of the forest sector were mainly due to circumstances that were beyond the direct reach of legislation. For example, the loosening of State control, fuel shortages, poverty and fear of instability of ownership rights were often the underlying reasons for the rise in illegal felling. Economic difficulties also increase the risks of over-exploitation by governments themselves, which in difficult years could be tempted to draw excessively from forest resources to obtain badly needed capital for investments.[5]

This study outlines how some of the most significant issues have been addressed in the recent forestry legislation of countries of Central and Eastern Europe.[6] Although it includes some suggestions for improvements, it is not primarily intended to make comprehensive recommendations in this regard. The analysis has been limited in scope to forestry laws (mainly principal legislation), and does not extend in detail to related legislation and policies, such as those on land tenure, agriculture, protected areas etc. In addition, the focus is on newly adopted forestry legislation. While an examination of pre-existing legislation would be instructive for comparative purposes, it is beyond the scope of this study.

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[4] Frydman and Rapaczynski (1994) illustrate how privatization in Eastern Europe should be seen not as mere ownership transfer, but as a comprehensive reform intended to liberate the productive forces of a society. It is a "prototype of a microeconomic restructuring process, in which the elements of design must work in tandem with unpredictable, spontaneous evolution of economic institutions."

[5] Marghescu (1994) warns against the risks of overexploitation not only by private owners through illegal fellings, but also by governments implementing unsustainable policies.

[6] The forest laws and regulations reviewed for this study were mostly adopted between 1992 and 2000.

INTERNATIONAL INITIATIVES

The transformation of forestry policy and legislation in Central and Eastern Europe has been taking place within an international context characterized by globalization.[7] This trend is reflected both in the development of domestic policies and laws in ways that are similar in different countries, and in the participation of countries in numerous international initiatives.

As regards domestic legislation, for example, numerous countries, not only in Central and Eastern Europe, are moving towards a reduction of State control, the departure of forestry institutions from the civil service and greater involvement of the private sector in forestry. An even larger number of countries have accepted the principle of sustainable development and have developed laws embodying it as a guiding concept (e.g., by establishing maximum allowable harvesting levels, requiring that logging be done only in accordance with management plans, etc.).

There have been numerous initiatives at the global, international and regional levels, including a so far unsuccessful attempt to develop a global international legal instrument on forests. A number of international agreements, both global and regional, deal with forests, although not exclusively. International co-operation in forestry has also led to the adoption of significant soft law instruments, particularly the “Rio Forest Principles”.[8] Although not legally binding, and expressed in general terms, the Rio Principles embody a number of concepts on which the international community has reached a consensus, from sustainable development and biodiversity, to trade in forest produce and international technical co-operation. Although it is clearly recognized that countries have sovereign rights over their forest resources, they are urged to implement the Principles within their national forestry policy and legal frameworks. Various references to relevant parts of the Principles are made in the following part of this study.[9] In general it can be said that the Central and Eastern European countries are moving in the directions recommended by the Principles as they reform their forest policies and legislation. The Georgian Forest Code of 1999, for example, refers directly to the Rio Principles as basic principles for the protection, management and development of Georgia's forests (sec. 4).

With the transformation of their economies, the countries of Central and Eastern Europe have expanded their co-operation with other countries. The process of

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[7] Pettenella (1997) identifies three main trends which affect public institutions in the reform of public forestry administration: globalization of policies and institutions; search for greater efficiency in public administration; and the need to enlarge participation in the decision-making process.

[8] “Non-Legally Binding Authoritative Statement of Principles for a Global Consensus on the Management, Conservation and Sustainable Development of All Types of Forests”. Other soft law provisions relating to forests are found in Agenda 21, whose Chapter 11 (“Combating Deforestation”) recommends the development of forest strategies in every country, and describes the various policy areas which can address deforestation. It also emphasizes the importance of involving affected groups in forest management.

[9] Stewardship Council and the World Commission on Forests and Sustainable Development. Other international initiatives at the global level include: (i) the establishment in 2000 of the United Nations Forum on Forests to consider, inter alia, the parameters for developing a possible international legal instrument on forests; (ii) the establishment in 1997, under the aegis of the UN Commission on Sustainable Development, of the Intergovernmental Forum on Forests, to continue the policy dialogue on forests that was initiated in 1995 by the Intergovernmental Panel on Forests; (iii) non-governmental initiatives, such as the establishment of the Forest

forestry legislation reform has in itself stimulated these countries to seek international contacts in order to exchange views and obtain information, with each other and with the rest of the international community. Among the positive consequences has been the progressive accession to international environmental agreements.[10] In this regard, Georgia's Forest Code provides that international agreements and treaties ratified by Georgia are part of the country's legislation dealing with, in particular, tending, protection, restoration and use of forest resources (sec. 2).

Among the relevant international initiatives in which European countries in transition have directly participated is the Helsinki process.[11] One of the Resolutions adopted following the Helsinki Conference (Resolution H3) specifically concerns co-operation with countries with economies in transition. The Resolution was signed by many countries of Central and Eastern Europe, as well as by the European Community. It recognizes the importance of forestry for countries in transition in relation to the development of their political, economic and social conditions, the possible consequences for forest conservation in the transition period, and the importance of enacting programmes to support sustainable forest development in these countries. It then emphasises the importance of co-operation, which may take the form of transfer of knowledge, bilateral and multilateral projects on technical, institutional and legal matters. Among other things, co-operation should lead to the development of information exchange and monitoring systems relating to transboundary factors causing forest damage, such as air pollution, fires, nuclear radiation, game and others. Among other possible donors (ECE, FAO, UNEP, UNDP, WB), the European Community undertakes to co-operate in mutually beneficial projects.

An issue of concern to the countries of Central and Eastern Europe is how their forestry policies and legislation should be adapted specifically with a view to their future accession to the European Union (EU). As regards forest management, a number of areas will require some intervention. For example, data collection and processing will have to be improved and harmonized in co-operation with European Union countries, and this will require a significant effort, particularly in light of the increasing privatization and consequent fragmentation of forest properties.

On the other hand, as regards the impact of future membership in the EU directly on forest legislation, the modifications which may be required are rather limited at this stage, since the European Community has not adopted a formal forestry policy, nor legislation imposing a specific common forestry regime for its member countries. Existing EU legislative texts that are related to forestry mainly deal with funding for afforestation, forestry statistics, forests' biodiversity, and the protection of forests

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[10] Global instruments include the 1992 Convention on Biological Diversity, the Ramsar Convention of 1971, the World Heritage Convention of 1972, the 1973 Convention on International Trade in Endangered Species of Wild Flora and Fauna (CITES), the Climate Change Convention of 1992 and its 1997 additional Protocol of Kyoto, the Desertification Convention of 1994, and the International Tropical Timber Agreement of 1994. Regional agreements relating to European countries include the 1979 Convention on the Conservation of European Wildlife and Natural Habitats.

[11] Following an initial Conference held in Strasbourg in 1990, a European Ministerial Conference took place in Helsinki in 1993 and adopted four resolutions, which were signed by most Central and Eastern European countries. Five years later, at the third Ministerial Conference on the Protection of Forests in Europe (Lisbon, 1998), pan-European criteria and indicators for sustainable forest management were adopted, and pan-European operational-level guidelines for sustainable forest management were endorsed.

against fires and atmospheric pollution. However, by a resolution of 1998, the Council of the European Communities adopted a EU forestry strategy, which identifies the main elements for sustainable forest management.[12]

There is, however, a general trend which the countries aspiring to accession to the European Union may consider. Although recognizing the importance of forests from an environmental perspective, relevant Community legislation thus far mainly envisages forestry as an aspect of rural development, and particularly as an alternative or a complementary activity to agriculture. Funding for afforestation activities, for example, is provided exclusively to farmers or their associations, pursuant to Regulation 2080/92 dealing with the aid regime to forestry measures in agriculture. Under this Regulation, planting of trees, tending to them for the first five years and other forestry improvement works may be financed. Compensation for abandoning crop cultivation in favour of forestry may also be available.

It would therefore be useful for the Central and Eastern European countries to address their agricultural and forestry policies in an integrated manner, taking other related policies (on environment, industry, economic development) into consideration. Although more specific legislation may have to be adopted in this regard at a later stage, it would be important, even now, to provide for integrated management in forest laws. This would argue against, for example, the preparation of forest management plans by forestry administrations in isolation, without any consultation with other authorities and the public, and particularly without consideration of interests other than strictly technical forestry matters.

PRINCIPAL ISSUES

Sustainable Development of Forests

The newly adopted forest laws of Central and Eastern European countries widely recognize the multiple beneficial role of forests and the need for their sustainable use.[13]

The Croatian law of 1991, for example, refers to protection of soil from erosion, influence on water resources and hydroelectric power systems, soil fertility and agricultural production, climate, environment, oxygen generation, scenic beauty, recreation, tourism, hunting and even national defence (sec. 2).

Similarly, the Hungarian law of 1996 establishes that forests should be exploited in a sustainable manner, at a rate which allows their conservation for future generations, referring in particular to preservation of biological diversity, fertility and capacity to regenerate, and to defence, health, welfare, tourism, research, education purposes (secs. 2 and 15). It is expressly requires that the creation of forestry districts for management purposes be done taking into account the possibility of sustainable forestry (sec. 11), and that any division of forest land be allowed only if it does not hamper sustainability (sec. 74).

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[12] Resolution of 15 December 1998 on a forestry startegy for the European Union.

[13] The Rio Forest Principles also suggest that all aspects of environmental protection and social and economic development as they relate to forests and forest lands should be integrated and comprehensive (Principle 3 (c)).

Likewise, the Estonian Forest Act of 1998 provides for the management of forests as a renewable natural resource with a view to satisfying economic and other needs of the population without causing unnecessary damage to the natural environment (sec. 1). The same objective is spelled out in the first chapter of the Georgian Forest Code of 1999.

Forest management has traditionally been envisaged as a technical discipline exclusively within the competence of professional foresters. Management plans were usually prepared in a scientific manner by the administration and applied to their respective areas. Violation of such plans could be an offence. In Kosovo the plans remain the basis of permission to harvest timber from both public and private land. The newly established Kosovo Forest Authority must select and mark all trees on the basis of the plan before cutting (Law on Forests, secs. 20, 21, 35; UNMIK Reg. No. 2000/27, sec. 2.2(k); Adm. Dir. No. 2000/23, sec. 1).

This attitude continues to be reflected in the new legislative provisions on management planning. In most Central and Eastern European countries, the preparation of forest management plans is expressly required and the issuing of harvesting authorizations is tied to them. This is an appropriate means of ensuring sustainable exploitation of timber resources.[14]

Planning, of course, requires a careful consideration of the existing status of the resources, and this in turn is dependent on the availability of detailed and accurate information. In this regard, it would be advisable for legislation to require that entities involved in forest management provide information to those responsible for planning, especially as an increasing number of these entities are now private. Examples of provisions of this kind in the studied legislation are not frequent.

Some examples, however, are found in the Forestry Act of the Czech Republic (sec. 40) and in Georgia's Forest Code (sec. 10). Both require provision by private forest owners of statistical and other information on the condition of their forests. In Lithuania as well, forest owners are required to submit statistical data on cuttings and reforestation pursuant to the 1997 Regulations on Private Forest Management and Use (sec. 25-9). Although in other countries similar requirements may be introduced through subsidiary legislation, the analysis of most existing acts, such as Estonia's Forest Law of 1998, shows that the collection of information remains largely a governmental responsibility.[15]

Sustainable forest management is also addressed in all of the laws which have been reviewed by establishing at least basic requirements regarding the harvesting of resources.[16] These usually apply to both State and private forests. In Romania, for example, the set of applicable rules included in the Forest Code, referred to as the “sylvicultural regime”, applies to the whole “forest estate”, which includes public and

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[14] An exclusively technocratic approach, however, is inadequate from the point of view of integration of forestry with related sectors, and with respect to public participation, as pointed out below (3.3).

[15] Contrary to this trend, the Rio Forest Principles recommend the provision of timely, reliable and accurate information on forests as being essential for public understanding and informed decision-making (Principle 2 (c)). They further suggest that scientific research and forest inventories carried out by national institutions should be strengthened through effective modalities, including international cooperation (Principle 12).

[16] The subsection below on forest utilization deals with this aspect in more detail.

private forests. In most laws, owners are made responsible for the adequacy of timber harvesting practice, as well as for facilitating appropriate regeneration techniques. They also are generally made responsible for activities designed to prevent harm to forests, such as the prevention of pests and diseases, “torrent control”, and even damages caused by game. A rather detailed list of requirements is found, for example, in the law of the Czech Republic (secs. 31-35). Under the Estonian Forest Law (sec. 24), the Georgian Forest Code (sec. 10), and the Lithuanian Regulations on Private Forest Management and Use (sec. 25), forest owners are responsible for the conduct of protection measures against pests, diseases, and fires.[17]

Countries also tend to require that forest management be carried out by appropriately trained professional foresters. This may be an additional obligation imposed on forest owners, as is done for example in the law of the Czech Republic (sec. 37). Croatia’s Law on Forests (secs. 28 and 42) and Lithuania's Regulations on Private Forest Management and Use (sec. 17) specify varying levels of required forestry training depending on the type of activity to be carried out, either by forest service staff or by private forest owners. The Albanian Regulation on the Granting of Professional Licences (1998) indicates the activities related to forestry, water supply and wildlife for which a professional licence is required, in respect of both national and foreign operators (sec. 3). These kinds of provisions, it should be noted, involve the risk of discouraging private land owners from practising forestry. They should therefore be carefully balanced with appropriate incentives, drawing upon a realistic appreciation of the owners’ financial and practical capabilities.[18]

Privatization and Private Forestry

The “privatization” of the forestry sector has typically included a number of different objectives in different countries. The following strategies have been the most common, and have been pursued to different extents and in a variety of ways:

- restitution, sale or other distribution of forested lands to former owners or other private entities, and specification of the regime applicable in privatized forests[19];
- harvesting of trees, or planting or other forestry activities carried out by private entities, on private or State land;
- transformation of State enterprises carrying out forestry and related activities;
- liberalization of forest produce prices.

Any of the above objectives requires an appropriate legal regime. Such a regime is frequently not provided by the principal forestry legislation. For example, even where there have been large programmes for the restitution of forest lands to former owners, this is not usually referred to in the forestry legislation, since the enabling

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[17] In Bulgaria, however, such tasks are the responsibility of the Forestry Department's local staff (secs. 32 and 35 of the 1994 Forestry Act).

[18] Other considerations in this regard are made in the subsection below on privatization and private forestry.

[19] A legal basis for this kind of action can be found, for instance, in Albania's Law No. 8337 of 30 April 1998 on "giving ownership in agricultural lands, forests, pastures and meadows".

provisions may be included in a general land privatization law[20], or in a separate act specifically made to that effect, such as Georgia's law on the privatisation of forests[21]. The structure and functions of the former State enterprises may have been transformed by administrative instruments, and although some forest laws specify the renewed functions of the forestry administration, any "privatization" process which may have taken place (for example, splitting up of formerly vertically organized enterprises and sale of the processing units) is not addressed in them. Forest laws are also usually silent regarding prices or other payments due in relation to forest produce, although this may in itself imply a liberalization.

Regulation of Private Forests

A basic "privatization" issue facing practically all Central and Eastern European countries is the establishment of an appropriate regime for private forests. It is important for all countries to strike an appropriate balance between governmental control and encouragement of private initiative; this becomes a particularly urgent matter where wide areas of forests are now (or soon will be) held by private entities, as is the case in many of the countries under study. Following the vast privatization of forest resources, forest administrations may be prepared to lose part of the potential revenues deriving from those resources. However, they continue to consider all of the country's forests as a productive resource which requires appropriate management, and reject the possibility of leaving large forest areas outside the scope of management schemes prepared by them or under their supervision. Given the lack of professional competence and financial capacity of new forest owners, forestry administrations take the position that appropriate management cannot be carried out by entities other than themselves.

In examining these perspectives, forestry administrations should evaluate the government's actual interest in retaining firm control over the management of private forests, and weigh that interest against the costs involved. The preparation and monitoring of plans for private forests is likely to entail heavy costs, given the number and variety of owners and individual forest areas. Assuming that the financial benefits from private forests will go mainly to the owners, it is possible that the interest of forestry administrations in being involved in the detailed management of such areas will diminish, particularly if the law in any event requires owners to observe basic forest protection rules. On the other hand, governments may retain an interest in increasing overall domestic forest production, whether or not this comes from the public or private sector; in this case they may feel that leaving resources unexploited is unacceptable, even when owners may wish to remain inactive.

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[20] This is crucial legislation for the success of any privatization programme. There are many possible conflicts which legislation should attempt to prevent, taking into account the peculiarities of forest lands. For example, there may be lands which have recently been logged and for which the owners may or may not be entitled to recover revenue; there may be areas where the State administration has invested on planting or other regeneration and for which it may or may not be entitled to recover expenses from the owners. The law should specify whether and to what extent any claims may be raised by the owners and by the State respectively. It should also attempt to resolve the numerous problems of succession which are likely to arise (e.g., what entity, if any, may succeed bodies which no longer exist ?).

[21] That law is referred to in section 9 of the Georgian Forest Code of 1999.

The legislation of some of the countries, such as Russia, Armenia and Bulgaria, does not address the issue of management of private forests, and is based on the assumption that this may be dealt with in other legislation. Some other countries' laws, such as those of Croatia (secs. 34-36), Kosovo (secs. 20-21), Slovenia (sec. 9) and Romania (sec. 66), still require the preparation of management plans by the administration regardless of ownership, and make the implementation of such plans compulsory for the owners.

Other countries choose to experiment with various “compromise” solutions. Pursuant to the Estonian Forest Act of 1998, private owners must sustainably manage their forests (sec. 26-3), in conformity with applicable management plans or recommendations. At the same time, they are allowed to participate in the preparation of such plans and recommendations (sec. 7). On the other hand, forests to be privatized must be managed under the responsibility of the Minister of Environment until they are actually transferred to the private owners (sec. 57)[22].

The fact that the central figure in the Hungarian law of 1996 is the “forest manager” (rather than the forest “owner”) also shows an inclination towards forest production. The law makes the forest manager responsible for submitting a ten-year operational plan and an annual forestry plan, to be approved by the authorities (sec. 26). The problem of the management of forests being fragmented among different owners, which is of concern in many of the countries being considered, is addressed in Hungary by requiring that under specified conditions, owners of those forests must conduct joint forestry activities on them and appoint a common forest manager (sec. 13-4).

The Polish law of 1992 envisages the preparation of simplified plans for forests which are not the property of the State Treasury (sec. 19). On request and at their expense, management plans may be prepared for individual legal persons owning forests (sec. 21). Plans may be prepared at the expense of the State budget if this is requested by the *voivodship* governor for villagers’ forests which are the property of physical persons (sec. 21). These provisions have been accompanied by a strong policy of co-operation with private owners. The administration has been particularly careful in taking the role of an advisor and extension agent for private forest owners, and has been successful in developing a productive relationship with them (Baresi, 1994).

Under the 1994 Forestry Act of Lithuania, in order to prevent excessive fragmentation of forest properties, a prohibition against dividing them into parcels which are smaller than 5 hectares has been established. For the same purpose and to encourage appropriate management practices, priority in purchasing forest lands is granted to forest professionals and owners of neighbouring forest lands (sec. 5). Among incentives to private forestry is the exemption of forest lands from land tax, and a general encouragement of co-operatives. The adoption of regulations is expressly required to specify the degree of control which may be exercised by forestry officers on private forests (sec. 7). Subsidies and credit may be provided by

[22] Note that lands that belonged to the State until 23 July 1940 and that are now covered with forests are not subject to privatisation.

the government to private owners for forestry works, and compensation must be granted to them if their rights are restricted (sec. 8). In any case, forest owners are obliged to protect forests and allow their regeneration as appropriate. Management issues are also addressed under the 1997 Regulations on Private Forest Management and Use. Implementation of management plans is a responsibility of the forest owners. However, forest inventories and management plans must be prepared by the Forest Management Institute, and monitored by the Ministry of Agriculture and Forestry, in collaboration with the Ministry of Environment. Management plans must then be cleared by the relevant administrations and formally approved –or changed as required– by the Government (sec. 8).

Under the law of the Czech Republic, owners of forests which are larger than 50 hectares are obliged to arrange for the preparation of a forest management plan (sec. 24). The issue of management planning for smaller forests is addressed by establishing that, where their owners have remained inactive, the administration may prepare "guidelines", and the owners may notify their "management intentions" before their final approval. Following the adoption of the guidelines, the owners may choose to formally accept the form of management specified in them, in which case they are bound by some of the contents of the guidelines (for forests smaller than 3 hectares, only the maximum allowable cut; for larger forests, the maximum allowable cut and some regeneration techniques) (sec. 25). A specific part of the law addresses "promotion of forest management", listing possible services or financial aid which may be provided, to be specified in annual governmental rules (sec. 46).

It would be inappropriate to try to identify, among the examples which have been described, those which may be taken as a useful model for the whole region.[23] In general, any provisions encouraging the creation of associations or consortia among forest owners may be recommended (although unpleasant memories of the "co-operative" model in the countries of Central and Eastern Europe may create psychological obstacles). Such an objective would have to be appropriately supported through funding programmes, facilitation of access to credit, tax exemptions, etc. In this regard, the Lithuanian Regulations on Private Forest Management and Use provide that, with a view to effectively managing forests, forest owners may voluntarily form cooperatives, establish funds and otherwise join efforts and pool resources to undertake forestry activities of common interest (sec. 5). In Hungary, owners of forests may establich profit-making associations under the 1994 law on forest owners' associations, which regulates the constitution, organization, operation, rights, duties and responsibilities of those associations and their members.

The forest administration could directly participate in owners' associations, with an advisory function, or simply exercise an external control function, e.g., approving proposed management plans. Where the State owns some of the neighbouring properties, it could become part of the agreement like any other forest owner. Owners and their advisors could agree on the manner of utilization of the concerned

[23] Some of the observations and recommendations made in this section were first made in an interim report on forestry legislation by the author and M. Uliescu (1997), as consultants for FAO to the Government of Romania on forestry legislation, particularly with respect to the adoption of a legislative framework for private forests.

forest areas (the properties of the participants) and arrange for the provision of necessary services in an entrepreneurial manner (e.g., run auctions to sell timber or other produce, select contractors, hire surveillance personnel, build infrastructure, etc.). If owners were left free to expressly agree or disagree to any particular management measures recommended by the association or consortium regarding their particular land, they may be more willing to enter into such arrangements.

In addressing related issues together with forestry (e.g., tourism, provision of related services, etc.), these initiatives could be beneficial for local development if they cover a significantly large area of land. They may also be more likely to obtain international or other sources of funding than isolated investment actions over individual forest properties. For example, numerous European Union funding programmes are directed at integrated rural development initiatives, and in some cases already cover associated non-member countries in Central and Eastern Europe.

The adoption of a legal framework providing these options for private forests, as well as appropriate incentives, will not be sufficient unless accompanied by an adequate extension and educational campaign concerning the possibilities being offered to forest owners, the potential losses caused by inadequate forest management, and the potential benefits of appropriate forest management.

Tree Planting

Unless otherwise provided, the legal regime applicable to private forests applies to natural as well as planted forests on private lands. It therefore could have a strong influence on people's initiatives with regard to planting.[24] If a country wishes to encourage tree planting, whether within or outside the state forest estate, it should avoid legal provisions which may act as disincentives. Countries should therefore determine an acceptable level of State involvement with regard to plantations, wherever they are located.

At present, provisions conducive to plantations are generally lacking in the forestry legislation of the region's countries. In Hungary, for example, in the case of the plantation of new forests, it is the forest authority which must determine the primary purpose of the plantation, although the authority cannot "refuse to approve the commercial purpose of a forest planted lawfully, without using State subsidy" (sec. 16 of the 1996 law). A specific "plantation-implementation plan" must be approved by the forest authority (sec. 35). In any case, the State "grants support to plantations", as may be specified in regulations (sec. 34). Regulations on Forestry Planting Materials were adopted in 1997 (Decree No. 91) with a view to preserving and developing forest ecosystems and their genetic diversity. Thus, State support to tree planting is aimed at extending the forest domain and improving the conditions of the natural environment.

In Romania, in the absence of an express exemption in the Forest Code, it must be assumed that planted trees in the forest estate (which comprises private lands) are subject to the same "sylvicultural regime" as natural ones, that logging is subject to

[24] Concerning planting of trees, the Rio Forest Principles emphasise the role of planted forests as sustainable and environmentally sound sources of renewable energy and industrial raw material, as well as an employment-generating activity for local populations (Principle 6 (d)).

the same authorization as for natural timber, and even to the annual maximum allowable cut limit. Post-logging regeneration is the responsibility of the owner. This regime is likely to result in a significant disincentive for private plantation, since the only exemption is for lands outside the existing forest estate (sec. 68).

Under the Estonian Forest Law, reforestation issues are addressed together with seed production and natural regeneration (secs. 10 and 11). Private forest owners are required to replant clear cut areas as well as degraded areas of both protection and commercial forests. If an area is not properly regenerated within seven years, the Forestry Board must arrange for its reforestation at the owner's expense[25].

"Forest Estate"

The expression "State forest estate" or "national forest estate"[26] is commonly used in the legislation of the countries considered. In some cases the forest estate is composed of forest lands belonging to the State. In others, however, it includes all significant forest lands, regardless of their ownership.

Pursuant to the Russian Forest Code of 1997, the forest estate is defined as including "all forests", excluding only defence lands, urban settlements and municipal forests, and its boundaries are identified by demarcation (sec. 7). In light of this provision and of section 19, which establishes that the forest estate is under Federal State ownership, private property of forests can hardly be recognized. However, trees on private land are stated to be the property of the land-owner (sec. 20).

In Albania, the law lists and defines lands which must be considered to be part of the forest estate, which also expressly includes State, Communal and private forests (secs. 2 and 3). It also establishes a procedure for the admission and exclusion of lands into and from the forest estate, so that it is such formal recognition which actually makes any land a part of the forest estate (secs. 2 and 7).

In Romania, the Forest Code also defines in its initial provisions which lands constitute a part of the national forest estate (secs. 1-3). It subsequently refers to the forestry cadastre which is current at the date of entry into force of the Code for the identification of the estate (sec. 5). Both public and private forest lands which have been determined to be part of the forest estate are subject to the "sylvicultural regime" ("régime forestier").

In Bulgaria, the Forestry Act uses the notion of National Forest Stock, which basically encompasses all forests, including "glades, pastures, cuttings, rocks, moraines, lakes, burnt out areas, barrens and screes within the boundaries thereof" (sec. 3)[27]. All lands of the national forest stock are publicly owned (sec. 2).

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[25] Chapter XVI of the Georgian Forest Code deals with forest plantations, mainly in the State forest estate. These plantations are primarily meant for the sustainable production of wood and other forest products. They must be carry out in accordance with the "Regulations for Managing Forest Plantations", to be prepared by the Forestry Department.

[26] The expression is often inappropriately translated into English as "forest fund", since in the respective original language the term is often derived from the Latin root "fundus" (e.g., "fondul" in Romanian, "fond" in Albanian, etc.). In French, this concept is generally known as "domaine forestier".

[27] "Forest" is defined as any land exceeding 1 decare, covered or planted with forest trees or brushwood and located outside the boundaries of settlements (sec. 3). However, single trees in farm

The concept of forest estate seems to be well-entrenched and it is unlikely that the countries which use it will depart from it. Nevertheless, this concept may make the interpretation of the laws ambiguous. In Albania, Romania and the Russian Federation, the law includes both a description of the lands which are part of the forest estate (rather than lands which “may be” part of it) and a statement that the forest estate is made up of lands identified to this end (in a forestry cadastre or as a result of a formal procedure). This easily generates confusion: there may be lands which meet the description but are not or have not yet been formally declared to be part of the estate, so their status would be uncertain.

In Armenia, most people interpret the Forest Code (1994) as applying to State forests exclusively, since no specific provisions expressly relate to private trees or forests. However, the opposite interpretation is also possible, since in the same document "forests" are declared to be State property without distinction. One could therefore claim that once a "forest" has been established even on private land, it becomes the State's property. This could of course result in a great disincentive to planting trees or any other forestry activities on private lands. Furthermore, the legislation does not clearly specify to what kind of control trees found on private properties are subject, so private owners are unaware of consequences which may arise.

These often unintentional disincentives to private forestry should be avoided in the drafting of forestry legislation. In many cases, it may be simply a matter of clarification, of stating in the law that trees planted or found on private lands are the property of the owners of the land (especially important where such private ownership is an innovation), and of clearly indicating which provisions of the law apply or do not apply to such trees, preferably avoiding ambiguous references to the forest “estate” as regards private lands.

Other disincentives to private forestry can be found in non-forestry laws. In general, the land legislation of Central and Eastern European countries tends to prescribe standards or activities aimed at ensuring productivity and appropriate use. At times, the right over private property itself may be subject to loss where inappropriate use is made of the land. This is a legislative device intended to discourage poor land use. As such, its overall utility is open to debate; in any event, with specific reference to forestry, it sometimes acts as a disincentive. If the definition of land “productivity” is limited to the growing of crops or fruit trees, then the planting of forest trees may be deemed an “unproductive” use of the land and therefore subject to extreme consequences such as expropriation.

Forest Management

Although traditionally forest management has focused almost exclusively on the production of a certain yield of timber products, it is increasingly recognized that such

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lands, afforested areas adjacent to monuments, forest belts on lands within cooperative and state farms, and forest stands planted by enterprises, organizations or cooperatives on their lands, are not part of the national forest stock (sec. 4).

a focus is too narrow. Citizens in many countries increasingly require the consideration of other public values implicated in forest management –e.g., values associated with recreation, tourism, wildlife, local needs, etc.– as they may be interpreted from time to time and place to place.[28] The involvement of civil society in the decision-making process is therefore increasingly a feature of forestry laws.

Some of the recent initiatives in Central and Eastern European countries reflect this trend. The Estonian forest policy (1997), for example, was prepared following consultations with representatives of potentially conflicting interests, such as forest industry, private forest owners, non-governmental organizations and concerned ministries, and a brief account is given of these consultations in the text of the document itself. The 1996 law of Hungary requires consultation among different ministries (sec. 24), as well as the consultation of forest managers and municipalities concerned in the preparation of district forest plans (sec. 25). Slovenia's law of 1993 also requires that draft management plans be publicized and comments be incorporated (sec. 14). It states that the needs and proposals of forest owners must be respected as far as possible if consistent with the needs of the ecosystem and the law (sec. 5).

Under Bulgaria's Forestry Act, major issues concerning the management, protection and development of forests are under the purview of an interdisciplinary body, the Supreme Forest Management Board. This must include specialists from the Ministry of Forests, the Bulgarian Academy of Sciences, the Ministry of Construction and Architecture, higher educational institutions, etc. (sec. 11). Estonia's law, on the other hand, provides that forestry activities must be conducted in accordance with forestry development plans prepared by state authorities. Relevant NGOs must be involved in the preparation of those plans, as well as in the development of forestry policy and legislation (secs. 35 and 36). Under Georgia's law, substantial powers are given to local bodies for the management of local forests, and there is provision for public participation in decision-making processes regarding the management of the State forest estate (Chapter X).

Narrower solutions were adopted in other countries, like Poland, where proposed forest "masterplans" must be formally publicized only in case they concern forests which are the property of individuals (sec. 21 of the 1992 law).

In general, however, the legislation examined does not provide for thorough public consultation. Administrations in the region do not yet seem to have recognized the potential benefits of participatory planning and management, and the value of reaching a broad consensus among affected parties as a means of facilitating implementation once a decision has been taken. For examples, the Forest Code of the Russian Federation still defines "forest inventory and planning" as a "system of activities to increase efficiency and conduct a uniform scientific and technical policy in forestry" (sec. 72). Programs for the utilization and conservation of forests are developed exclusively by administrative bodies (sec. 72). However, Georgia's Code provides that, before a decision on forest use in a particular area is made by entities

[28] In this regard, the Rio Forest Principles encourage governments to promote and provide opportunities for the participation of interested parties, including local communities and indigenous peoples, industries, labour, non-governmental organizations and individuals, forest dwellers and women, in the development, implementation and planning of national forest policies (Principle 1 (d)).

responsible for forest estate management, information concerning that area, such as the management plan or the protection regime, must be publicized (sec. 35-5). Under Lithuania's law, forest enterprises, park administrations, and regional departments of the Ministry of the Environment must be consulted prior to the approval of management plans (sec. 8).

On another important component of public participation –public access to relevant information which may be available to the authorities–, the countries' forest laws tend to remain silent. Some, indeed, impose obstacles to that access. The Hungarian law, for instance, expressly limits access to the "National Forest Database" to the owner or manager of a particular forest with respect to relevant data (sec. 32).

Another aspect which is still not adequately addressed is the integration of forestry with the management of related sectors, such as agriculture, grazing, tourism, wildlife and protected areas. This approach may be an innovation for the countries of Central and Eastern Europe, where the responsibilities of the forestry administrations have focused almost exclusively on technical forest management. A shift in the attitudes of forestry and other administrations would be necessary to make this approach a reality, but appropriate legislation could facilitate that process.

This is important because some activities related to forestry, such as agriculture and grazing, already put the forests under strong pressure in some countries of the region. Others, such as tourism, are likely to increase in influence. The increased accessibility of transportation, for example, will probably allow a much wider number of people (and therefore of bikers, hikers, skiers, etc.) to reach forest areas for recreational purposes. Utilization of forest produce other than timber in the context of activities of integrated local development –for example, collection and/or cultivation of honey, mushrooms and truffles, and their sale in connection with visitors' excursions– has become common in Western European countries, and similar developments could be foreseen for the rest of Europe.[29]

One "non-forestry" activity related to forestry that is frequently referred to in the forest laws under review is grazing. The provisions in this regard are often limited to a list of prohibitions. In Armenia, for example, existing regulations on grazing adopted under the principal forestry legislation prescribe in which areas grazing is prohibited, and also establish that only selected areas of certain types may be used for haymaking. In Romania, the Forest Code prohibits grazing in the whole national forest estate, with limited exceptions (sec. 6). In the Czech Republic, grazing and allowing livestock into forests is an offence under the Forest Act (sec. 53). More appropriately, the law of Croatia ties grazing to forest management programmes (sec. 46). In Bulgaria, the Forest Act provides for a combination of measures whereby: (i) grazing must be authorized by competent forest-range officers and performed in accordance with annual plans approved by the Minister of Forests; and (ii) areas where grazing is completely forbidden are identified (secs. 27-30).

Considering that there exist different kinds of forests, as well as different types of livestock, and since their possible interaction may vary greatly from case to case, a

[29] Upton (1994) demonstrates how a careful economic assessment of non-timber forest produce can be a useful tool in achieving the appropriate balance between environmental and economic demands on forest resources.

general prohibition on grazing may be inappropriate, and more flexible legal approaches should be considered. Some flexibility should be left for negotiations among users and the administration over the use of grazing lands.

Forest utilization

All of the laws studied require an authorization for the harvesting of timber, at least on a commercial scale. The legislation tends to provide a sound basis for the granting of such authorizations, in that it ties them to management plans and sometimes to yearly maximum harvesting limits.

In the simplest and most traditional arrangements, the administration issues harvesting authorizations and remains responsible for any activities other than logging in the areas subject to such authorizations (e.g., construction of roads, regeneration, etc.) and for control of the activities authorized. The Romanian Code, for example, provides for this arrangement.

Trees that may be logged are often to be identified by the administration. The laws of both Croatia (sec. 41) and Kosovo (secs. 20, 21, 35), for example, require selection and marking of every tree to be felled, in accordance with the annual forest management plan, regardless of the size of operations and the ownership of the concerned land (sec. 41). In theory, similar provisions ensure absolute protection against illegal activities which may be carried out under licence or concession agreements, but in practice they may not be a sufficient guarantee if enforcement is not perfectly accurate.

In some places, such as Albania and Armenia, limited innovations have been introduced in this basic scheme: (i) by establishing procedures, such as auctions, for the awarding of authorizations; or (ii) as was the case in Albania, by allowing the possibility of extending the duration of authorizations, and modifying fees if the holder of the authorization has invested on the concerned lands.

Various countries establish general conditions for the issue of licences. The law of the Czech Republic requires conditions regarding minimum age, citizenship, clean criminal record, professional qualifications depending on the type of activity to be licensed, impediments to the issue of licences (e.g., holding particular positions in the State administration or business companies), and grounds for withdrawal (secs. 41-45).

Some of the countries of Central and Eastern Europe, and especially Russia, however, have long allowed forest exploitation under concession agreements, i.e., more complex and longer term arrangements concerning larger areas, under which a concessionaire may undertake additional obligations, e.g., replanting or allowing regeneration according to certain rules, etc. Other countries are now faced with the decision as to whether such a system could be appropriate for their situations, sometimes under pressure from interested foreign companies. This is a rather delicate policy decision, since control and law enforcement under such a system are particularly difficult and therefore serious risks of resource depletion are involved. In any case, for this option an appropriate legal framework should be in place, and this is not always the case in the countries being considered.

In this regard, the Russian Forest Code contains more substantive provisions than the other legislation examined. It provides for different types of arrangements for forest utilization. Large-scale, long term exploitation –up to 49 years– may take place under lease agreements (sec. 31) or concessions (sec. 37). The latter are envisaged mainly for underdeveloped parcels requiring significant investment. For both cases, the Code specifies minimum contents of the lease or concession, which include the obligations of the parties with respect to conservation and regeneration measures (secs. 33 and 40). Basic rules for the allocation of leases and concessions through tenders are also established (sec. 34). The provisions on taxation and other payments are quite detailed (secs. 103-107).

Forest laws of most other countries lack sufficient details for regulating the "concession" type of arrangement. These can be spelled out either in specific acts[30] or in subsidiary legislation specifying the conditions applying to logging authorizations, which could be both generally applicable and agreed through negotiations on a case by case basis. For example, the holder of an authorization could be made responsible for the preparation of a detailed working plan for the concerned area to the satisfaction of the administration. Specific conditions as to the qualifications of potential contractors who wish to participate in tenders could also be imposed (e.g., admitting only companies which have a representative within the country, companies which employ personnel with proven abilities, etc.). For large-scale operations, there may be a requirement for ministerial approval, while for others an approval by lower level forest authorities may be sufficient. Appropriate provisions should authorize the administration to suspend or terminate logging authorizations under specific circumstances (mainly the violation of the authorization's conditions or of the law).

Even for private forests, the legislation could impose some requirements, since an authorisation to log is generally required. But in this case, commercial aspects may have to be left to private negotiations between the parties.

Community forestry

Local communities and indigenous peoples' rights and contributions are increasingly acknowledged in recent forestry legislation.[31] Among the numerous ethnic minorities of the Russian Federation, there are indigenous groups which, since the *Glasnost* era, have claimed traditional rights to forest resources. In 1992, a decree was adopted to recognize some of these rights.[32] Moreover, the Forest Code, adopted in

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[30] Examples of these include Bulgaria's Concessions Act of 1995 (consolidated in 1999), and Lithuania's Law on Concessions of 1996 (consolidated in 1998).

[31] Likewise, pursuant to the Rio Forest Principles, "national forest policies should recognize and duly support the identity, culture and the rights of indigenous peoples, their communities and other communities and forest dwellers. Appropriate conditions should be promoted for these groups to enable them to have an economic stake in forest use, perform economic activities, and achieve and maintain cultural identity and social organization, as well as adequate levels of livelihood and well-being"(Principle 5 (a)).

[32] Decree of the President of the Russian Federation on Defense of the Territories of Northern Indigenous Peoples, 22 April 1992, 18 Vedomosti SSSR, item 1009 (1992) (Russian Federation). Levin (1992) reports that a lawsuit has been initiatied on the grounds of this decree.

1997, requires that any legislation concerning forest utilization in areas populated by ethnic communities guarantee their traditional way of life.

Even where there is not a particular concern for the cultural identity of minorities, local populations frequently require forest produce, particularly fuelwood, for domestic uses, and in the past few years, recourse to illegal actions to obtain this produce has sometimes been unavoidable. To help meet these needs sustainably, community forestry activities are being undertaken in many places world-wide.

This approach is advisable also in Central and Eastern European countries, especially with rural populations already involved in agriculture and grazing. It may be possible to identify suitable parts of the State forest estate where, in collaboration with the forestry administration, local residents could undertake forestry activities with suitable incentives, for example, being exempted from payments normally due if the forests are not commercially viable. In this regard, under Georgia's Forest Code, priority is given to local people and bodies for receiving forest use tickets (sec. 61-4). These allow recipients to extract timber through cleaning, thinning, sanitary, passage, reconstruction, and special cuts as well as final cuts.

Legislation may not be strictly necessary to undertake initiatives of this kind. However, the law could in any case facilitate them by providing appropriate incentives, protecting weaker parties by establishing minimum requirements of the agreements, ways of settling disputes, etc. Attention may also be necessary to reduce constraints that might otherwise be imposed by application of the legislation in the community forestry context. For example, requirements applicable to commercial logging would be inappropriate for community forestry arrangements.

The current legislation of the countries which have been considered rarely takes this distinction into account, although on more than one occasion it clearly allows and encourages public access to forests. In Lithuania, the 1994 law allows citizens to gather medicinal fruits and herbs, to keep bees, etc. in any forests, except in limited specified cases (sec. 9). The Polish act of 1992 allows access to public forests –and private ones unless prohibited by the owner– as well as collection of fruits and herbs (under contracts with the forest districts if for commercial purposes) (sec. 27).

Under Estonia's law, users may gather fruits, herbs, etc., in public forests as well as in private forests that are not fenced or marked, so long as they don't disturb the ecosystem and wildlife. Camping and making campfires are also allowed, but only in designated places or with the permission of the manager or owner of the forest (sec. 32). In Georgia, all citizens have the right to enjoy the natural environment of the forests. In addition to free access and movement in forests for recreation purposes, they can collect non-wood products for personal use. In return, they must care for the forests and protect their assets (sec. 88).

An approach tending to satisfy especially local needs for forest produce is being experimented with the creation of “communal” or “municipal” forests. In Albania, communal forests are to be created on State land handed over for the "common use" of one or several villages or communes. However, the decision to actually allocate communal forests is left to the forestry administration, which should for this purpose enter into agreements with local institutions, while local authorities are not expressly authorized to take any initiatives in this regard. Furthermore, the 1992 law does not

establish even a basic regulatory regime. These shortcomings in the law have hampered the actual creation of any communal forests.

Law enforcement

Although Central and Eastern European countries have been faced with serious problems of forestry law enforcement, their principal forestry legislation typically does not endow enforcement officers with strong powers.

Specific provisions on enforcement powers of officers can be found in the law of Croatia, which is rather detailed on powers of inspection, and gives powers to suspend illegal operations and to seize produce (sec. 75-81). In the law of Lithuania, provisions on enforcement are less detailed but still allow inspections and suspension of illegal activities, although powers of seizure are not expressly given (sec. 7). Even less detailed on law enforcement measures, the Forest Act of Estonia refers to the Environmental Act as to applicable procedures (sec. 55).

The law of Hungary empowers officers to request offenders to prove their identity and initiate proceedings with the competent authorities, but this seems to be limited to offenders found within the forests (which would exclude, for example, vehicle inspections outside forests, etc.), and powers of seizure also are not expressly given. However, reference is expressly made to separate regulations in this regard (sec. 91). The same kind of powers are given to forest-range officers by the Bulgarian Forestry Act. In addition to checking all documents permitting felling and removal of timber, grazing, gathering of non-wood products, etc., they can stop and search all vehicles which transport timber or other forest produce (secs. 36 and 38).

Under the law of the Czech Republic, forest guards are vested with more stringent powers: they may request offenders to prove their identity and arrest them if there is no way of identifying them; power to suspend operations or seize produce, however, are not expressly addressed (sec. 39). The Georgian Forest Code also details the powers and responsibilities of forest personnel (secs. 108 and 109). Moreover, it provides for incentives for meritorious staff, such as awarding the title of "Honorable Forester of Georgia" and granting special medals for successful work.

Although strengthening the powers of enforcement officers would not typically be considered an innovative approach to the formulation of forestry legislation, a more thorough treatment and, in some cases, enhancement of the powers of officers may be appropriate in the case of Central and Eastern European legislation. In some instances, it would be useful simply to define empowered officers and their powers more clearly in the forest law. It may also be useful to extend such powers to routine inspections on vehicles transporting forest produce or at processing or selling points, or to arrest offenders who refuse to prove their identity, where these powers might not be already envisaged. The power of suspending operations or seizing produce can also be strong deterrents to the commission of violations.

In addition to such traditional methods as the strengthening of enforcement capabilities, there are various other approaches which could be pursued to facilitate compliance with forestry legislation. Some could be achieved through legislation, but others require alternative solutions and incentives. For example, developing the awareness of local communities of the local resource base would be a means to facilitate enforcement. Increased public participation in decision making processes

could increase people's support for governmental action and decrease the number of violations. Strengthening the forest administration's extension capacity to spread knowledge of legislation as well as of the benefits of appropriate forest management may also be beneficial in this regard. An interesting illustration of the latter can be found in the Lithuanian Regulations on Private Management and Use, which provide for the granting of free consultations by forest officers to private owners on existing laws and regulations governing the country's forests (sec. 6).

As a part of many privatization programmes in Central and Eastern Europe, the State forest authorities have been undergoing a process of transformation into privatized entities with commercial objectives. Especially in these cases, it is important to separate the commercial or exploitation functions from the law enforcement functions, which should be left unequivocally to the public authorities, in order to avoid conflicts of interest. Legislation should be designed accordingly, provided that the state forest administrations are endowed with sufficient means and personnel to be responsible for forestry law enforcement.[33] This has not been the case in Romania, for example, where a progressive privatization of the "Forestry Regia" through separate legislation has not been accompanied by a restructuring of enforcement arrangements. The Forest Code, therefore, continues to refer to the "Regia" as the authority responsible for enforcement.

A particular problem in Central and Eastern European countries has been the enforcement of the law in privately owned forests, where the owners themselves are often suspected of being responsible for illegal actions, but rarely bear the consequences. Sometimes simple clarifications in the legislation would be helpful. For example, the legislation should clearly state whether particular rules, such as the requirement for a permit to harvest wood, apply also to private forests, and which public authorities are responsible for the enforcement of such provisions. Specific provisions to this end are rare. Hungary's law, for example, simply requires the forest manager to arrange for surveillance of the forest (sec. 90). The Lithuanian Regulations on Private Forest Management and Use, however, specifically provide for State control over private forest use, reforestation and protection by public forest officers (sec. 27). Private forest owners who fail to comply with control requirements are subject to the prescribed fines (sec. 31).

An unusual problem has occurred in Romania: because the provisions on offences call for punishment to be based on the amount of "damages" caused, an owner who had been accused of illegally logging his own land was able to raise a convincing defence simply by claiming that he had suffered no damage. This kind of problem could be easily resolved through more careful legislative drafting.

[33] Levin (1992) reports that in the Russian Republic of Buriatia the separation has been drawn so clearly that the financing of the enforcement agency is not in any way tied to commercial exploitation, but derives only from the State and from fines charged in the implementation of the agency's functions.

CONCLUSIONS

The process of reform of forest legislation which has taken place in many Central and Eastern European countries in the recent past has brought about several positive developments. These can be briefly summed up as follows.

The commitment in all countries in the region to the development of market economies has been accompanied by a concern to protect forest resources from inadequate management. New forest laws provide, accordingly, for maximum productivity, while tending at the same time to ensure sustainability –whether or not the forest lands and resources have been privatized.

Another positive factor has been the significantly increased participation of Central and Eastern European countries in international initiatives regarding forestry. This has led to a greater exchange of experience and acquisition of information for the purpose of adopting appropriate domestic legal frameworks, and wider acceptance of international environmental obligations or recommendations, such as the Rio Forest Principles.

The formulation or improvement of a legal framework for private forests, which may prevent risks of inappropriate use and at the same time guarantee citizens' legitimate democratic rights, remains a complex task. Interesting solutions have been introduced in various countries and now require more practical experience on the ground and more careful evaluation.

There has been a moderate opening of the decision-making processes to public participation and integrated management. Some, although not all, of the laws which have been examined make the consultation of concerned parties compulsory for the adoption of forest management planning decisions. As non-governmental actors and interest groups become more active and gain importance, it is likely that they will be further considered even in the absence of more specific legislative provisions.

The fact that the laws which have been reviewed are relatively recent is probably a sign that most developments of the legal frameworks in the coming years will be effected through subsidiary legislation –and this is already happening in some countries–, since governments will be reluctant to promote a further complete replacement of laws. The adoption or replacement of appropriate regulations is, therefore, of crucial importance. Many of the desired developments could in fact be guaranteed even under the existing acts of parliament, if appropriate subsidiary legislation is put in place. This could be said, for example, with regard to the adoption of a legal framework for private forestry, to the prescription of conditions for forest exploitation, and to the enhancement of public participation. Hence, there will have to be an underlying continued commitment of governments to support the recommended approaches.

LEGISLATION REVIEWED

Albania

Law No. 7223 on Forestry and the Forest Police Service, 13 October 1992 (amended)

Decision on Tariffs in the Forest Sector, 26 February 1993

Regulation No. 577 on Protected Forestry Zones, 8 February 1993

Regulations Nos. 576 and 581 on Functions and Conditions of Admission into the Forest Service, 8 February 1993

Regulations on Exploitation of High Stands, Coppice Stands, Shrubs and Conditions of Cutting and Improvement, 11 January 1993

Guidelines on Auctions of Standing Wood, 25 July 1993

Instructions on Protection Against Forest Fires and Pests, 17 February 1993

Land Law, 19 July 1991 (amended, 2 June 1993)

Law on Compensation of Former Owners of Agricultural Lands, 21 April 1993

Law No. 8302 for the Management of Revenues Generated from States Forest and Pastures, 12 March 1998

Regulation on the Granting of Professional Licences, 21 March 1998

Law No. 8337 on Giving Ownership Agricultural Lands, Forests, Pastures and Meadows, 30 April 1998

Armenia

Forest Code, October 1994

General Forest Regulations

Regulations on Sale of Standing Timber

Regulations on Haymaking and Grazing, 1983

Land Law, 31 October 1990

Land Code, 29 January 1991

Bulgaria

Forestry Act, 1958 (amended, 1994)

Concessions Act, 5 October 1995 (amended, 1999)

Croatia

Law on Forests, 18 January 1991

Decrees on Amendments to the Law on Forests, 22 February 1991 and 30 July 1993

Forestry Seed and Seedling Act, 24 April 1998

Czech Republic

Forest Act, 3 November 1995

Estonia

Forest Act, 9 December 1998

Georgia

Forest Code of the Republic of Georgia, 22 June 1999

Law on Timber Exports, 20 February 1998

Decree of the President of Georgia Amending the Law on Timber Exports, 12 March 1998

Hungary

Law No. LIV on Forests and their Protection, 3 July 1996 (consolidated, 9 December 1997)

Decree No. 29 Implementing Law No. LIV on Forests and their Protection, 30 April 1997 (consolidated, 6 May 1998)

Decree No.92 on the Conservation and Utilization of Plant Genetic Resources, 28 November 1997

Decree No. 91 on Forestry Planting Materials, 28 November 1997

Law No. VII on Forest and Wildlife Management, 1961 (consolidated, 30 April 1997)

Decree No. 73 Implementing Law No. VII on Forest and Wildlife Management, 12 December 1981 (consolidated, 30 April 1997)

Law No. XLIX of 1994 on forest owners' associations, consolidated the 9 December 1997

Decree No. 37 of 1996 of the Ministry of Agriculture on the establishment and organization of the National Forestry Service, consolidated the 20 December 1997

Decree No. 155 on the Duties and Competencies of the Minister of Agriculture and Rural Development, 30 September 1998

Kosovo

Law on Forests, 1987 (still in force by virtue of UNMIK Regulation No. 2000/59, amended by UNMIK Regulation No. 2000/17)

Administrative Instruction No. 2000/1 on the Department of Agriculture, Forestry and Rural Development

Administrative Instruction No. 2000/23 on the Forest Authority

Lithuania

Forestry Act, 22 November 1994

Law on Concessions, 10 September 1996 (consolidated, 17 February 1998)

Regulations on Private Forest Management and Use, 24 July 1997

Poland

Act concerning Forests, 28 September 1991

Executive Order No.11 on the Statute of the State Forestry Administration, 27 May 1992

Order on Detailed Rules for the Preparation of Forest Management Masterplans, 25 August 1992

Order on Detailed Rules and Procedure for the Recognition of Protected Forests and their Management, 25 August 1992

Romania

Forestry Code, 26 April 1996

Land Law, 20 February 1991 (amended, 1997)

Law for the Conservation, Protection and Development of Forests and their Rational Exploitation of 30 October 1987

Russian Federation

Forest Code, 22 January 1997

Slovenia

Law on Forests, 26 May 1993

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FOREST LEGISLATION IN A CONSTITUTIONAL STATE: THE JAPANESE EXAMPLE

IKUO OTA

SUMMARY

With 25 million hectares or two-thirds of the land covered by forest, Japan is one of the most forest-rich countries among industrialized nations. Having 3.5 billion cubic meters of timber stock, annual growth is about 90 million cubic meters, which is roughly equal to the volume of annual domestic wood fiber consumption. However, Japan imports around 80 million cubic meters of wood and domestically produces only 20 million cubic meters.

Forest legislation and policy are responsible for such a strange situation. The Forestry Law of 1951 successfully protected and enlarged the forestland area after World War II. On the other hand, the Basic Forestry Law of 1964 failed to facilitate domestic forest production and the forest industry because they were not competitive with foreign producers. The law designated small-scale family forestry operations and forest owners association as key factors in Japanese forestry, but it was hard to achieve in reality.

Recently, the management direction of the national forest has become more environmentally oriented. Timber production is not as important as the environmental functions of the forest. For private forestland, policy direction is also shifting. A new Basic Forestry Law will be created in the very near future, and a new forest policy should be forthcoming. Keeping the balance between industrial production and environmental conservation will be a critical point of discussion in developing the new legislation.

Keywords: Japan, Forest Law, Basic Forestry Law, Forest Owners Association Law, Protected Forest.

INTRODUCTION

Japan is second in international trade of forest products after the United States. It imports huge amount of logs and timber from more than 80 countries, while most of Japan is covered by dense closed forest. The Japanese people consume about 100 million cubic meters of logs annually, of which 80 percent comes from abroad. One can suppose that Japan preserves domestic forest resources for future use and exploits foreign forests, but it is not the reality. As described later, high cost is the main reason why the Japanese forestry sector does not supply more wood from its own backyard.

In order to have a solid understanding of Japanese forestry, a comparison with major European forestry countries is useful. Table 1 indicates the size of forestland and wood fiber production as well as land area of four European countries and Japan. The land area of Japan is 37 million ha, between those of Sweden and Germany. The forestland area in Japan is 25 million ha, smaller than that in Sweden, but bigger

than that in Finland, France, and Germany. The rate of forest cover is 65.5 percent, one of the highest such ratios in the industrialized world.

However, the volume of forest production is smaller than each of the four European countries. Japan has a lot of forest resources growing domestically, but it produces only a small portion of its allowable cut. The rate of self sufficiency in sawnwood is only 34 percent, quite low to compared with other countries in the table.

Table 1: Forestland area and wood fiber production in selected European countries and Japan in 1995

		Sweden	Finland	France	Germany	Japan
Total Land Area	(M ha)	41,159	30,461	55,010	34,927	37,652
Forestland Area	(M ha)	28,015	23,373	14,154	10,735	24,718
Rate of Forest Cover	(%)	68.1	76.7	25.7	30.7	65.6
Wood Fiber Production	(M m^3)	63,600	49,894	43,361	39,005	25,834
Firewood & Charcoal	(M m^3)	3,800	4,095	9,800	3,795	138
Woodchip	(M m^3)	24,600	22,968	11,414	13,104	7,497
Sawnwood & Others	(M m^3)	35,200	22,831	22,147	22,106	18,199
Softwood	(M m^3)	58,100	41,459	23,758	27,184	18,887
Hardwood	(M m^3)	5,500	8,435	19,603	11,721	6,947
Self Sufficiency Rate of Sawnwood	(%)	100+	100+	84	80	34

Source: World Resources Institute, UN Environmental Programme, UN Development Programme, The World Bank. 1998. 1998-99 World Resources. FAO. 1995. State of the World's Forests. FAO. 1998. Forest Products 1996.

The timber market of Japan is highly competitive. There are no trade barriers or tariffs for forest products with a few exceptions in engineered wood products. This is mainly because of a political decision made in early 1960s, when rapid economic growth occurred in Japan after recovering from the damage of World War II. Political pressure from the US is another factor in later years. The fundamental idea of the present forest legislation was formulated in the middle of 1960s.

This paper aims to show an outline of Japanese forestry and to describe major forestry laws. Since the 1990s, with decreasing forestry production and increasing public awareness of the environment, the government has been changing the direction of national forest policy. This paper will also try to analyze the ongoing policy change in the last section.

FOREST AND FORESTRY IN JAPAN

Japan is composed of four big and many smaller islands. Because the islands are oriented north to south, and high mountains are found on the major islands, the climate varies from sub-alpine to sub-tropical. In addition, most of the islands are located in monsoon areas. Average annual precipitation is about 1,600 mm. These

conditions make Japan rich in plant and tree species. Such natural conditions as well as continuous human efforts make two thirds of the land surface of dense closed forest.

Forest ownership pattern is shown in Table 2. Privately owned forestlands comprise more than half of total forest. However, most private forest holdings are very small. The national average for a family-owned forest is 2.7 ha. Company-owned forestlands are also small in scale, and the average size of company holdings is 34.6 ha. The national forest occupies about one-third of total forestland, and the Forestry Agency, which is responsible for managing the national forest, is the single biggest forestry organization in Japan. About 10,000 employees are in the Forestry Agency, of which 3,000 are forest workers.

Table 2: Forestland area by ownership in Japan (1995)

	Forestland area	Ratio
National forest	7,844,000 ha	31.0 %
Other public forest	2,730,000 ha	10.8 %
Private forest	14,572,000 ha	58.2 %
Total	25,146,000 ha	100.0 %

Source: Forestry Agency. 2000. Forestry White Paper.

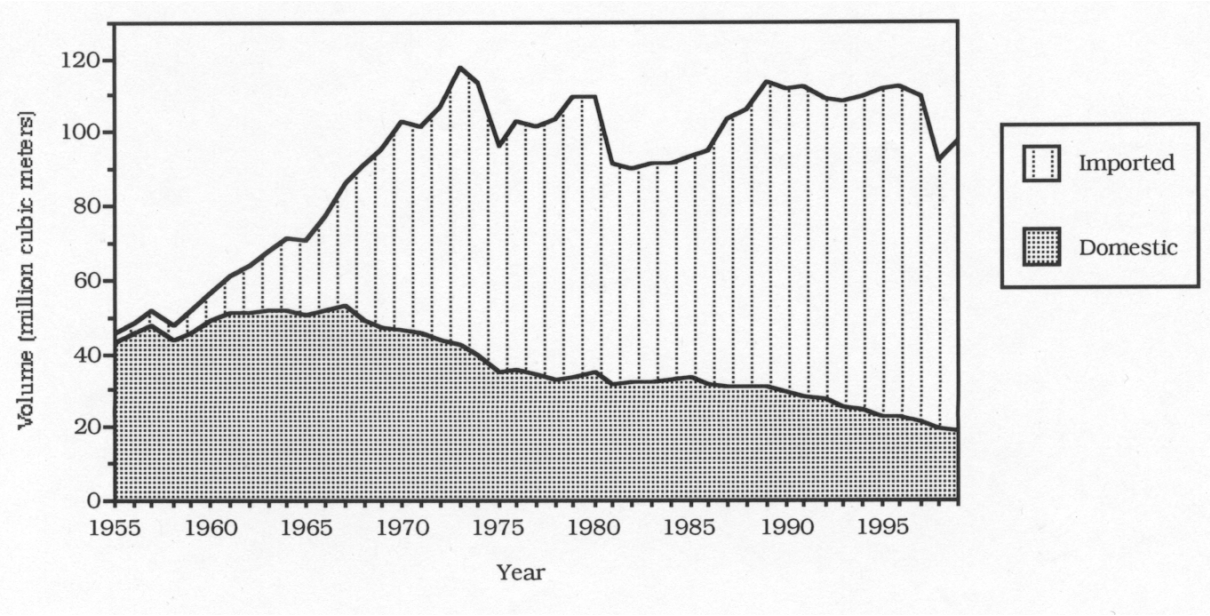
A special feature of Japanese forests is the large stock of artificial plantations, which comprise 10 million ha out of 25 million ha of total forestland. Most of these plantations are even-aged conifer stands, planted after the initial harvest of hardwoods following the energy revolution in the 1950s, when families' energy source changed from charcoal to coal or oil. The total timber stock is about 3.5 billion cubic meters, of which 1.9 billion cubic meters are held in artificial conifer plantations, and another 450 million are held in natural conifer stands. Two of the most common species in artificial plantations are Sugi or Japanese cedar, (*Cryptomeria japonica*) and Hinoki or Japanese cypress, (*Chamaecyparis obtusa*). The average rotation age for Japanese cedar is between 40 and 70 years, and that for Japanese cypress is slightly longer.

Figure 1 illustrates the trend of domestic log production and imports. Domestic production has been decreasing constantly during the past three decades, while the imported volume has been increasing. Japan used to produce around 50 million cubic meters of wood annually in 1960s, but the production volume was only 21.6 million in 1997. In the same year, Japan imported 88.3 million cubic meters of wood including wood chips for paper. Its aggregate self sufficiency rate for wood fiber was 19.6%.

This situation is not caused by a depleted forest resource base, but by the lack of competitiveness of Japanese domestic forestry. The annual increment of wood fiber is 90 million cubic meters. On the other hand, annual harvest of timber is less than one-forth of its increment, and the national forest inventory is increasing 70 million cubic meters every year.

As a result of continuing governmental efforts promoting international free trade, forest product prices in Japanese markets have been downward trending, which while good for consumers, is not good for domestic producers. The Forestry White Paper for Fiscal Year 1997 displayed the downward trend of real prices of saw timber, logs, and stumpage. During the period 1969 to 1996, the saw timber price of Japanese Cedar dropped 6 percent, log prices dropped 33 percent, and stumpage prices dropped 55 percent. Japanese forestry is in more or less a critical situation.

Figure 1: Japanese domestic production and imported volume of wood fiber (1955-1999)



Source: Forestry Agency. (Each year). Table of wood demand and supply.

HISTORICAL BACKGROUND

Timber has been the most important material for the Japanese people for building their houses. In addition, forests have been the main source of commodities and tools for thousands of years. For example, fuelwood was very important for cooking and heating Japanese homes until recently.

Forest and trees were also part of the lifestyle of the people. In other words, Japanese culture was deeply tied to the forest. Horyuji Temple, the world's oldest wooden building in Nara City, western Japan, is 1,300 years old, and was designated as a world cultural heritage in 1993. The timber and logs which make up the temple are a vivid example of Japanese culture, and also an example of the excellent forestry techniques which existed in such an ancient time.

The non-material services of forests have been also considered throughout Japanese history. Because of the steep mountainous landscape, the Japanese people soon learned the importance of the water holding and soil protection functions of forests. In the Middle Age, feudal loads prohibited cutting certain tree species or imposed forest protection laws. Plantation efforts were also engaged in many parts of the country by individuals, groups, and regional communities.

The first Forest Law was established in 1897 under the modern constitutional monarchy government. It is said that European forest legislation, especially French law, influenced the first Japanese Forest Law. This law established rules for forest utilization, protection and management as well as penalties for their violation. This first forest law was characterized by its strong emphasis on forest protection. The law was amended several times before the end of World War II. As described in the next chapter, the new forest law under the present constitution was enacted in 1951.

FOREST LEGISLATION

There are many forestry-related laws in Japan, but the following three are the principal ones: the Forest Law of 1951; the Basic Forestry Law of 1964; and the Forest Owners Association Law of 1978. National and regional forest policy has been directed under these laws for decades.

(1) Forest Law

The Forest Law of 1951 is the basic statute for forest management in Japan. The purpose of this law is stated in its first article:

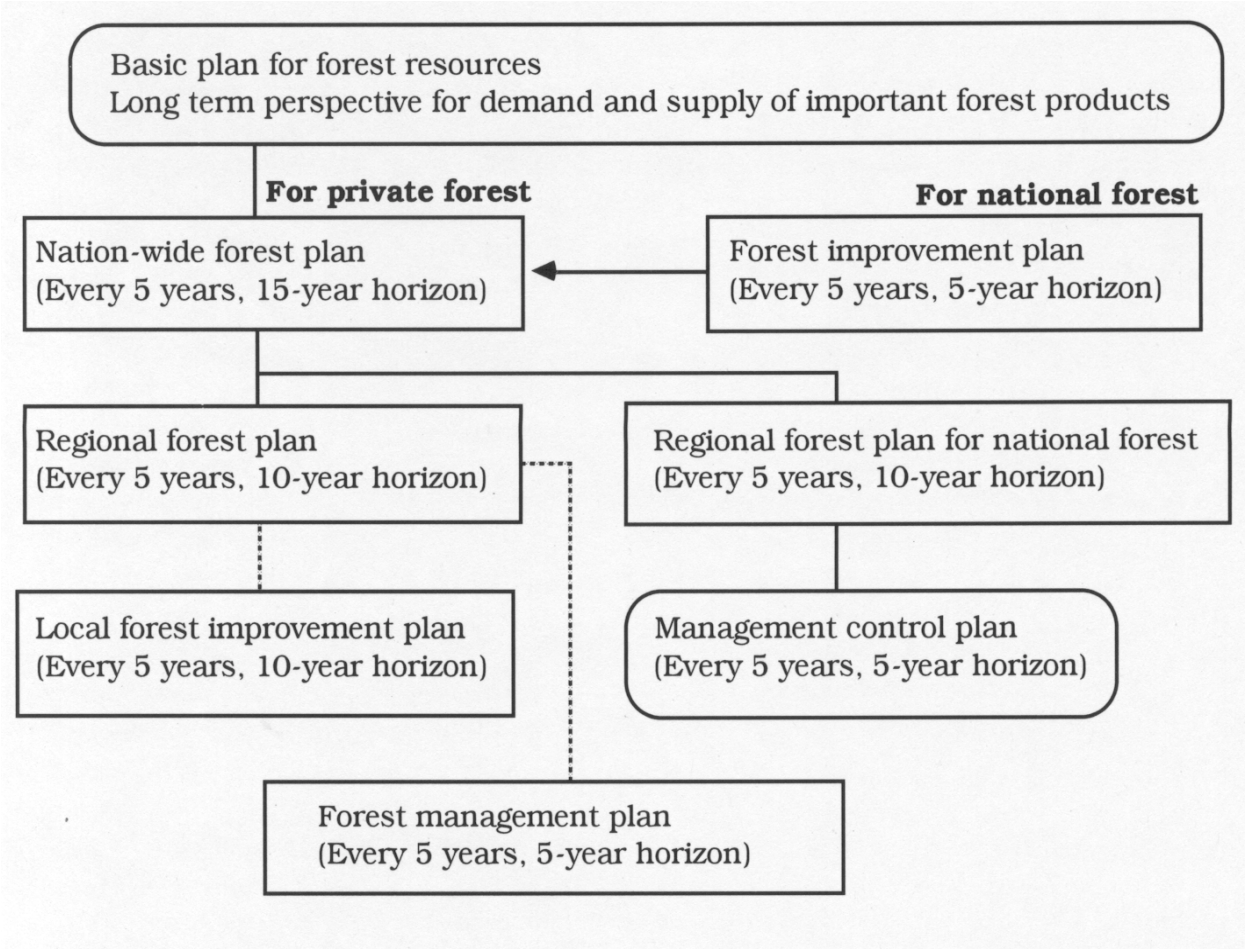
> *This law is intended to design a forest planning system, provide for forest protection, and address other basic issues related to forestry and to sustain forest*s *and to increase production for the purpose of protecting national land and contributing to the national economy.*

In the subsequent article, forests, forest owners, and the national forest are defined. Because forests in Japan are usually quite dense, an open forest occurs only during the early stage of succession, the definition of forest is very simple and clear. A forest is a group of living trees or bamboos and the land on which the group of trees or bamboos is growing. The exception is land with trees that are managed for agriculture, residence, or similar purposes.

The forest planning system is one of the distinguishing features of this law. This part of the law has been amended many times since 1951 because the government has always been willing to improve the system to fit the real situation of the forest. The present system was established in 1991. Figure 2 shows general concept of the present forest planning system.

The "Nation-wide Forest Plan" is the upper most plan of the Japanese forest planning system with a fifteen-year time horizon, and it is revised every five years by the Minister of Agriculture, Forestry, and Fishery. The plan is made in accordance with the "Basic Plan for Forest Resources" and the "Long-term Perspective for Demand and Supply of Important Forest Products," both of which are occasional legal perspectives for forests and forestry prepared by the government. In the Nation-wide Forest Plan, the following subjects must be addressed for 44 regions of the country: Objectives of forest improvement, harvesting, plantations, thinning and tending, special forest practices, forest roads, rationalization of practices, forestland conservation, forest protection facilities, and other~~s~~ subjects as well.

Figure 2: Forest planning system in Japan



Source: Ryoichi Handa. 1996. Forest Policy. Buneido. 274p.

Under the Nation-wide Forest Plan, two parallel regional plans are prepared. For the national forest, the regional director of the national forest is obliged to make a "Regional Forest Plan for the National Forest," and for private and municipal forests, the governor of the prefecture is obliged to make a "Regional Forest Plan." Both plans are written with a ten-year time horizon and revised every five years. The River Basin Forest Management System, which divides the nation into 158 river basins, is the basic unit of the regional plan.

In the Regional Forest Plan, the following subjects must be addressed: Mapping of forests, forest types and areas, volume of harvest, area of plantations, volume of thinnings, area of special forest practices, plans for road building and maintenance, plans for collaboration and rationalization of forest practices, conservation of stumps and land surface, improvement of protected forests, and so on. The Nation-wide Forest Plan and the Regional Forest Plan have to be strongly and rationally related. For example, total volume of harvest in the Nation-wide Forest Plan must be kept the same as the sum of the volume in all regional plans.

The "Local Forest Improvement Plan" is not obligatory for all local governments. It is requested to be made for selected municipalities having above a specified amount of forest area. Having a private forestland area of over 2,000 ha, an above average amount of artificial forest, and similar factors are the usual grounds for the request.

Around 60% or 2,000 out of 3,200 municipalities are make a Local Forest Improvement Plan. In it, more site-specific subjects are addressed.

In addition to these three levels of governmental forest planning, individuals may have a “forest management plan" for their own forestland. It is not an obligation but a recommendation. Forest inventory, harvest scheduling, and afforestation and reforestation are the major items of the plan. There are two types of the plan: individual and collaborative. Those who hold a forest management plan receive advantageous subsidies, loans, and tax treatment.

Protected forest is the other major concept developed in the Forest Law of 1951. There are seventeen different categories of protected forest. The Minister of Agriculture, Forestry, and Fisheries is able to designate protected forest in case the necessity to protect the forest is high.

Table 3 indicates the area of protected forest by type. The total area of protected forest is 8.86 million (8.33 million excluding the overlap) ha, which is about one-third of total forestland area in Japan. Protected forest does not mean totally preserved forest. There are some restrictions of activities in protected forests, but they depend on the type. For example, one can harvest trees in a headwater-protected forest with the governor’s permission. In the case of a headwater-protected forest, the upper limit of clear cutting is 20 ha, but it is 10 ha for soil erosion protection or land-collapse prevention forests.

(2) Basic Forestry Law

In contrast with the Forest Law of 1951, which is intended to provide a framework for sustainable use of forest resources, the Basic Forestry Law of 1964 establishes the basic policy for forestry activities. The Basic Forestry Law is very short. It concisely specifies roles and prospective efforts for national and prefectural governments and forestland owners. It mentions promotion of forest production, structural improvement of forestry, demand and supply of forest products, prices, workers, organizations, and forest administration council.

Table 3: Area of protected forest in Japan (1993) in 1000 ha

Headwater protection	6,052	Fog prevention	51
Soil erosion protection	1,945	Avalanche prevention	19
Land collapse prevention	46	Stone fall prevention	2
Shifting sand defense	16	Fire break	0
Windbreak	55	Fish breeding forest	28
Flood prevention	1	Navigation target forest	1
Tide damage prevention	13	Recreational forest	561
Drought damage prevention	42	Scenic beauty forest	27
Snowbreak	0		---
		Total (excluding overlapped area)	8,330

Source: Ryoichi Handa. 1996. Forest Policy. Buneido. p. 119

This law requires an annual "Forestry White Paper" to be presented to the Diet. The Basic Plan for Forest Resources and the Long-term Perspective for Demand and Supply of Important Forest Products are also required by this statute.

The purpose of this law is designated in the first article:

> *This law, with the understanding of the important role of forestry and forestry professionals in the national economy, is intended to clarify goals of forest policy and provide basic policy measures in order to develop forestry, improve the social status of forestry professionals, keep forest resources secure, and promote national land conservation, with consideration for an expanding national economy and progress of society.*

The objectives of a national policy for forestry were clarified by this law in 1964. Continuous development of forestry was the first objective. Increasing gross production volume and improvement of productivity were two of the more concrete ideas expressed for accomplishing this objective. Increasing income of forestry professionals as well as improving their social status was the second objective. Both of them were critical problems at the time of enactment, and the situation has not been fully resolved yet today, unfortunately.

The Basic Forestry Law is unique in its simple facilitation of forestry as an important primary industry. It also emphasizes the role of small-scale family forestry and forest owners associations rather than middle- and large-scale forest companies. In other words, small-scale family forestry with the help of forest owners associations was expected to be the driving force of Japanese forestry.

The law also mentions forestry structural improvement, stabilization of forest production and timber prices, consideration of adequate imports, rationalization of distribution and processing systems, facilitation of forestry education and research, among other things. The Forestry Agency and municipal governments are involved in numerous policy measures based on this law.

(3) Forest Owners Association Law

The legislative definition of forest owners associations (forestry cooperatives) used to be in the Forest Law of 1951, but it was superseded by passage of a comparable version in the Forest Owners Association Law of 1978. In Japan, forest owners associations are legally established, non-profit cooperatives like agricultural cooperatives.

Two major objectives of forest owners associations are: (1) to raise the socioeconomic status of forest landowners; and (2) to increase the efficiency of timber production while facilitating the growth of healthy forests. There were about 1,250 forest owners associations in Japan in 1999, and 50 percent of private forest landowners or 73 percent of the total private forest land area comprise the forest owners association system (excluding prefectural forests).

The Forest Owners Association Law designated required and optional activities for associations. Required activities include management guidance for members, management and silviculture practices of a member's forest by entrustment, acceptance of a member's trust for forestry purposes, and protection of member's forest. Optional activities include making loans for forestry activities, processing, distributing, stocking,

and selling of forest products, building of forest roads, providing facilities for forest workers to improve their efficiency, creating recreational facilities, making forest management plans and providing education and information services to members.

The forest owners association plays a very important role in private forestry. It is an independent voluntary organization, and forestland owners in the region are free to join it. However, most of the forest landowners join the association because it is advantageous. For example, governmental subsidies for silvicultural practices such as planting and pre-commercial thinning are provided through the association. Members can receive the full amount of subsidy with the presence of association in the area. Forest owners associations play an important role as the public administration organization at the lowest hierarchical level. Forest owners associations are not a branch office of the Forestry Agency, nor is it a public corporation, but usually the salary and working conditions are comparable to those of public agency such as municipal government.

(4) Other related laws

In addition to the three fundamental laws described above, many other laws directly and indirectly affect forest policy. They are listed and briefly described below.

Promotion of Securing Forest Workers Law of 1996 enables municipal governments to support forest owners associations and other private companies in recruiting and training forestry workers. The law also allows governors to create a prefectural center for securing forest workers. This policy is one of the more promising public support systems for revitalizing Japanese forestry.

Special Measures for Stable Timber Supply Law of 1996 aims to facilitate development of forestry and the forest industry. The law allows forest owners, forest owners associations, and timber processing entrepreneurs to establish a plan for stabilizing timber supply. It also allows governors to create prefectural centers for facilitating a stable timber supply. The main role of the center is to guaranty loans for forestland owners and others for their forestry activities.

Special Measures for National Forest Reorganization Law of 1998 explains the reasons for reorganization of the national forest, to declare new objectives for national forest management, and to designate many special measures. The law declares the main objective of managing the national forest is changed from continuous timber production to pursuing public benefits. It also orders abolishment of a self-supporting national forest accounting system and transfers 2.8 trillion Yen of cumulative debt out of 3.8 trillion in total debt into a general account budget for repayment. The law indicates a big change in forest policy in Japan. Among the results of this change is the number of regional forest offices was reduced from 14 (including 5 branch offices) to 7, and district forest offices were reduced from 229 to 98. A big decrease in the number of forest workers employed by the Forestry Agency was also a result.

The *Natural Park Law of 1957* aims to preserve natural beauty and facilitate use of parks for recreation and education of the public. The law designates three levels of natural parks: National Park, Quasi-National Park, and Municipal Natural Park. Parks are not necessarily publicly owned land but legally designated area regardless of ownership. The total area of National Parks in Japan is about 2 million ha. Over 60% of the area in natural parks is in national forest.

The *Conservation of Natural Environment Law of 1972* aims to facilitate policy measures for environmental conservation. The national government is obliged to gather basic information about geographical, geological, and biological status of the country around every five years. The government is also obliged to prepare a principal environmental conservation plan. One of the distinguishing features of this law is the article on wilderness preservation. There is not a big area of untouched nature left in Japan, so wilderness areas are highly valuable to keep untouched for future generations.

The *Conservation of Endangered Wild Species Law of 1992* provides authority for the Minister of Environment to designate endangered species. This law also protects internationally designated species within Japan. Designated endangered species must not be kept, killed, injured, traded, sold, purchased, and displayed.

The *Basic Environment Law of 1993* aims to facilitate a healthy and rich cultural life for the public by maintaining a good environment. The law establishes the basic concept of environmental conservation for the nation. The Basic Environment Law is very short just like the Basic Forestry Law, and it simply declares the basic idea of environmental conservation and clarifies the responsibilities of government, companies, and people.

A NEW DIRECTION

Forest policy in Japan is moving in the direction indicated by the recent drastic change in national forest management objectives. The Basic Forestry Law of 1964 was intended to promote timber production as the primary goal of national forest policy, but the situation today is far different from the ideal foreseen by that law. Therefore, a new version of basic forestry law, namely the basic forest and forestry law, is to be implemented in 2001. As described above, small-scale family forestry has survived with the help of government subsidies based on the policy of the Basic Forestry Law. The government pays large sums of money to support roads or machinery to enhance rural forestry every year. In the 1960s and 1970s, when forestry was strong, forestry practices realized both timber production and environmental services at the same time, which was referred to as "preestablished harmony" in forestry. However, such harmony has since disappeared, because appropriate practices are now lacking. Abandoned plantations on steep terrain can easily cause environmental disasters such as wind throw, soil erosion, or landslides. Unfortunately, the number of such abandoned forests is gradually increasing because small-scale forestland owners can no longer afford to maintain their forestland in many cases

The primary goal of forest policy under the forthcoming new basic forestry law will be to implement various environmental services. In addition to the above-mentioned domestic reasons, the law is also influenced by an international movement for sustainable forest management practices following the 1992 Earth Summit in Rio de Janeiro. Timber production will thus have to relinquish its position of primary importance, although in reality it has not held this position for some time. Forestry will continue to play an important role in land stewardship and will no longer be concerned merely with timber production.

The position of small-scale family forestry as the driving force of domestic forest production may or may not change. Integration of forest management by accumulating dispersed holdings is planned under the River Basin Forest Management System. This would mean less and less family forestry units can survive in the future. However, in most cases, small-scale family forestry will continue to manage their own forestland for as long as possible. Because forestry practices are necessary in maturing plantations, government assistance to forest owners must continue for at least two or three more decades. In addition, direct income compensation or similar public support systems for forest owners are under consideration. Because there are no giant forestry corporations in Japan, and the national forest is no longer a highly productive organization, family forestry and forest owners associations should continue to play a leading role in domestic forestry. New legislation will recognize this reality or it will fail to attain its policy goal.

CONCLUSIONS

Forests and people have been intimately related throughout the history of Japan. However, in the 19th century and the first half of 20th century, large areas of forest were devastated, and timber inventories decreased. The First Forest Law has been the primary breakwater against expansion of forest exploitation and conversion of forests into other uses. Especially in war time, natural forests were destroyed across the country.

After the World War II, the New Forest Law provided for a nation-wide reforestation effort. Most of the 10 million ha of plantation forest had been planted during the 1950s through 1980s. Forest inventories steadily increased year-by-year. In spite of such favorable resource conditions today, domestic forestry has been struggling. Forestry development aimed at in the Basic Forestry Law was never fully achieved because of the flood of less expensive imported logs and timber into the market.

To summarize the situation, the Forest Law of 1951 did a remarkable job as forest resource policy during post-war period, but the Basic Forestry Law of 1964 did a rather poor job as forestry related industrial policy. Recent policy direction toward environmental protection is good, but the production side of forest policy should not be forgotten because the renewable resources it provides will be needed both in the present time and in the future. Balancing environmental protection and timber production along with considering both urban demand and rural employment will be the key to the success of forestry legislation in the 21st century.

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FOREST POLICY AND LAW DEVELOPMENT IN ARMENIA

KAREN TER-GHAZARYAN

INTRODUCTION

Armenia is a landlocked, mountainous country located in the Caucasus eco-region and covers an area of about 3 million hectares. A wide variety of habitats may be found in this small land area, including desert, semi-desert, steppe, forest, sub-alpine and alpine meadows. Due to its position at the meeting point of three diverse bio-geographic regions and the mountainous nature of the landscape, the country sustains high biological diversity and a number of endemic species of the Caucasus.

Only 11% of the territory is covered by forest, at altitudes of 500 to 2,700 m asl., characterized by more than 200 species of trees and shrubs. All forests in Armenia are state owned, and all forest management and protection activities are financed through the state budget. The current protected areas formally make up one third of the total forest area.

The current harsh economic situation has created a great demand for wood products. Large peri-urban areas have been denuded of forests, which negatively affects soil and water resources (Ter-Ghazaryan et al., 1995). It has been estimated that in each of the last seven years at least 700,000 m3 of wood have been illegally cut, and this has damaged the forests, as cuttings were done in an uncontrolled and disorderly manner. It is feared that rare species, both flora and fauna, disappear continuously. The co-operation between concerned ministries and authorities when it comes to sustainable forest management and use is inadequate.

There is a strong black economy and a high proportion of the timber harvested is felled illegally (Thuresson et al. 1999). The state institutions responsible for forestry are weak, the regulatory system is poorly developed, and there is a lack of forestry experts. The state forestry enterprises follow former Soviet-style management plans, which do not guarantee sustainable forest management. The current situation concerning the management and conservation of forest resources is crucial, and calls for immediate actions both for national and international communities.

FOREST POLICY DEVELOPMENTS AND RELATED INSTITUTIONAL CHANGES IN THE TRANSITIONAL PROCESS: CURRENT STATUS AND PROGRESS MADE

Policy and legal framework

A revised forest policy declaration for Armenia was adopted in May 1996, and aims to satisfy objectives related to environmental protection, economic utilization, rural development, and land use. Specifically, the stated main policy objectives are to:

- create conditions which lead to proper economic utilization;
- be consistent with other national policies, especially those concerning the environ-ment, agriculture, forest industries, and rural development;
- take account of recent developments in forest policies of developed countries;

- strengthen the institutional capacity for forest policy formulation, monitoring and execution;
- enhance forest regeneration, afforestation and rural forestry.

The principles enunciated for implementation of the forest policy are:

- conservation;
- afforestation and regeneration;
- sustainable and multiple use of forest resources;
- maximum participation of private and other non-governmental organizations in forestry development.

The last two principles represent major departures from past policy, which neither sanctioned productive use of forests nor permitted non-governmental or private participation in forest activities.

The overall strategy of forest sector development in the long run is to make the Armenian forestry sector self-reliant in both financial and economic terms, thus justifying future capital investments and also offsetting the shortfalls in government support for annual budgets.

There are four major and interrelated strategic objectives:

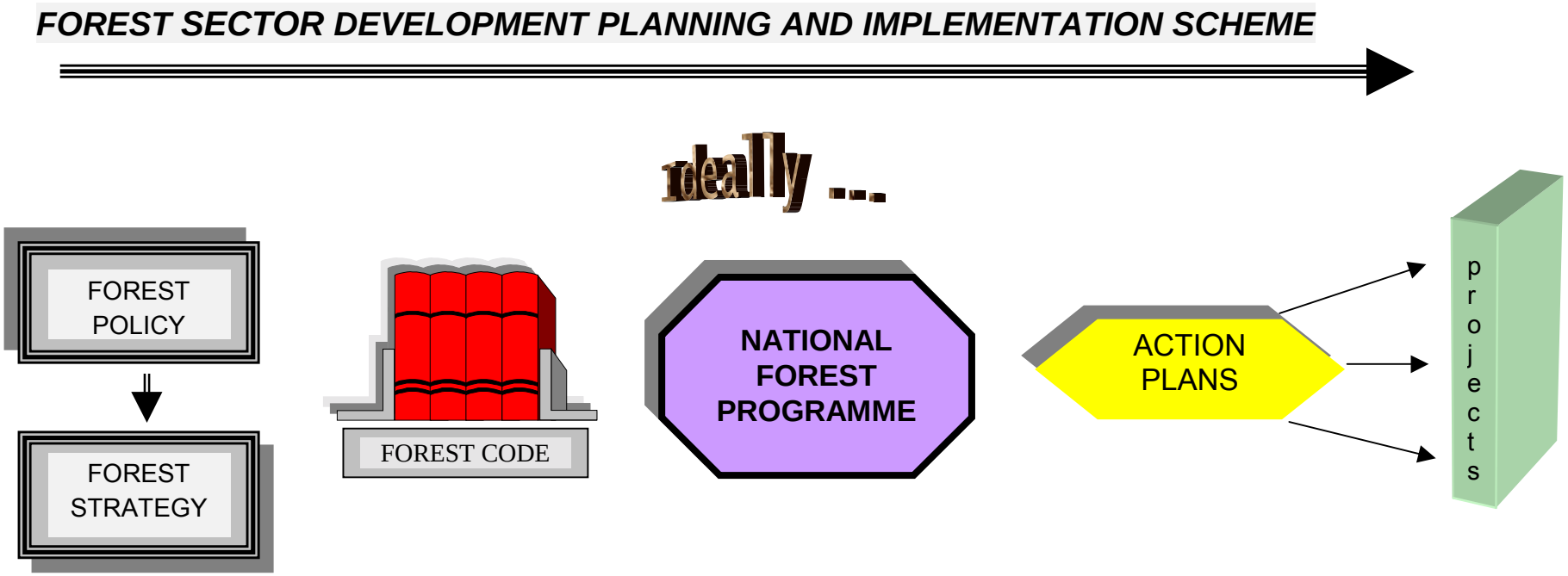
- integration of Armenian forests into the national economy;
- afforestation, regeneration and rural forestry;
- improvement of the effectiveness of forest management;
- conservation and protection of the environment.

The forest strategy also identifies activities in the implementation of these objectives, and in particular for the fourth objective (conservation and protection of the environment). The following steps were proposed:

- Elaboration of an environmental action plan for forestry
- Reconsideration of the conservation status of all Armenian forests by teams of specialists
- Development of protected areas for eco-tourism and recreational use
- Elaboration of wildlife management plans consistent with the other uses of forests

The forest policy and strategy needs review and further development to adjust to an evolving and dynamic economic and social environment in the country, whilst maintaining the conservation and protection of natural resources (fig. 1).

As new partnerships develop with other countries, bilateral agencies, international institutions and NGOs, there will be an increasing need for Hayantar, the State Joint Stock Company, to provide co-ordination and information services, so that government policy is clearly presented.



ARMENIAN CASE

Forest Code 1994

Forest Policy and Strategy 1996

Forest Sector Identification Projects

- The WB (Agriculture Sector Review, 1992)
- FAO/TCP (Forest Sector Studies, 1995)

Action Plans (NEAP/Forestry, The WB, 1999)

Pilot Projects (Forest Resources Assessment. SIDA, 1998)

MAIN ISSUES

1. Filling Gaps
2. NFP Formulation
3. Revisions & Amendments
4. Strengthening Links

Fig 1. Forest policy and law development in Armenia

Legislative framework

The Ministry of Nature Protection (MNP) is responsible for the conservation, management, sustainable use and regeneration of all natural resources of the republic. MNP tasks include, *inter alia,* the preparation of the theoretical guidelines on the *ex-situ* and *in-situ* conservation and sustainable use of biodiversity, and the control and supervision of the existing laws in close cooperation with relevant ministries.

The responsibilities of MNP include issuing licenses for the use of natural resources, and in particular forest resources, against the payment of resource use fees. These fees as well as procedures, user rights and obligations, etc. are defined according recently adopted governmental decision (1999).

Through its different structural divisions (including HAYANTAR State Joint-Stock Company, State Forest Administration) the MNP in collaboration with external expertise is also responsible for the organization and implementation of the ecological surveys and inventories of natural resources, *in-situ* conservation of habitats and species, provision of guidelines for their sustainable exploitation, and preparation of the environmental impact assessments (EIA) for all national development projects.

A new “Forest Code” came into effect in November 1994. This is based largely on the former Forest Code of 1978, amended to take account of changes in the Armenian economy regarding, in particular, the shift from a centrally planned system to a market economy and the emergence of private property. The Forest Code is currently deficient with respect to the ownership of forest on privately owned or controlled land, and also needs elaboration in respect of forestland use and grazing.

However, the Code does not have any stipulations against the establishment of private forests. Rather than the Code, hindrances to private forest sector development can be found in the forest regulations, which were established under the previous Code and still remain in force, even though the Government decided to annul all previous regulations and replace them with new ones. Renewal of the lower level regulations and by-laws would be needed if the establishment of private forests were truly waited.

Administrative structures

Forestry Administration: The national forest estate is divided into 21 forest economies under the jurisdiction of forest enterprises (FE); these constitute the Armenian Forest Fund, which is administered by Hayantar, the State Joint-Stock Company. Hayantar lies within the Ministry of Nature Protection, and is headed by a General Director assisted by three deputies. There is no organisational provision for forest extension, either in Hayantar or within the Ministry of Agriculture.

Although the forest enterprises have previously been grouped into four forestry regions (Northeast, Southeast, Lake Sevan Basin and Central), they are all responsible directly to Hayantar at the central level. Enterprises have two, potentially inconsistent, functions. On the one hand, they are responsible for forest regulation, supervision and monitoring. On the other, they carry out virtually all forest operations, including logging, transport and wood processing.

Each FE is subdivided into 3 or 4 (sometimes even more) forest primary units or forest districts. The latter in turn is divided into compartments and sub-compartments (liters) based on stand and stocking figures. Each FE contains several operational sections: administration, silviculture, reforestation, protection, and forest by-products. The FE Director is largely autonomous allowing him to recruit personnel and control all forest activities in his FE. The director is assisted by a deputy director, a chief forester, a chief accountant and several engineers or technicians. The forest district is headed by a district forester assisted by several forest rangers. Usually the Hyantar Director General nominates the FE Director and the district foresters.

Hyantar has some 1,200 permanent and casual employees: 65 are posted at Headquarters and the rest at the district level. It is estimated that about 300 have an academic degree, 600 have been trained as technicians or forest guards, the rest are workers. There is no specific vocational training in forestry in the country and a large part of the forest staff is educated in other disciplines than forestry. Hyantar is poorly equipped in all areas. The communication system is weak and most vehicles are old and out of service.

There is not yet any organisational decentralisation, although the Government of Armenia (GoA) has in May 1996 introduced eleven local government administration areas (*Marz*). At the level of the *Marz*, there are now Environmental Officers of the Local Government *(Marzpetaran)* with local jurisdiction, *inter alia*, over forestry matters. The mandates of the various ministries involved between political responsibility, administrative authority and technical competence have not yet been fully defined.

Problems To Be Addressed: As an institution, Hayantar is affected by problems of both inappropriate structure and weak capacity. Hayantar does not yet have its own capacity to carry out all assigned functions adequately. For example, policy development, coordination, planning and budgeting, forest management and forest resource assessment. Without a continuation of donor assistance, Hayantar will be unable to fulfil this mandate in the immediate future.

Identified problems are:

- lacking institutional capacity to implement new forest policies
- policies and laws do not meet requirements emanating from community and private forestry.
- there are certain environmental problems (erosion, soil salinity, contaminated surface water) in agriculture that could be addressed through an integrated use of trees, shelterbelts and forests;
- co-operation in land use/land management between agriculture and forestry is inadequate;
- there is no forestry extension service for farmers and the entire concept of farm forestry and agro-forestry is not developed.

EXPERIENCES GAINED AND PROBLEMS ENCOUNTERED IN PRIVATIZATION AND RESTITUTION PROCESS

All forests in Armenia are currently state owned. At the beginning of the 19th century all forests were privately owned. After joining Russia (1828) a part of the forest was considered as a property of the Russian Empire, yet a substantial areas were left under the responsibility of communities, private landowners and churches. Under the Soviet regime the forest areas located in the vicinities of the villages were transferred to collective and state farms (which were the main agricultural production units, and formerly called kolkhozes and sovkhozes).

In 1994 over 50,000 ha of forests belonging to the former state and collective farms have been transferred to the state forest estate. However, it is anticipated that private forestry will be developed on the recently privatized lands through farm forestry practices (Ter-Ghazaryan 1997).

This is due to the recent privatization of agriculture lands, which will bring about a need to establish forests to protect fields from wind and water erosion. Private owners will also produce fuelwood, fruits or other produce both for own consumption or commercial sales. The current fuelwood extraction and the frequency of illegal logging, may make land owners reluctant to planting trees in due to the difficulties in controlling wood theft.

The New Forest Code of Armenia stipulates that all forests are state owned and that the State prepares and implements forests management plans, authorizes exploitation, and generally controls the sector. The Code does not contain major obstacles against privatization in the forestry sector. Development may take place through forestry activities on private lands or allowing private entrepreneurs to utilize state forests and allowing access to the wood-processing industry and trade.

The Forest Code needs to be clarified to encourage private owners to reforest their own land. It should be explicitly stated that forests developed on private land would not become part of the state forest estate.

Future private forest owners in Armenia could be organized into Community-Based Groups. These are formal and informal groups of local people. The main activities of Community-Based Groups would be:

- preparation and management of wood and non-wood forest product sales,
- management of thinning, sanitation, regeneration and tree planting,
- wood and non-wood forest product processing, and
- provision of information and further education to their members.

ROLE OF INTERNATIONAL COOPERATION AND EUROPEAN INTEGRATION

Armenia has participated in:

- The 4th meeting of the Team of Specialists (ToS) to monitor and develop assistance to countries of central and eastern Europe in transition in the forest and forest products sector (Austria, 1999)
- Regional consultative meeting “COSTA RICA-CANADIAN INITIATIVE: International forest regime” (Turkey, 1999)
- INTERNATIONAL EXPERTS MEETING ON LOW FOREST COVER COUNTRIES which is an open-ended international meeting of experts on "Special Needs and Requirements of Developing Countries with Low Forest Cover and Unique Types of Forests”. (Tehran, Iran, 1999)
- World Bank’s Forest Policy Implementation Review and Strategy (FPIRS) regional consultations, ECA region (Joensuu, Finland 2000).

FUTURE CHALLENGES TO ENSURE SUSTAINABLE FOREST MANAGEMENT (SFM)

Enhancing economic viability of SFM

Socio-economic functions: Forest management planning should aim to respect the multiple functions of forests to society, have due regard to the role of forestry in rural development, and especially consider new opportunities for employment. Economic policy and financial instruments should support programmes to ensure employment in rural areas in relation to forestry. Economic incentives at the community level are preferable. Forest management practices should make the best use of local forest-related experience and knowledge, such as of local communities, NGOs and local people. Opportunities for public participation in decision-making on forests should be enhanced.

Awareness raising and education: The implementation of SFM in the field requires continuous extension, training and education of forest managers, owners, contractors, employees and users. All of them need to be trained in the principles and practices of SFM, in order to empower them to implement ecologically and economically adapted forestry operations, and to prepare them to accept responsibility on the results. Awareness raising and extension services need to be provided. A part of forest revenues are reinvested in training and awareness raising.

Prerequisites for SFM: A country needs a continuous forest resource inventory and monitoring system. Adequate enabling structure, infrastructure and institutional capacity, etc. are important prerequisites as well.

Conserving and enhancing forest biodiversity: The forests of Armenia offer very high environmental and nature conservation values. The forests contain lots of dead wood - essential for endangered fungi, insects and birds. There are many hollow trees suitable for bird nesting, and many Armenian forest areas would be classified in Western Europe as possible nature reserves. This is of course due to the fact that in Western Europe there are very small areas left with these characteristics, and therefore they are considered ”rare”. In Armenia this is not always the case. More or

less all forest stands (except the few young ones) have a lot of snags, dead trees, coarse woody debris and other characteristics of natural forest. As there are such large areas with this kind of forest, the nature conservation issue is not that critical. To be able to preserve the ”good” and valuable nature conservation characteristics in the forest and still be able to use it, the forest personnel will have to be educated in nature/environmental aspects in forestry. This is also a matter that ”the world community” could (and really should) be assisting Armenia with, before it is too late (as is the case in many areas in Western Europe).

In Armenia there are currently valuable forest areas and forest types in more or less acute need of protection, e.g. high-mountain forests (upper timberline), virgin forests (old-growth), “fauna-flora” forests, and forests with rare and endangered species (in IUCN categories: vulnerable, conservation dependent, near threatened, endangered and critically endangered). Information on these valuable forest areas is basically lacking and must be collected as a part of periodical forest inventories.

The present situation calls for the formulation of an integrated land use plan of the entire country in which all different types of land use would be included. The contribution from the forestry sector to such a concentrated effort would be to identify such areas that are important for biodiversity and nature protection (including water surfaces) in the forests. Other sectors (agriculture, animal husbandry, communications, etc.) would have to take a similar approach. It is difficult to predetermine how credible and useful activities in the field of environmental protection and biodiversity conservation can take place without such an integrated land use plan.

Identified key problems and needs (no order of priority):

- the present status of forest biodiversity is bad. It is feared that forest species, both flora and fauna, continuously disappear;
- there is an urgent need for review of the network of protected areas and integrated planning of reserves and land use generally, in order to arrive at credible activities for forest biodiversity conservation and sustainable use on national and regional levels;
- the knowledge base regarding forest biodiversity and health is not good enough to really support detailed activities to salvage different species . There is a pressing need for surveys, ground inventories and up-dating of the relevant databases based on ecosystem approach;
- the co-operation between concerned ministries and authorities when it comes to biodiversity conservation and reserved areas management is not sufficient. There is a need for clarification in terms of authority and responsibilities to prevent overlap and confusion;
- there is an urgent need for improved inspection, monitoring and control of conservation areas and biodiversity;
- there is a special need to protect and manage old-growth forests and forest genetic resources of high conservation value.

Improving socio-cultural conditions for SFM: So far participation of the local population and private landowners in forest biodiversity preservation is quite small although this is prescribed by environmental legislation. It is essential to include the farmers in the planning exercise mentioned above. The forms and an adequate mechanism of co-operation and participation have vet to be clarified.

Tools to ensure SFM:

A work programme for the conservation and sustainable use of the forest biological diversity should be urgently designed, discussed with interested parties and implemented. This work programme must follow the priorities of the overall national forest programme (currently under development).

Aiming to maintain forest biodiversity and the environmental, cultural and aesthetic values of the forests, and to enhance the environmental benefits of forests and forestry in Armenia, the following immediate objectives must be addressed.

- to improve forest biodiversity management by institutional strengthening of the forestry administration at both the central and local levels (including but not limited to information, policy and strategy development, legislation, education, training and applied research);
- to reduce and ultimately halt soil erosion processes in the country;
- to promote in selected watersheds environmentally friendly natural resource management by all concerned parties;
- to improve the forest road network and to introduce environmental dimensions in road planning, construction and maintenance;
- to introduce integrated pest and disease management concept into forest planning and implementation;
- to restore the urban and peri-urban shelterbelts and other types of plantations with special regard to landscape rehabilitation and recreation;
- to strengthen sustainable management and protection of particularly viable old-growth forests and other forests of high conservation value and genetic reserves;
- to introduce environmentally sound forest harvesting and transport practices;
- to promote the range and value of wood and non-wood forest products, to conserve gene resources and support economic development and employment creation in local communities, especially with regard to women and the rural poor (K.A. Ter-Ghazaryan and G.G. Ter-Ghazaryan 1998).

Capacity-building agenda, institutional strengthening and improved partnership with NGOs and the local population for the conservation and sustainable use of the forest biodiversity are the principal prerequisites for the promotion of the aforementioned work programme (Ter-Ghazaryan 2001). A special emphasis must be placed upon larger involvement of the local power and communities, NGOs and the small business sector in sharing traditional knowledge and responsibilities for the sustainable management, conservation and protection of the forest biodiversity. This would enhance the overall value of, and ensure an equitable access both to wood products and non-wood forest goods and services.

PRIOR AND ON-GOING ASSISTANCE TO FOREST SECTOR

UN FAO Technical Cooperation Programme ARM/4451/6612 (1994-1997): TCP has assisted with: (i) training (English language, project preparation, principles of market economy and introduction to computer usage); (ii) trial wood sale auctions; (iii) a national forestry workshop; (iv) the preparation of a new forest policy and strategy, and review of forest regulations; (v) the preparation of an associated portfolio of investment profiles; (vi) the preparation of the Institutional Capacity Building(ICB) Project on behalf of UNDP .

National Environmental Action Plan (NEAP) 1998-1999: Activities were taking place under an IDF grant, which has been made by the World Bank(WB) to assist Armenia in developing its institutional capacity for environmental and natural resource management, including forest resources. The emphasis is on developing the capacity to establish an appropriate regulatory framework and to manage environmental issues.

Forest Resources Assessment (SIDA) 1998-1999: The main objective of the project was to arrange and carry out a forest resource assessment (FRA) on the Armenian forests possible for exploitation to get strategic data to use in forest management policy decision work. The project provided results on:

- the present growth and the future growth potential.
- ecological as well as some economic factors concerning the forest in a way that nation-wide forest policy decisions can be made based on simulations of different scenarios.
- future development needs especially in the forest area.
- training of Armenian staff members in forest inventory methods, forest inventory design and strategic/normative forest management planning for policy decision making.

Development of the Forest Certification Standard for Armenia. (UK FCO) 2000: The purpose of the project was to support the goal of sustainable forest management in Armenia by developing a forest certification standard that has the support of all key stakeholders in Armenia.

Joint Environmental Programme (JEP-06, TACIS). On-going: Preparation of the Forest Management Component of the Natural Resources Management and Poverty Reduction Project-Armenia (The World Bank).

New national development strategies require policies that integrate forests in rural development efforts and that balance economic and environmental needs among national, regional and international interests. Today, the country is seeking more appropriate economic policies, regulatory mechanisms, financial incentives, organisational structures and tenurial arrangements to promote sustainable forestry practices. These economic policies should address also the needs of the most vulnerable social groups as rural poor.

Within the forestry agencies, which are involved in international cooperation programmes development, there is a great lack of the knowledge upon the presence and the relevant programmes of donor organizations interested in the sector development. These agencies are institutionally weak in terms of cooperation

development, needs assessment and overall in the organization of the negotiation procedure. This is a major constraint of the appropriate implementation of the adopted forest policies and strategies.

CONCLUSION

Forest Legislation: The new Forest Code is effective. It is recommended that it should be revised in light of the anticipated development of private and community forestry to guarantee that private forestry retains the benefits of its activities, and that technical assistance is provided to forestry activities undertaken on private land as well as to community forests. With respect to institutions, it is recommended that the Code test some institution with responsibility for forest management. Regulations on haymaking and grazing should be examined from a wider perspective of integrated management. A more general recommendation about all regulatory texts in Armenia is to limit regulation to a minimum, to formulate clear and preferably brief provisions and to eliminate many of the unnecessary details which are dealt with in existing texts.

It would be advisable to utilize the experience of other Eastern European countries, such as Poland, in the finalization of such legislation, including the development of regulations.

Policy direction and control: Since the early 1990s *Hayantar* has not been allocated sufficient resources in the form of staff and equipment to strengthen its inspection function and enforce the law. *Hayantar* would also require resources to initiate and follow up on the development of the prospective strategy for conservation and sustainable utilization of forest resources as outlined above. In this task which must involve many ministries, *Hayantar* could be assisted by the Forest Research and Experimental Centre (MoNP).

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FOREST AND ENVIRONMENTAL LEGISLATION IN THE FEDERATION OF BOSNIA AND HERZEGOVINA

MERSUDIN AVDIBEGOVIC

Forests are one of the most important natural resources of Bosnia and Herzegovina (hereinafter referred to as BiH). The total land occupied by forests and forestlands in BiH amount to 2,710,000 ha (forests 2,276,000 ha and other forestlands 434,000 ha) or 53.4% of the total land area. Based on percentage of territory that forests occupy, BiH is the fourth ranking country in Europe. The amount of forest per capita is 0.74 ha, which places BiH in sixth place in Europe.

Forestry and the wood processing industry are a very important branch of the national economy. The contribution of forestry and the wood processing industry to the gross domestic products of BiH was 8.14% in 1990. The contribution of the forestry and wood processing industry products to total export value was 7.27% in 1990 and in 1998, it was 24.84%.

The traditional focus on forest resource management has been followed by corresponding forest legislation. Since Ševal's Forest Law, enacted during the middle of the 19th century, to the Forest Laws of 1961 and 1978, the country has tried to regulate forest property and legal relations and to define a forest policy that would respond to relevant societal requirements.

Dynamic economical and political changes in the last decade of the 20th century and recognition of the importance of forest resources in the broader context both in and out of BiH, as in other countries with economies in transition, defined the need for a new legal framework that would address natural resource management issues.

The result is the Forest Law of 1993, which is analyzed in this study. Because of political causes, this Law has never been fully implemented. Some of its individual provisions like transition of the forests and forestlands from "society" ownership to state ownership, establishing a singular public enterprise for forest management, defining forestry as independent activity with a special public interest, in other words, separating forestry from the wood processing industry, etc., make it an interesting foundation for understanding BiH forestry.

TITLES TO LAND

There are two basic forms of ownership of forests and forestlands in the Republic of BiH (R BiH):

1. State forests owned by R BiH
2. Private forests, which include:
    - forests owned by religious communities,
    - collective farm forests and
    - other private forests owned by legal entities and natural persons.

State forests in BiH occupy 2,125,000 ha (78.4%) and private ones occupy 585,000 ha (21.6%). From the moment the 1993 Law went into effect, all forests and forestlands were transferred from “society” ownership to state ownership.

All forest and forestlands in R BiH are state property, except forests and forestlands that are property of citizens, legal and citizen-legal entities. State forest boundaries must be defined on the field, marked prominently and drawn in cadastral plans of forests.

To accomplish particular public interests in state forests and forestlands management, the Parliament of R BiH has established public forestry enterprise “Bosansko-hercegovačke šume” (hereinafter referred to as the Forest Enterprise) with its headquarters in Sarajevo. Financial resources of the Forest Enterprise are state property. The Forest Enterprise must provide simple biological reproduction, throughout its own forest service or by authorizing other legal entities registered for forestry management. State-owned forests and forestlands could be managed by other legal entities if they satisfy all requirements of this Law.

Forests and forestlands owned by the state cannot be alienated from state ownership, except in cases of redistribution of land. Nobody can acquire title to property of state forests and forestlands by adverse possession. Self-willed occupation is prohibited and punishable.

Some forests and forestlands owned by the state can be separated from forest management areas in order to use them for other purposes if that is in the common interest.

In accordance with regulation of this Law, a common interest exists if:

- forests and forestlands are needed in order to put an urban plan into effect,
- forests and forestlands should be transferred to another cultivation or use which is more beneficial for society,
- separation is for purposes of the defense of the country.

The Forest Enterprise or the other legal entities have the right to obtain compensation, which will ensure that working conditions are not adversely affected because of handing over of forest and forestland management rights. The Forest Enterprise or other legal entities can only use the above-mentioned compensation for extended biological reproduction of forests or for buying of forests and forestlands.

INTERVENTIONS IN AND STATUTORY RESTRICTIONS ON PROPERTY

Trees in the forest can be cut only after they are selected and marked in accordance with the forest management plan. In exceptional cases defined by this Law, only the areas that will be cut down need be marked. Selection and marking of trees in state forests is done by the legal entity to whom management has been delegated. For forests owned by citizens or a citizen-legal entity, it is done by a municipal administrative organization authorized for forest activities.

Selection and marking of trees, except in the case of sanitation cutting, cannot be done if there is no forest management plan or if property and legal relations are in dispute.

Forest cutting must be primarily for the purpose of forest protection, silviculture and reforestation with the final objective to establish ecologically stable and productive forest stands.

Wood and branches cut in or outside of the forest can be moved out, transported, accepted for shipping, processed or stored and traded only if they are marked by the proper forest hammer, numbered and measured, and if the wood possesses the proper outgoing documentation.

Legal entities that manage forests and forest owners are obligated to take measures to protect forests from:

- fire and other natural disasters,
- plant diseases and forest pests,
- illegal arrogation of lands and other illegal actions.

It is prohibited to damage trees or to cut rare tree and brush species, which are recorded on the established list of rare tree and brush species. Cutting rare tree and brush species can be done only if they are damaged or diseased to the point that they are threatened with dying or they are the source of infection.

If not proscribed otherwise, the following is prohibited:

- cutting and clearcutting of forests, cutting of trees in younger stands, trimming of branches or parts of branches,
- woodland pasturing and browsing, fattening of hogs, collecting and taking of litter and moss,
- collecting of forest fruits and other forest products,
- exploitation of humus, clay, sand, gravel and stone,
- coating of trees with pitch,
- destroying and damaging of marks and boundary signs used in forest management.

The legal entity who manages a forest can allow, by special document, collection of forest fruits and other forest products, exploitation of humus, sand, gravel, stone, and pitch, pasturing and fattening of animals, for purpose of its own use and for use of other citizens with compensation, if it does not conflict with the forest management plan. Exceptions are different-aged forests, even-aged high forests and coppice that have breast diameter from 7 to 10 cm wide. Guarding of cattle is compulsory.

The forest owner can pasture cattle, collect dry leaves, moss and other forest products in his forest only in accordance with conditions and means determined by the forest management plan or special document that was passed by municipal administrative organization authorized for forest activities.

Clearcutting is permitted only:

- for the purpose of changing of tree species, changing of stand forms, establishing of plantations or structures for forest production (nurseries, forest roads, building, hunting structures, etc.),
- if forestland, for the common interest, should be transferred to the other cultivation,

- if it is required for the defense of the country,
- if it is necessary in order to put area urban planning into effect.

Land, which was exposed to clearcutting must be, within a three-year period, prepared for the intended purpose for which cutting has been conducted. The user is obligated to reforest the cutover land within the time limit determined by the authorized municipal body.

Starting an open fire in forests as well as on land nearby is prohibited. Starting fire and producing charcoal is permitted only in certain places and under specific conditions which are determined by the legal entity that manages the land or, if private forests are involved, under conditions determined by the municipal administrative entity authorized for forest activities.

In forests and in areas 200 meters near forests, it is prohibited to build a lime kiln, field brick kiln, or other structures with an open hearth, as well as disposal and burning of trash and waste material.

Roads that are used primarily for the forest management are considered as fixed assets of the legal entity who manages the forest. Other legal entities and citizens can use forest roads under conditions determined by the legal entity which manages the forest, but they are obligated to pay compensation for such utilization.

Game may be raised in the forest but only of a species and number that will not interfere with proper forest management. Species and number are determined by the fore management plan in accordance with hunting regulations.

SCOPE AND REACH OF FOREST LAW

The Forest Law defines management of all forests and forestlands on R BiH territory. Forest and forestland management is of special social interest that is achieved in the way specified in this Law.

Forests and forestlands are unique natural resources that provide generally beneficial and productive functions. Productive functions of forests are the production of wood raw material and other wood products. Generally beneficial functions include protection of land, traffic arteries and other structures from erosion, torrent and flood, influences on water and hydroelectric systems, influences on the fertility of the soil and agriculture production, influences on climate, protection and advancing of the environment, production of oxygen and purification of the atmosphere, influence on the beauty of the landscape, and creating conditions for human treatment, convalescence, rest and recreation, development of tourism and hunting, and for the defense of the country.

In accordance with the Forest Law, land covered by forest trees in the form of stands on an area bigger than 0.1 hectare is considered forest. Separated groups of forest trees on an area smaller than 0,1 hectare, forest nurseries, windscreen zones and parks in populated areas are not considered forests.

Land where forests are grown or which are, because of their natural features and management conditions, anticipated to be favorable for growing of forests are considered as forestlands.

Based on purpose, forests can be economic, protective and forests with a special purpose. Economic forests are primarily used for wood production and for production of other wood products. These uses are considered not to endanger the generally beneficial functions of forests.

Protective forests are used primarily for protection of land, riverbeds and riverbanks, erosion areas, populated areas, economy and other structures and other properties.

Forests with a special purpose are:

- forests and their portions registered as structure for forest seed production,
- forests with special scientific, educational, cultural, historical, ecological or recreational importance; in other words, those that provide natural heritage (nature parks, nature reservations, natural sights and rarities),
- forests for scientific research, teaching, for use by the armed forces and other defense requirements, and for requirements determined by special regulations,
- forests for rest and recreation,
- forests with special importance for water supply systems, protection from flooding and water quality protection.

Forestland management is a mix of mutually connected and interacted activities focused on a common objective of complete utilization and the maintenance of their natural potential. Those activities can be separated in four characteristic groups:

- simple and expanded biological reproduction of forests,
- utilization of forests and forestlands, forest plantations and other forest products, transportation of forest products, and extraction of sand, stone and gravel,
- utilization of generally beneficial functions of forests,
- construction and utilization of forest roads and other structures for purpose of forest management.

Providing for simple biological reproduction of forests includes the following activities:

- development of a forest management plan, identification of projects for accomplishment of the forest management plan, development plans and other technical investment documentation in order to accomplish a program of simple biological reproduction of forests,
- forest protection and preservation measures,
- forest seed and planting material production for simple biological reproduction of the forests,
- construction of forest roads in order to accomplish program of simple biological reproduction of forests,
- selection and marking of trees for cutting and monitoring of activities for utilization of forests,
- afforestation of areas caused by clearcutting and fires,
- preparation of sites for natural regeneration of stands anticipated for natural regeneration within the period of forest management plan,

- filling, rearing and thinning of all stands: up to age 20 in even-aged generative forests, up to age 10 in softwood deciduous forests and coppice and up to group-age 20 in stands, which are determined for group management.

Providing for the extended biological reproduction of forests includes the following activities:

- development of programs and plans for extended biological reproduction,
- forest seeds and planting material production for purposes of extended biological reproduction,
- construction of forest roads in order to accomplish programs of extended biological reproduction,
- reconstruction and conversion of coppice, underbrush, shrubberies and maquis,
- afforestation of and raising of fast growing tree species in new areas,
- rearing of new stands and their cultivation,
- protective measures from plant diseases, forest pests and fires up to one-fifth of the rotation period,
- buying of forests, or forestlands, rehabilitation and regeneration of forests caused by dryness and ruining of forests,
- scientific study and education of professional personnel.

To provide rational and permanent management of forests and forestlands owned by the state, forest management areas are formed. Forest management areas represent ecological, biological, geographical, traffic and economic sense, one encircled entirety, in limits that ensure permanent forest and forestland management.

Forests and forestlands are managed based on forest management plans which determine the basics of management in accordance with approved forestry policy and policies of other relevant economic sectors in R BiH. The forest management plan must determine ecological, production and economic basis for biological improvement of the forest and increasing forest production. The forest management plan is developed for a 10-year period.

Each forest management area has its own forest management plan. If there is no possibility for timely development of a new forest management plan, forests will be managed based on an annual management plan, but only for one year at the longest. Realization of the forest management plan for forests owned by the state is done based on projects for forest management plan accomplishment. Projects for plan accomplishment are done by management unit – forest district – according to the methodology of the authorized Ministry.

REALIZATION AND TRANSLATION OF POLITICAL IDEAS INTO ACTION

Financial resources required for forests and forestlands management, in other words resources for providing of simple and extended biological reproduction, integral forest protection, necessary scientific research and forestry plans and programs, are provided by:

- allocation of resources for simple biological reproduction by owners who manage forests and forestlands, or from compensation from cadastral income from forests and forestlands,
- allocation of resources by the legal entity which manages forests and forestlands for the purpose of biological reproduction of forests,
- compensation for utilization of generally beneficial functions of forests.

The legal entity which manages forests or the legal entity whose activities include cutting, manufacture and transport of wood, allocate resources for simple biological reproduction of forests from their total income. The foundation for allocation of resources is income acquired by selling of wood and the value of wood used for personnel needs less than 20% of total income. Exceptions from this regulation are forests in karst areas, and for them allocation is less than 15% of total income.

The legal entity which manages forests owned by the state is obligated to, with the report of annual financial balance, to prepare a special report for expense of resources anticipated for simple biological reproduction.

The legal entity who manages forests owned by the state and acquires income from wood trade is obligated to allocate 3% of the value of traded wood products to a separate account for resources to accomplish biological reproduction of forests. The authorized Ministry conducts forest inspections for purposes of Forest Law implementation.

The current situation in BiH forestry in the sense of implementing forest legislation and organizing and functioning of “state” forest enterprises is very complex. The Forest Law passed in 1993, which applied for all R BiH territory, because of political reasons, was not fully implemented. Upon enactment of the Dayton Peace Agreement of 1995, two entities were formed in BiH – the Republic of Srpska and the Federation of BiH (F BiH). Because of such an administrative organization of the state, the Forest Law passed in 1993 has never applied to nor has it been accepted by the Republic of Srpska. Forest resource management in the Republic of Srpska is accomplished in accordance with entity Forest Law, and the forest enterprise “Srpske šume,” with its headquarters in Banja Luka, is authorized for forest resource management.

F BiH is administratively organized in ten cantons. The portion of the F BiH Constitution, which regulates distribution of authorities between Federal and Canton governments, defines Federal and Canton authorities for utilization of natural resources including forest resources. Because of unclear authority relations, this regulation permits various interpretations. Instead of consistent execution of the Forest Law of 1993, in some cantons, Canton forest laws were passed. Canton authorities are aware that, without a common legal framework and forestry organization at the Federation level, they cannot independently execute all tasks required by the principle of sustainable forest management. However, there is considerable concern that the Cantons will, with the passing of Federal Forest Law, lose their authority for forest resource utilization. The most controversial issue is control of income from forestry and its distribution among forest enterprises, both Cantons and Federation.

The F BiH Ministry of Agriculture, Water and Forestry prepared several drafts of a Federal Forest Law. One of these proposals got to Parliament, but because of a

disagreement on forestry organizational structure, a final version of that Law was denied in the House of the People. The consequence of this situation is that there are few public forest enterprises authorized for forest resource management:

- "Bosansko-Hercegovačke šume," with headquarters in Sarajevo,
- "Šume Herceg-Bosne," with headquarters in Mostar,
- "Herceg-Bosanske šume," with headquarters in Kupres.

The extent this situation has on consistent forest policy will be clearly illustrated by the following. In accordance with a decision made in 1961, 43 forest management areas were established on BiH territory, and they are the basic administrative units of forest planning and management. In addition to forest management areas, 5 forestry departments in the karst areas and two national parks were established. While defining the boundaries of forest management areas, ecological, social, traffic and economic factors were taken into consideration. In other words, formation of logical management areas was attempted, which would make sustainable forest resource management possible. Entity and Canton boundaries split previous forest management areas, and that is why current situation is as follows:

- "Bosansko-Hercegovačke šume" has a legal right over forest resource management, and that right is renounced to the other legal entities who satisfy all conditions proscribed by the Forest Law. In accordance with that, this enterprise is consisted of four Canton Public Enterprises and 15 independent forestry enterprises.
- "Šume Herceg-Bosne" is made up of 17 territorial-organizational forestry units, which do not represent independent legal entities.
- Public enterprise "Srpske šume" manage forests in the Republic of Srpska territory and it consists of 42 territorial-organizational forestry units, which do not have legal entity status.
- Public enterprise "Herceg-Bosanske šume" is consisted of six territorial-organizational forestry units on territory of Canton 10.

Noting the importance of forestry for the BiH national economy and unsatisfactory situation in the sense of legal infrastructure and organization of forestry, the World Bank initiated and mostly financed a national forestry program within which there are projects for forestry legislation improvement and privatization and reconstruction of the forestry sector.

One of the program outputs is the proposed new Federal Forest Law. Two drafts of the proposed Law have now been prepared. The Office of the High Representative (OHR) prepared the first draft and that proposal consists of some totally new concepts. It is based on forest concessions with strict control by an authority authorized to issue concession licenses. Application of this proposal and implementation of its regulatory practices would bring about privatization of existing forestry enterprises and involvement of foreign companies in the process of forest resource management in F BiH. Foresters on the field did not support his proposal even though it was supported by the F BiH Ministry of Agriculture, Water and Forestry. Almost all contacted foresters indicated lack of understanding of the organizational aspects. Even the World Bank Mission was not completely in favor of

this proposal because of it requiring use of forest concessions. Considering the various weaknesses in BiH forestry (reduced growing stock, lack of equipment, insufficiently qualified private sector, illegal cutting, etc.), this kind of approach could, in the World Bank's opinion, have a negative influence on forests and forestry in BiH.

A group of local experts engaged by the F BiH Economic Chamber has proposed another draft of the Federal Forest Law based on OHR's proposal, but they offered quite a different solution for the organization of forestry. In this proposal, F BiH needs to form two forestry enterprises for management of state forests. This proposal's weakness is that it does not identify the forest areas that would be managed by the above-mentioned enterprises and leaves this very sensitive issue to the BiH Parliament for a decision. OHR is not favorably disposed toward this proposal so it is not officially discussed.

The difference between the two drafts of Forest Law rests on their approach to the privatization and reconstitution of the forestry sector, in other word, in the proposed models of organization.

To overcome these differences, intensive discussions have occurred between the World Bank, the Ministry, the Project Implementation Unit for Forestry and OHR.

Later in 2000, the Work Group for Forest Law was formed, whose purpose includes coordination of the OHR draft with received suggestions and proposals. Also, the Work Group is expected to submit a coordinated final version of the proposed Federal Forest Law to the ministry in order to initiate the decision-making process. It is anticipated that the work group will accomplish its task by the end of June 2001.

SCOPE AND REACH OF ENVIRONMENTAL LEGISLATION

The Law for Urban Planning of 1987 asserts that all values for the environment have naturally developed with human influence. Favorable living, housing, working and resting conditions in natural and manmade environments are under the protection of society.

Parts of natural and urban environment, under special protection are:

- areas of natural heritage,
- areas of cultural and historical heritage.

Extraordinary valuable areas of natural heritage are:

- natural parks and landscapes (national parks, memorial areas, natural parks and landscapes with extraordinary beauty),
- nature reservations (general and special nature reservations),
- natural sights and rare species of plants and animals (nature monuments, memorial nature goods and some endangered species of plants and animals).

Protection of areas of natural and cultural-historical heritage is provided by development of appropriate plans, coordination of activities or utilization of areas for the purpose of protection and performing continuous monitoring along with responsibilities for authorized services. Protection of natural and cultural-historical heritage includes valorization of heritage, development of revitalization programs and conservation and revitalization of protected areas.

To sustain the most valuable purposes of lands according to ecological balance and environment arrangement viewpoint, the following areas are protected and controlled:

- forests and other vegetation,
- agricultural fields of high value or specially suitable for cultivation,
- areas endangered by erosion and torrents,
- other endangered grounds.

Measures for protection, arrangement and utilization of above-mentioned areas are determined by favorable regulations, plans, waterpower engineering and forest management plans and the agriculture land utilization plan.

Agricultural and other lands, forests and vegetation, seas, lake and river coasts must not be endangered by harmful material or they must not be used in a way that endangers the ecological balance and their natural reproduction cycle.

Legislation that will more specifically treat nature protection issues in F BiH is in process. It should cover the following issues:

- scope of nature protection law and defining terms and general responsibilities.
- procedures, measures and programs for protection of habitats and species, minerals, fossils, landscape, etc.,
- procedures for establishing protection areas and nature monuments
- proper documentation and information collection methods
- mechanisms for ensuring nature protection such as management plans
- authorizations, duties and responsibilities of institutions for nature protection
- finance resources and etc.

COLLISION BETWEEN REGULATIONS IN FOREST LAWS AND ENVIRONMENTAL LEGISLATION

Because development of the new law that treats forest resources and nature protection is in process and is expected to be passed soon, it is not useful to analyze differences between it and the Forest Law of 1993 and the Law for Urban Planning of 1987. Since development of the legal framework for forests and environmental protection is in process, it is expected that a high level of compliance will be achieved among all laws that treat these issues.

OTHER RELEVANT REGULATIONS CONCERNING FOREST LAW AND ENVIRONMENTAL LEGISLATION

While analyzing review of law and law regulations that are in use in F BiH and refer to forest resource management, it is noticeable that they include the newest regulations of F BiH and BiH as well as previous regulations published in Official Gazette of SFRJ, SR BiH and R BiH. Previous regulations are implemented in accordance with Annex II of the Dayton Peace Agreement and in accordance with the Constitution of R BiH, which state: “All laws, other regulations and court rules, which are in effect on the day of putting into effect of this Constitution, will remain in

effect in size which is not contradictory to this Constitution, until authority decides otherwise."

In addition to above-mentioned laws on F BiH territory, more than 80 other laws regulations, decisions, guidance, orders and regulations are in use, and they are implemented in order to regulate forest resource management. Some of the most important are:

- Law on establishing of Public Enterprise "Bosansko-Hercegovačke šume" (Official Gazette R BiH 9/95)
- Regulation for content and format of outgoing wood documentation (Official Gazette R BiH 11/94)
- Regulation for implementation of forest order in forest owned by state (Official Gazette R BiH 8/94)
- Law on conditions and methods of wood cutting activities (Official Gazette F BiH 27/97)
- Decision for export prohibition of forest assortments that are subject of primary wood processing industry (Official Gazette F BiH 51/99, 42/00)
- Regulation for forest management plan elements for forests owned by state (Official Gazette SR BiH 13/83)
- Regulation for forest cadastre (Official Gazette SR BiH 30/78)
- Regulation for marking forest boundaries and boundary marks in forests owned by society (Official Gazette SR BiH 25/78)
- Regulation on compensation for damages in forests owned by society (Official Gazette SR BiH 23/78, 37/82)
- Decision for forest management areas establishment (Official Gazette SR BiH 31/61, 41/61, 49/61, 17/62, 48/62, 5/63, 12/67, 13/68, 19/74, 33/71, 32/75, 10/78, 28/86, 3/87)
- Law on seeds (Official Gazette SR BiH 21/77, 12/87)
- Law on seedlings (Official Gazette Sr BiH 21/77, 12/87)
- Law on plant protection from diseases and pests (Official Gazette SR BiH 21/77, 39/84, 12/87, 4/92)
- Guidance for procedures and methods for issuing of authorizations for seed and seedling of agriculture and forest plants import (Official Gazette F BiH 14/97)
- Hunting Law (Official Gazette SR BiH 7/77, 12/87, 30/90)
- Law on administrative procedures (Official Gazette F BiH 2/98, 48/99)
- Criminal Law of F BiH (Official Gazette F BiH 43/98, 29/00)
- Labor Law (Official Gazette F. BiH 43/99, 32/00)
- Law on waters (Official Gazette F BiH 18/98)
- Law on agriculture land (Official Gazette F BiH 2/98)
- Law on economic crimes of F BiH (Official Gazette F BiH 6/95)

- Decree for cross-entity trade (Official Gazette F BiH 32/98)
- Law on mining (Official Gazette R BiH 24/93, 13/94)

CONCLUSIONS

The condition of BiH forestry is very complex, caused by many unsolved problems in forest sector restructuring. Contributing to the condition is the lack of a legal framework that would address the following issues: restitution, privatization, concessions, natural resource management rights, foreign investment, etc. The condition can only be improved by passing new laws filling the current legal "vacuum." Having recognized this necessity, the World Bank launched the National Forestry Program, to treat issues of environment protection, forestry and other natural resources, which will be offered for parliamentary consideration. Because development of these proposed laws has been done with the participation of local and international experts, it is assumed that the proposed legislation will be in accordance with laws of European Union and approved international agreements. At the same time, these laws are expected to satisfy the requirements of BiH society. In this matter, close cooperation with other countries with economies in transition is beneficial, because much can be learned from their experience.

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FOREST AND ENVIROMENTAL LEGISLATION AND PROTECTION OF BIODIVERSITY OF MEDICINAL PLANTS IN FORESTS IN BULGARIA

MARIA STOYANOVA, NICKOLA STOYANOV, and PETER HADJIEV

Sustainable management and protection of biological resources require a system of management that allows biodiversity protection and normal functioning of the forest ecosystems. This concerns not only economically important resources, such as commercial tree species, for which ways of use were developed long ago, but also other plant species, used for industrial and household needs. That's why analysis of use of these resources and legislation is necessary for the rational use, the reproduction and protection of a rich genetic heritage as well as ways for increasing income. This is particularly true now at the time of changing property ownership, legislation and the transition to a market economy.

The area of forest land in Bulgaria is one third of the territory of the country. With their productive, protective and environmental functions they have important influence both on the social-economic development of the country and the environment of the Balkans and Europe. Bulgarian flora comprises more than 3500 higher plant species with higher endemism (12%). These plants are situated mostly in the mountains (on the territory of the forest fund) – Stara planina – 122 plant species, Rhodopes – 80, Pirin – 70, Rila – 50, Black Sea coast – 49.

The flora of Bulgaria includes species and genetic resources, which are widely used for trade and non-trade objectives and from which we have the possibility to obtain important economic and ecological benefits. Besides economically important plant species (the tree species), over 200 kinds of edible mushrooms and several hundred local medicinal plants are used in Bulgaria.

Bulgarian natural forests comprise 72,2 % of the forest land cover. About one third of the forest land is in forest plantations, whose composition, compared to the past one, is poorer. After establishing of artificial forest stands, wood stock increased more than twofold. The annual growing stock is 4,3 m^3/ha. Afforestation and establishing of monoculture plantations adversely influenced biodiversity, increased susceptibility to diseases and insect pests, and give bigger rise to fires in coniferous forest plantations.

Besides natural-historic, ecologic, economic and other factors for the sustainable development of Bulgarian forests, it is necessary to ensure well grounded economic and legislative protection.

Thus legislation, responding to traditions and international agreements signed by the country, can guarantee juridical protection of biodiversity.

International environmental legislation suggests important instruments for protection of local biological resources. These instruments can be utilized by Bulgaria, because its Constitution stipulates "the international contracts, ratified on the strength of the Constitution, published and in force in the Republic of Bulgaria, become part and

parcel of home legislation. They have priority to those regulations of home legislation which contradict them." Although a concrete valuation of juridical impact of this constitutional decree hasn't been made, it provides significant place for international environmental policies in Bulgarian legislation.

Bulgaria has signed and ratified a number of international conventions, treaties and agreements, concerning biodiversity. Among the most important agreements signed and ratified by Bulgaria are the following:

- A declaration on the guidelines of global consensus of management, conservation and sustainable development of all kind of forests (Rio Principles).
- A convention on biological diversity. Opened to signing on 05.06.1992. In force on 29.12.1993. Ratified by Bulgaria on 29.02.1996.
- Framework convention on climate change which was signed in 1992, but which is a non-committing agreement.
- A convention on Wetlands of International Importance (Ramsar Convention).
- A convention on the protection of the wild European flora and fauna (CITES), signed in Washington on 03.03.1973 and re-signed in Bern on 31.12.1974. In Bulgaria it came into force on 16.04.1991.
- A convention on the protection of the world cultural and natural heritage, approved in Paris on 16.11.1972. For Bulgaria it came into force on 17.12.1975.
- The Programme for Man and the Biosphere of the Organization for Education and Culture ((UNESCO) at the UN.
- A convention on the protection of the wild European flora and fauna and the natural sites. It was drawn up in Bern on 19.09.1979 and ratified by the Bulgarian parliament on 25.11.1991.
- Other European agreements, as Directive 92/43 of the European Community Council on the habitats and wild nature from 1992 (it implemented many of the clauses of the Bern convention). It is not in force in Bulgaria but it is of considerable importance for the elaboration of the new home legislation.

The convention on biological diversity is the most important legislative instrument for stimulation of the protection of biological diversity. The Bern Convention is one of the most important agreements at the European level, concerning conservation of wild European flora and fauna and natural habitats. This convention obligated the signed countries to maintain populations of wild nature at levels, that correspond to ecological and cultural needs and contribute to the protection *in situ* of wild nature.

Bulgaria fully accepted international agreements in developing its internal legislation.

The First Law for Forests, enacted in 1883, has special chapters and articles dedicated to the definitions of protected forests and to their protection. From a historical point of view development of legislation on protection of biological diversity in Bulgaria is closely connected with the development and improvement of forest legislation, and later, with the protection of nature and environment.

Below is listed the main legislation and rules with the force of authority provided for the protection of biological diversity in Bulgarian forests:

- Laws for Forests – 1889, 1897, 1904, 1922, 1925, 1958, 1997;
- Regulations for implementation of the Forest Laws;
- Law for Protection of the Fatherland's Nature – 1936 (the first law for the protection of nature);
- Regulations for implementing of Law for Protection of the Fatherland's Nature – 1937;
- Decree for Protection of Nature – 1960;
- Law for Protection of Nature – 1967;
- Regulations for implementing of Law for Protection of the Nature – 1969;
- Red Book of the People's Republic of Bulgaria – 1984;
- Regulations for setting up, organizing and managing forests and territories of special designation – 1989;
- Law on Environmental Protection – 1991;
- Law for Protected Territories – 1998;
- Regulations for the Organization, Functions and Activities of the Boards of the Natural Parks within the National Forestry Board – 1999;
- Law for Medicinal Plants – 2000.

According to current environmental legislation, the main legislative documents, regulating the protection of plant biodiversity are:

- Law for Protection of the Nature – 1967;
- Law for Protected Territories – 1998;
- Law for the Medicinal Plants – 2000;
- Law for Forests and Regulations for it's implementing decides separate questions.

In Section II (Subject of the Protection) of the Law for the Protection of Nature, different cases are listed for undertaking measures for the preservation and protection of forests, tree and bush plants, medicinal plants, fruit plants, mushrooms etc.

In Section III (Protected Natural Objects) the order is set forth for creating protected natural objects for protection of biological diversity.

The relation of protected natural territories to the different categories, its statute and characteristics, as well as the limitations upon them is the object of the Law for Protected Territories.

In Bulgaria there is a developed network of 90 reserves with a total area of more than 79 000 ha, from which about 4 400 ha are supported reserves, 3 National Parks with a total area about 193 000 ha and 8 Natural Parks. This network of protected territories was created mainly for conserving of genetic resources of forest trees and accompanying shrubs and grasses and for directing development of protected species, communities and ecosystems.

These reserves and National Parks will serve not only for valuable protection of rare forest tree, shrub and grass species, but for successful reintroduction and introduction of extinct and new species in the flora at the conditions close to their natural biotope.

In Bulgaria, the legislation regarding the use and biodiversity of medicinal plants developed in a specific way. The managed use of the medicinal plants for production of industrial quantities of raw materials began after World War I mainly because of the demand in Germany. Data about the exported quantities illustrate this situation: in 1934- 8240 kg and in 1939 – 721 000 kg or 87 times more than in 1934.

In this period medicinal plants are viewed as a component of plant resources in the wild, and at that time regulations for the use of them were the subject of the common laws for environmental protection.

For example: in compliance with The Law for the Protection of the Fatherland's Nature of 1936, the Minister of Agriculture and the State Estates have had the right "to ban forever or for certain period the harvest in mass quantities of medicinal plants and flowers from certain areas".

The steady rise in harvested quantities of medicinal plants predominantly for export led to the necessity of development and passing of a special "Law of medicinal and aromatic plants" in 1941.

The purpose of this law was to establish conditions for sustainable use of the mentioned resources and their preservation as source of income for certain parts of the population in Bulgaria.

In the law medicinal plants are presented and divided into the following categories: plants, fully prohibited from harvesting - 15 species; plants harvested in limited quantities - 6 species; plans allowed for harvesting for sale only in the domestic market - 42 species and plants free for unlimited harvesting - 121 species. The law has been in force until 1947.

From 1947 to 1989 the common laws for environmental protection regulated the use and the protection of the medicinal plants. In the last 10 years interest in harvesting of medicinal plants, forest fruits, berries and mushrooms has risen once again.

The export of dry medicinal plants reached 10 thousand tons per year and the bulk of it is harvested in the wild. This brought the attention to the regulation of the use, the protection and the conservation of the available resources of medicinal plants expressed in the development and the passing of the new forest and environmental preservation laws.

With the passing of the new Law for the Forest in 1997 in the special chapter called "Nonwood uses of the forests" are established the conditions and the order for the use of medicinal plants and plants for industrial use, when these plants are harvested from forest lands – state, municipal, religious and private. When the harvest of plants or parts of plants, mushrooms, forest fruits and berries is done for the purpose of business activity, then harvesters are required to obtain permission from the local forest service office for harvesting of certain quantities and the payment of a small fee. The Council of Ministries of the government specifies the fee.

For personal need no permission is necessary but they can't be the object of purchase or sale.

In the year 2000 parliament passed the new Law for Medicinal Plants, which regulates the use, protection and cultivation of these plants over the whole country.

At its essence the Law for Medicinal Plants is an environmental law providing for the management of activities for protection and sustainable use of medicinal plants, independent from its property.

It contains six chapters: Common Regulations, Conservation of Medicinal Plants, Use of Medicinal Plants (Common Orders, Order for Issuing of Permission for use), Management of Medicinal Plants (Powers of bodies of executive authority, Planning Rules for the Use and Conservation of the Medicinal Plants, System for Monitoring and Evaluation of the Medicinal Plants), Control, Administrative Punishment, Additional Order, Transitional and Closing Order and the List of Medicinal Plant Species regulated by law.

According to Art. 9 of the law, the use of medicinal plants is prohibited in a way that will cause damage of their habitats, a decrease in their abundance prevent, restoration of their populations or a reduction of their biological diversity.

When the resources of different wild growing species are in danger, the Minister of Environment and Water determines a special regime of use with an order, which is issued each year. The special regime consists of:

- Prohibition for collecting of medicinal plants for fixed period of time from natural habitats of species from the territory of whole country, different regions or single habitats.
- Fixing the maximum annual quantity of medicinal plants for collection by regions or by habitats.
- Development and implementation of measures for restoration of populations and their habitats.

The medicinal plants are divided in the following groups:

- *Protected medicinal plants* – 37 species – their harvest from the nature is fully prohibited.
- *Species of medicinal plants under special regulation for harvesting and use.* According to the Law for the Medicinal Plants the Ministry of the Environment and Water every year determines those species prohibited from collection from their natural habitats and the maximum quantities for collection by region. For the year 2001, 24 species were prohibited from collection, and 11 had limitations placed on their use.
- *Species of medicinal plants of sufficient abundance.* Their national stock is of asize that allows collection for market objectives. Their use is accomplished according to the rules, pointed in the Second part “Protection of Medicinal Plants” of the Law for Medicinal Plants.

For protection of biological diversity of medicinal plants in the protected territories and for protection of natural processes in the included ecosystems determine the requirements approved in the Second part “Protection of Medicinal Plants” of the Law for Medicinal Plants.

The management of activities regarding the conservation, sustainable use and cultivation of medicinal plants is done on different levels by different officials: The

Minister of the Environment and Water, the Minister of Agriculture and Forests, the regional governors, the mayors of municipalities, the directors of the national parks, the head of the National Forestry Board.

In the Law for Medicinal Plants is provided the development of a national strategy for sustainable use and conservation of medicinal plants, section “Medicinal Plants” in the plans for management of National and Natural Parks, section “Medicinal Plants” in municipal programs for protection of the environment, and section “Medicinal Plants” in Forestry Management Projects, Plans and Programs.

The Law for Medicinal Plants requires a system for long-term monitoring and assessment of the status of populations and resources and on the use of products from medicinal plants. The Law also requires development of Cadastre of medicinal plants.

According to the Law for the Medicinal plants, the control on the state and use of medicinal plants is to be done by managers of the different ministries, directors of Regional Forestry Boards, State Forests, National Parks, Natural Parks, etc.

For infringement of the Law for the Medicinal Plants there are stipulated penalties and sanctions which are set forth in Section six “Administrative Punishment.” In the Section cited “Additional Order” there are definitions of the most important notions, concerning medicinal plants such as “medicinal plants”, “herbs”, “sustainable use”, “regime of use of habitat”, “biological diversity”, “herbs for personal use” etc.

There is a 3-year period in the Law for Medicinal Plants for development of a National Strategy for Protection of Medicinal Plants and for development of a section on “Medicinal Plants” in the different documents designated in the Law. The period for development and introduction of “Cadastre of Medicinal Plants” is 5 years.

The rational use, regeneration and protection of species diversity of medicinal plants in the forests of Bulgaria is compromised by insufficient information on the conditions of natural habitats, lack of inventories, mapping and data for their stocks. Diversity of users can be added, in the recent years, when many companies were established in the country with the object collecting of medicinal plants.

Passage of the Law for Medicinal Plants has given an opportunity for regulation and control by the state of its resources. It is necessary to develop the anticipant sub normative documents, specified in the Law, to accomplish various objectives and tasks.

A disadvantage of the Law for Medicinal Plants is the can to point very big list of medicinal plants in the Law, complicated requirements for the development of different planning documents, difficulties in the fulfilment of the management and control of activities for protection and use of medicinal plants.

On May 31, 2000 the Council of Ministers accepted a National Strategy on the Environment. In this Strategy there are described priority fields of action for sustainable development and protection of the environment. The Strategy is worked out by specialists from the Ministry of Environment and Water with the help of experts from Germany, Austria and France and from Non governmental Bulgarian Organizations.

The main tasks of the strategy are conservation of biological diversity, increasing of protected territories and resolution of the problems in the territories, when there are

old pollution rules or diversions from the standards of the main characteristics of environment.

As a whole, the legislation in Bulgaria provides the conservation of biological diversity in the country. Besides the execution of the laws and other normative documents for conservation and protection of the species and intra-species diversity of the genetic fund of medicinal, forest-fruit and technical plants in the forests, it is necessary to carry out the following activities:

1. Conservation in situ: finding populations capable of reproducing themselves, conserving the site conditions particular for each species; control of competition in the ecosystem; preventing anthropogenetic effects which additionally suppress natural regeneration; restoring the natural formations of the main species of medicinal plants; establishing these species in cultures and semi-cultures; searching for new species of medicinal plants and introducing exotics.

   The conservation of the natural formations, as well as the care to be taken of these formations, necessitate utilization and enlargement of the system of reserves, as it is the most efficient way of conserving natural formations of plants and their gene pool. For this purpose, special reserves for endangered medicinal plants must be established.

2. Conservation ex situ (Conserving medicinal and aromatic plants outside their natural habitats, includes): establishment of plantations in botanical gardens of research institutes or in tree-breeding centers; establishment of forest genetic reserves, seed plantations, plots of mother plants, etc.; establishment of gene banks for endangered species, tissue cultures, cell cultures, etc.

3. Inventory of tree, medicinal, forest-fruit and technical plants in the forest management in connection with complex utilization and sustainable management of all forest resources: The inventory of the resources of medicinal, forest-fruit and technical plants is a precondition for a more systematic control of their utilization and protection. For this purpose it is necessary to develop a unified method for the inventory of the non-wood forest resources and its introduction as a part of the forest management activity, for which the necessary normative basis must be developed.

In conclusion it can be mentioned that:

- There is a considerable experience in our country in the legislative field, concerning the conservation of biodiversity in the forests.
- Special laws have been developed for conservation of medicinal, forest-fruit and technical plants, and this makes the difference between Bulgarian legislation and the legislation this one in the rest of the countries in transition to a market economy.
- Bulgaria has ratified international agreements for biodiversity and the protection of plant resources, and they are implemented through national legislation.
- The environmental and forest legislation in Bulgaria is a very good instrument for protection of the biodiversity of medicinal plants in the Bulgarian forests.

DEVELOPMENT OF FOREST AND ENVIRONMENTAL LEGISLATION IN BULGARIA (1999 – 2001)

NICKOLA STOYANOV

Forests are one of the important means for existence for the Bulgarian people. They are one of the natural resources that serve the welfare of the country and its citizens. Forests preserve the landscape, environmental quality and provide multiple products and services.

After accepting of the New Law for the Forests in 1997, Bulgarian foresters began to work on elaboration of regulations, instructions, orders, ordinances, and methods for implementation of the new forest legislation.

The work connected with the development and implementation of forest legislation in Bulgaria had the following main directions:

1) restoration of forest property;
2) realization of new management and economic structure of forestry;
3) correspondences of the Bulgarian forest legislation to European standards;
4) development of new laws, connected with the forest legislation.

Since the year 2000, the practical work of the restoration of property has been engaged. The Land Commissions issued official decisions for recognition of the right of ownership over Forests and Forest Lands. The deadline for finishing the main activities in the restoration of property on the forests and forestlands is mid of 2001.

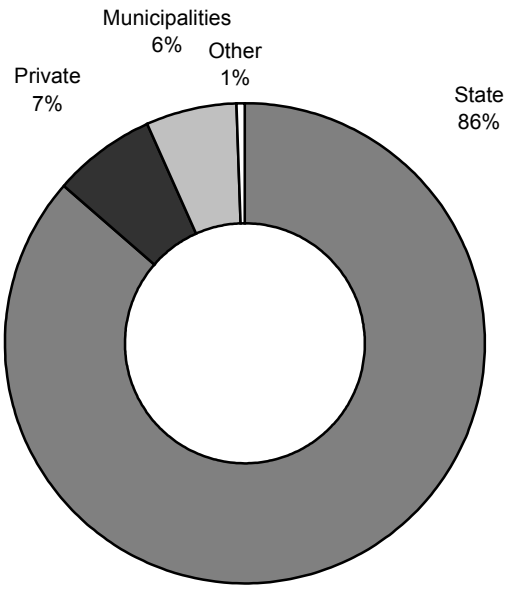
Until the end of February and March 2001 the results from the restoration of forests and forestlands are the following (Table 1 and Figure 1):

Table 1: Results from restoration of property on the forests and forest land in Bulgaria (February-March 2001)

	Total area of forests and forest lands	Afforested area (total)	Restoration area of forests and forest lands (total)		Restoration area of forests and forest lands to individuals	Restoration area of forests and forest lands to municipalities	Restoration area of forests and forest lands to religious communities, schools, community centers, cooperatives etc.
	Ha	Ha	Number	Ha	Ha	Ha	Ha
February 2001	3899861	3362688	253304	539725	271529	242605	25591
March 2001	3899861	3362688	257426	534213	277509	230089	26615

The process of restoration of forests and forestlands in Bulgaria is not finished yet. It is expected that about 650 000 ha will be restored to former owners and their inheritors. The share of private forest owners is about 270 000 – 300 000 ha and those of the communities – about 200 000 - 230 000 ha. The forest property will be distributed to about 250 000 physical persons.

Fig.1. Distribution of forest area by type of ownership
(March 2001)



Bulgarian forest policy recognizes that Bulgarian forests have high environmental and ecological values including species diversity, landscape diversity, natural stand structure, etc.

The main principles for development of the Bulgarian forestry sector are:

- *Sustainability of forestry,* which requires management and utilization of forests and forest lands in a manner and a rate which maintains their biodiversity, productivity, capacity for regeneration and vitality as well their potential to fulfill ecological, economic and social functions at local, national and global levels without damaging other ecosystems.
- *Efficiency in forest management,* which entails securing efficient production and effective utilization of valuable forest-based products and services for present and future generations.

One group of tools to obtain these objectives is legislative documents. The activity concerning development and accepting new forest and environmental laws, regulations, ordinances and other normative documents in Bulgaria began in 1997. Development of Bulgarian forest and environmental legislation in the period 1997 – 1999 was presented at the previous IUFRO symposiums (Stoyanov N., 1999, Stoyanov N., 2000, Stoyanov I, 2000). During this period the Law for Forests and the Law on Restoration of the Property of the Forests and Forest Land of the Forest Fund (1997) were elaborated and accepted. These laws required elaboration and acceptance of numerous regulations, ordinances, methods, instructions, tariffs etc.

From 1998 to 1999 there were elaborated and entered into force over 23 such documents. In the environmental field there were elaborated the Law for Protected territories (1998) and Regulations for the Organization, Functions and Activities of Natural Parks within the National Board of Forests (1999).

During the period 1999 to 2001, the process of elaboration and acceptance of new laws, regulations, instructions, ordinances etc. continued in Bulgaria. The result of this work are the following: Law for the Medicinal Plants (2000), Law for Hunting and Game Protection (2000), Regulations for Implementing the Law for Hunting and Game Protection (2001), draft for correction of Law for Forests (2001). Several ordinances, instructions and tariffs were elaborated concerning implementing the laws which are in force.

The main characteristics of the Law for Hunting and Game Protection are:

- Game is private state property.
- Organization of hunting areas, management of hunting and control in management of game are the responsibility of the Ministry of Agriculture and Forests.
- Hunting areas include all lands, forests and water areas, in which game live and in which there are conditions for their existence. Hunting areas are divided into hunting management regions.
- For protection of game diversity and conservation of the genetic fund, State Game Breeding Stations will be created.
- Bulgarian citizens can receive the right to hunt after passing an examination provided by a designated commission of the Ministry of Agriculture and Forests.
- The order for receiving the right to hunt for foreigners is specified.
- Management activity of State forestry in the field of hunting is executed by firms.
- Rules for management and protection of the game are elaborated.
- Trade and marketing of game and game products are regulated.
- The responsibilities for implementation of the law are specified.
- Definitions of a number notions connected with game protection are given.

The Law for the Hunting and Game Protection is the last law to be elaborated by the National Board of Forests.

On June 13, 2001 the Council of Ministers accepted regulations for implementing the Law for Hunting and Game Protection.

With the passing of the Law for Hunting and Game Protection and its regulations, Bulgaria disposed of all necessary laws in the field of forestry.

Beside elaboration of new laws and regulations, the obligation of the National Board of Forests in the period of analyzis (1999-2001) was control of implementation of these documents and their improvement. Several corrections of the new forest and environmental laws were accepted. These corrections concern the Law for Protected Territories, Law for Restoration of the Forests and the Forest Lands from the Forest Fund and the Law for the Forests. Corrections of these laws were assembled and

are the consequence from the elaboration and accepting of other new laws by Parliament.

The most important document in this field is a draft for correction of the Law for the Forests. This draft was developed and suggested to the Parliament by the National Forestry Board, but it has not yet been accepted.

We expect that this draft will be one of the tasks of the New Parliament, which will be elected in June 2001.

The most important changes in the Law for the Forests, which were suggested in the draft, are the following:

1. The definition for the state forests is improved. In the category “forest and lands public state property” are included “forests and lands exceptionally state property and forests and lands included in the protected territories, which are not exceptionally state property”.

2. In the category “private state property of forests and lands in the state forest fund” are included all other forests and lands in the state forest fund.

3. The order for excluding forests and lands from the area of the forest fund has been improved.

4. The order for receiving the rights for free use of forests from municipalities has been determined.

5. The number of licenses which specialists, engineers of forestry, must have for performing private forestry practice (work) has been decreased.

6. Clauses are suggested concerning improving and facilitating the order for using private forests from their owners and the order for obligations of forestry specialists in the State Forestry’s in respect of private forest owners.

The corrections of the Law for the Forests are necessary because specialists met some important difficulties in its implementation. The other part of the corrections is associated with changes of legislation and acceptance of new laws and harmonization of the legislation.

The next work area is connected with elaboration, acceptance and amendment of Instruction No. 33 from December 6, 1999 for Conditions and the Order for Use of Forests by Auction, Competition and Negotiations with Possible Purchaser. This instruction is the basis of reform, which began in 1999 in the forestry sector in Bulgaria. According to the Law for the Forests and Instruction No. 33, wood is sold standing by auction (tenders), competition and negotiations with possible purchasers and the harvesting is the obligation of companies which won the auctions, competitions or negotiations.

In conclusion, Bulgaria, especially the National Board of Forests and representatives of the Ministry of Agriculture and Forests have worked actively in the elaboration of new laws and legislative documents and their improvement and correction for accomplishing the taste of reforming forestry and implementing new forest policies.

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FOREST ACT IN THE CZECH REPUBLIC

MARTIN CHYTRÝ AND JAROMIR VAŠIČEK

Act No. 298 passed in 1995 (Forest Act) came into force on the 1st January 1996. The object of this Act is to lay down conditions for forest conservation, forest management and reproduction of the forest as national wealth, being an irreplaceable component of the environment, for fulfillment of all its functions and for support of its sustainable management.

There have been three amendments of the Forest Act approved until now.

1. By Act No. 283/1999 effective from the 1st January 2000, conferring the status of public officials to rangers.
2. By Act No. 67/2000 effective from the 1st July 2000. The duty to notify the intention of logging was extended from forest owners to persons who have bought standing timber to be cut as well as to persons who carry out logging. A possibility of sanctioning forest owners was also extended to any person who has committed another tort. The merits of other torts were extended by inclusion of any action connected with forest exploitation contradictory to Forest Act, and a possibility of forest land fencing for the need of farm management of game was adopted.
3. By Act No. 132/2000 effective from the 1st January 2001, re-defining the competence of state forest administration authorities after the regions (higher-level territorial administrative units) have been established.

It may be stated in general that the existing legislation played a positive role in the process of restitutions in the second half of the nineties. It replaced the outdated laws that were based on property rights of the past regime.

But the present situation requires a change in approaches to forest management and to forest owners, particularly in these aspects:

1. *The present Forest Act is based on management of even-aged stands. The objective of an amendment is to support finer methods of management.* The forest ecosystem is a very complicated organism. It is rather difficult to describe it by measurables, and consequently legally enforceable parameters. The greater the difficulty, the more ambitious we are to apply the fine methods of management.
2. *To establish a balanced relationship between government support to forest management and restrictions imposed on forest owners when providing public services to the population.* It is fairly easy to set up parameters for forest conservation and protection in such cases when no profit is expected from forest activities. It is much more complicated to impose restrictions meeting the requirements for forest conservation, protection, fulfillment of all forest functions and at the same time allowing profit-making (in areas where it is feasible).

3. *To define the boundary between the interests of forest owners and society's public interest.* Another problem of forest legislation is that the forest is an object of private law, and at the same time an object of public law because the society's interest is permanent existence of forests. Social development will lead to an increasing conflict between individual and public interests that are very often opposite. On the one hand, there are individual interests, expressed, among other things, by the right to possess and to use forest property. On the other hand, there are public interests that are expressed by the right of the population to frequent forests irrespective of the ownership. The society expects that other public interests will also be satisfied in form of fulfilling public functions.

The government regulation in the forest sector has been analyzed; the result of this analysis is a proposal to diminish the extent of legally laid down duties of forest owners and to replace them by a positive incentive, namely financial support.

The analysis was based on these assumptions:

- If the State and public officials, respectively, used to be passed for authorities by forest owners and by the population, nowadays the attitude towards officials has changed. The population takes officials as persons providing services paid from taxes.
- Only restrictions (cuts, reforestation, penalties for a failure to implement measures) are laid down by the Forest Act. Decisions in the framework of these restrictions are within the competence of the state forest administration officials and are subject to respective official procedures.
- A reform of public administration is under way in the Czech Republic. The main feature of the reform is to delegate the powers of state administration authorities to a level closer to the population, i.e. decentralization of the state administration and delegation of its competence to self-governing authorities.
- Definition of general principles of the state administration prefers universal state administration to special state administration.
- The Forest Act should provide for balanced fulfillment of all forest functions.

It is evident from the above *that any extension of the government regulation in forests at present is a wrong move*. There are several basic reasons there:

1. A majority of forest owners are decent people taking due care of their property. It is obvious despite some negative cases disclosed by officials of the state forest administration discharging their duties (ca. 1% of cases).

2. What is vitally essential for the operation of the system should only be regulated by law. Not all that can be regulated and influenced by the government.

3. Any complicated and unclear legal regulation does not benefit either forest owners or foresters, but only provides earnings for lawyers.

4. Efforts to control more than vitally essential parameters result in the overburdening of the competent state authorities that are not endowed with enough time for consistent control of important parameters.

5. More efficient is a lower number of clearly defined and distinct restrictions and parameters, their unambiguous and unquestionable enforceability (with a possibility of taking action on the spot).

6. Creation of new barriers to law infringement will always lag behind the craftiness and adroitness of those who do not want to respect the rules. Therefore a positive attitude to forest owners is worthwhile, and the goals of public interest should be achieved by supporting the fulfillment of duties, not by enforcement of legal duties.

The main reasons for an amendment of Forest Act have been proposed on the basis of these considerations:

1. To simplify regulatory mechanisms applied by the government to forest owners.
   - To reduce the number of obligatory provisions so that only maximum allowable cut shall be laid down.
   - The duty of broadleaved species planting should be omitted.
   - The duty of stand tending should be omitted.
2. To introduce positive incentives for forest owners.
   - The duty of broadleaved species planting should be replaced by financial incentives.
   - The duty of stand tending should be replaced by financial support.
3. To improve those provisions of Forest Act that turned out inconvenient in the practical framework of the state forest administration.
   - To improve the provisions about forest land protection.
   - Modification of some provisions of the Act should contribute to law enforce-ability that is still problematic.
   - Definitions of the merits of torts should be so precise to avoid any ambiguous-ness.
4. To implement European law in forest legislation.
   - To abolish the condition of Czech nationality for granting the license for activities in the forest sector.
   - To facilitate free trade in raw timber by unification of its classification (mensuration) with classification in the countries of European Union (Directive No. 89/1968 ES of the Council of European Communities).
   - To incorporate in forest legislation a directive of the EU Council concerning trade in reproductive planting stock.

A draft amendment of Forest Act has been drawn up, and it is to be considered by the government and legislature (Parliament and Senate) this year. But the draft amendment has clashed with different opinions of environmentalists represented by the Environment Ministry.

On the contrary, the Environment Ministry has claimed a great extension of the government regulation, namely:

1. Working plans should be drawn up for all owners (for owners with forests above 50 ha for the time being).
2. All parameters of the working plan should be obligatory (three parameters are obligatory for the time being – allowable cut, share of improvement and stabilization species for reforestation, share of tending measures by 40 years of stand age).

Such concepts were hardly acceptable for the forest community; hence taking into account the strong differences in opinions, the authority presenting the Forest Act amendment (Ministry of Agriculture) has suggested the government to postpone it by 2005. The Government has consented to such a solution.

Parliamentary elections will be held in the Czech Republic next year (2002), and a changeover of political forces is expected. A priority task of the new government (regardless of its political orientation) will be preparation for accession of the Czech Republic to European Union, maybe even accession itself. Postponement of Forest Act to such a remote date has been determined by this fact.

THE NEW LATVIAN FORESTRY LAW AND SEVERAL PROBLEMS OF ITS INTERPRETATION

LIGITA PUNDINA AND ILZE SILAMIKELE

INTRODUCTION

In 1999, state management reform in the branch of forestry was accomplished in Latvia. It is quite reasonable that the reform implementation program also included a plan of legislative alignment of the system of regulatory acts. Development of a new Forest Law (accepted as of 24 February 2000) could be mentioned as one of the most important of the aforesaid tasks. It must be noted that the process of restructuring the forestry management system (1997 to 2000) and making amendments to the legislation was quite fast in Latvia.

At the moment, regulations related to the Forest Law are being worked out and accepted by the Cabinet of Ministers. Altogether, the Forest Law requires adoption of 17 regulations by the Cabinet of Ministers in accordance with the legislation practice accepted in Latvia.

According to the Constitution of the Republic of Latvia, ”legislative rights are granted to the Parliament and the people”. In view of the historical circumstances of development of the Constitution, the said rights are partially delegated to the Cabinet of Ministers. However, the said delegation cannot be interpreted in broad terms – the Cabinet of Ministers’ legislative rights are restricted to the delegated task – i.e. in this case, to the Forest Law. Besides, pursuant to the general lawmaking principles, this delegation does not entitle the Cabinet to adopt regulations ‘extending’ the Forest Law.

The following can be mentioned as most important regulations of the Cabinet of Ministers that must be issued in view of the aforesaid delegation: Regulation on Nature Protection in Forest Management, Regulation on Tree Felling in Forest Lands, The Procedure of the Calculation for Damages Inflicted to Forests, Forest Generation Regulations.

In the beginning of this paper, we give an analysis of the most important, in our opinion, new standards regulating the branch of forestry. We shall also discuss potential problems of implementation of the said standards that can result from such a rapid change of the legislative basis. Let us first have a closer look at “The Procedure of the Calculation for Damages Inflicted to Forests” and “Forest Generation Regulations” and their intrinsic problems.

THE PROCEDURE OF THE CALCULATION FOR DAMAGES INFLICTED TO FORESTS

Civil liability is referred to the following two major groups of liability: contractual liability, i.e. liability for non-fulfillment or improper fulfillment of contractual obligations, and tort, i.e., liability for health damages, corporal injuries, property losses or environmental pollution. Both types of civil liability have one and the same function – namely, to ensure restoration of the material standing of the victim in the form of

reimbursement or compensation of material and, later on, also moral detriment (damage); to ensure that the victim is in the same or maximally closest to such condition that he would have had if no detriment (damage) had been inflicted. Since civil liability in issues of environmental protection usually applies to cases of violation of some standard regulations or requirements, this study only refers to civil liability for delicate or tort.

The Procedure of the Calculation for Damages Inflicted to Forests determines how to calculate damages incurred in cases of violation of the standard requirements regulating the branch of forestry (management and use of forests). Damages shall be deemed as inflicted to forests in case of damage or destruction of a part of forest stand. It must be noted that the said regulations provide for calculation of damages inflicted to the so-called “natural environment”, “ecology” and “society” using quite a complicated formula with variables depending on the area of the destroyed or damaged forest stand, the average height of forest species, etc. These damages shall be calculated and recovered by officials of the State Forest Service in favor of the state basic budget. The said damages bear signs of the so-called ‘punishing’ damages providing for recovery of a greater compensation than the actual amount of losses incurred.

Speaking of those regulations, it is worthwhile to dwell a little on the system of civil liability in Latvia.

One of the common features of civil liability for violation of rights of employment of natural resources was the fact that the legislation of the former Soviet Union and the corresponding legislation branches of its republics in the field of, say, forestry code, etc., included a section on liability not providing any compensation for the victim suffered from the adverse effect on natural environment.

It should be noted that with regard to employment of forests, civil liability only became applicable for illegal actions (behavior) and was only provided for the violator’s fault.

During the socialistic law period use of a term of ‘material liability’ that had originated and was developed under the influence of Russian scientists in the field of law. The said notion stood for material compensation of detriment inflicted to the environment and was expressed, most often, in monetary terms. Material penalties used to be imposed on such an individual or entity (physical or legal person) whose illegal action or inaction resulted in damage to or destruction of trees. The argument in favor of separating ‘material liability’ from civil liability in general was that a special tariff system was developed for calculation of losses in monetary terms for natural resources whose value could not be expressed in commodity prices. The said loss calculation tariffs provided for cases of violation of current regulations in the fields of forestry and hunting (illegitimate cuttings, damages, wild life hunting, etc.). The new regulations were developed by the Cabinet of Ministers in accordance with a similar scheme providing for use of a certain formula for calculation of damages inflicted to the forest environment. However, this cannot serve as a ground for its separation as a type of civil liability since ‘material liability’ also aims to ensure reimbursement or compensation of property damages (losses). It reminds us of the principle of the ancient Roman Law “sic utere tuo ut alienum non laedas” (‘use your property in such a way that cannot inflict damage to other people’).

According to the new regulations, any losses incurred by a proprietor as a result of illegitimate cutting must be proved by the proprietor itself. This leads to a situation when civil liability can be applicable for one infringement (illegitimate cutting) with respect to two subjects: reimbursement of damage inflicted to the 'natural environment' and compensation of property damage (losses) in favor of a proprietor. The said losses can also be classified as resulting from non-received anticipated property increment (repayable to the society) and property decrease or losses, the so-called positive losses (repayable to the proprietor). It must be noted that although the Civil Law (Article 1772) distinguishes between decrease of the existing property and non-received income, still there are no differences in determination of compensation amount and its repayment. Therefore, it is difficult to foresee the future court practice in resolving such cases. At the moment, such court practice is very scarce in this field in Latvia, so only theoretical forecasts are possible regarding the (non) existence of such a 'dual' system.

It should also be noted that both of the aforesaid types of damages are civil liability, i.e. application of coercive methods of a material kind to a violator expressing itself in terms of monetary compensation or reimbursement of damages inflicted. Closely linked with the material nature of civil liability is the compensating function of civil liability based upon the proprietary relationship reimbursement nature. The task of civil liability is to restore the infringed proprietary rights of the victim by reimbursing the inflicted damages at the expense of the violator. This function characterizes most vividly the essence of civil liability. One cannot but agree that the principal task of civil liability, i.e. to compensate or alleviate, as much as possible, any consequences of the detriment inflicted by the guilty person to another person and the society, can be characterized as 'most fair'.

Here, the two most typical functions of civil liability can be viewed simultaneously – educational function and restoration of the previous standing of the victim (i.e. the basic task of civil liability is to ensure that the victim is in the same or maximally closest to such condition that he would have had if no detriment (damage) had been inflicted).

Educational Function

A violator will have to understand that such offense is unacceptable to the society and any recurrent offences of such kind are neither desirable nor acceptable. Although civil legal relations between persons is their private matter, sometimes it does concern the society, since the latter is interested in maintaining the balanced relationships between its members. As regards environmental protection, civil liability relationships also concern the society since forest cutting affects not only the two parties but also other people from the point of view of air purity. The educational function is specially important in cases of violation of the environmental protection regulations since companies in today's world (as well as in Latvia) are trying not to violate the forest environment protection requirements not because they 'afraid of' sanctions but of public opinion.

Speaking of the educational function, the society is also interested in maintaining the "balance" between its members since gross violations of the environmental protection norms affect the whole society's interests.

Restoring the Previous Standing of the Victim

By repayment of losses incurred by a victim as a result of a violation, its previous state of affairs is being restored as it was before commitment of the said violation. Alongside with status restoration, restoration of the infringed legal rights also takes place. It is this function that must be applied most often when determining the amount of civil liability. In cases of forest cutting, there is a possibility to eliminate the unfavorable circumstances (by planting new forest stands) resulting from violation of civil rights, which is also among the tasks of civil liability.

It is this particular function of civil liability, namely, to ensure reimbursement or compensation of material and, later on, also moral detriment (damage), that differs civil liability from criminal or administrative liability whose main task is to punish the guilty person with a penalty determined by the state.

The theory of civil rights has it that liability, i.e. realization of sanctions of legal provisions, must be associated with acts of accommodation of legal provisions issued by a competent institution. However, civil liability in this sense is very specific. In many cases, the violator has a chance to realize the civil liability provisions by itself without any acts of accommodation of legal provisions issued by a competent institution. For example, the guilty person can reimburse or compensate the damages to the victim voluntarily, without any coercion. There is no ground to believe that damages reimbursed, penalties paid or losses covered voluntarily are not a civil liability realization type, and recovery of losses or imposing sanctions by a court, on the contrary, is civil liability. It is only when a violator does not realize the established additional liabilities voluntarily, the same is done by a court using coercive methods.

It must be noted that unlike criminal or administrative liability, civil liability is regulated with not just one codified law – the Civil Law, but also with some other laws, such as the Forest Law and the aforesaid Cabinet of Ministers' Regulations. It should also be noted that in Latvia "the Civil Law is applicable to all legal issues which its text or interpretation may refer to, and regulates all civil relationships in Latvia", although there are some relationships that are not expressly mentioned in the Civil Law. That does not mean, however, that the provisions of the Civil Law are inapplicable to the said relationships. Article 4 of the Civil Law provides that "the law provisions should be first interpreted by their direct meaning; they can also be interpreted by the law system, basis and purpose wherever necessary, and finally, by analogy". The Civil Law may also provide regulation of individual issues by special regulatory acts (e.g., Article 1128 of the Civil Law refers to the Forest Law for forest management issues).

REQUIREMENTS TO FOREST GENERATION

Since last spring, a new Forest Law came into effect in Latvia. It is too early to evaluate the new law completely since many of its provisions are put into practice gradually and in accordance with long-term forest processes and the results can only be evident in several years or even decades. This chapter highlights evaluation of the basic principles of forest renewal in terms of both theory and practice taking into account last season's indicators (the year 2000). Successful restitution of forests in cutting sites is one of the main prerequisites of long-term and inexhaustible use of forests. Since Latvia regained its independence, private forest employment for timber purposes has become more intense. The main reason for that is a relatively low use

of those woods during the period of the Soviet rule when the said forests were owned by soviet or collective farms. However, to ensure successful forest development in future, proprietors of cut out areas must ensure forest restoration. Until now, forest owners have been insufficiently concerned in long-term management of their forests. That can be partly attributed to their inadequate expertise on issues of forestry, and partly – to limitations of the system of standard regulations in the field of forestry.

Comparison of Standard Requirements

Like the previous Law on Forest Management and Utilisation (as of 24.03.1994), the new Forest Law also includes requirements for forest renewal – Table 1 gives a concise comparison between them.

Table 1: Previous and New Requirements

Aspect	Previous requirements	New requirements
General provisions	A forest must be renewed at cut-out and burnt-out sites. A forest must be restored and planted artificially (by seeding forest cultures); or it renews itself and grows naturally (with or without forest management procedures). Lands meant for artificial renewal of forest must be seeded or planted within three years from cutting (including the year of cutting).	The owner or legal administrator of a forest is obligated to renew forest stands not later than three years (in some cases, five) years from cutting (including the year of cutting) and ensure maintenance of the renewed forest stands.
Limitations	If a forest manager fails to comply with the forest renewal requirements, the compliance shall be ensured by branches of the State Forest Service at the expense of the said forest manager (this provision had no practical effect).	Major cutting is forbidden: if the forest owner or legal administrator has failed to restore at least 80 percent of the total area subject to restoration; if a forest stand area of 1.0 ha and more adjacent to a major cutting site in the forest of a single administered object has not been admitted as renewed and the plantings have not reached at least three years of age.

In the new law, significantly different are solutions to the following two problems. First, a norm has been introduced allowing a state control body (the State Forest Service) to restrict economic activity of an owner if the forest is not renewed within the stipulated time limits. Therefore, the owner is concerned in restoring the forest as soon as possible. Second, no emphasis is made on artificial forest renewal - seeding

or planting. The important thing is to ensure renewal with particular tree species complying to the given conditions of growing; the choice of methods of renewal in most cases is left with the owner.

Evaluation of the New Regulatory Provisions for Forest Generation

In order to evaluate the provisions of the Forest Law and its subordinate regulations, they can be analyzed from various aspects. In this analysis, attention is paid to three main spheres – analysis of the world's and European tendencies for nature diversity preservation, evaluation of practical implemention of the standard regulations and an attempt to predict future tendencies.

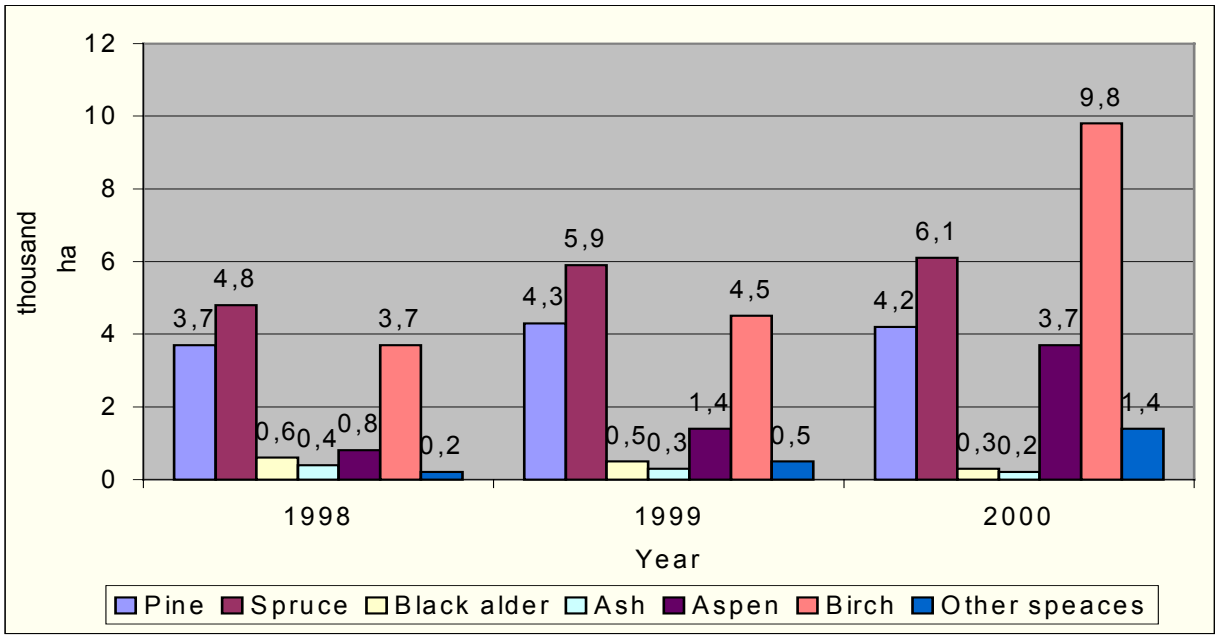
Latvia has been involved in processes connected with conservation of biological diversity and issues of long-term utilization. Forests occupy 45% of the republic's territory and are an significant part of Latvia's nature. Therefore, their future preservation is so important. Latvian Forest Policy (1998) sets out the main fundamental principles of long-term forest and forest land management, one of which is to ensure maintenance and improvement of forest land productivity and value by using as many nature-resembling forestry methods as possible.

The standard documentation aggregate serves as a tool for implementation of the state policy in the branch of forestry. The new Forest Law provides for much more efficient means of forest generation in private forests. A forest owner who fails to renew the major cutting site shall not be entitled to obtain a license to conduct further major cuttings. Forest renewal requirements are aimed at increasing the proportion of naturally growing forest stands. The former standards set out planting of coniferous tree species – pine and spruce – as the main type of forest renewal, not allowing any admixtures of broad-leaved trees. The new standards provide for an opportunity to renew forests both by seeding or planting or leaving for natural re-growth, besides when growing new coniferous trees, an admixture of broad-leaved trees is admissible. These principles conform to the basic principles of forest inexhaustible management and biological diversity preservation developed at the Second Conference of Ministers of the European countries held in Helsinki, as well as to the All-European forest management criteria and indicators worked out in Lisbon.

Although the new law has only been valid since last spring, several positive forest renewal tendencies are evident already (See Figure 1).

Firstly, the annual figures of forest renewal areas tend to grow. That can be attributed to some positive signs in renewal of private forests; renewal of state-owned forests was successful during earlier periods as well. In the year 2000, the volume of broad-leaved tree species, especially birches, increased. By type of property, the proportion of birches in the state-owned forests is 36% of the total area renewed, in private forests this figure is a little higher - 41%. Secondly, when comparing the proportions of artificial and natural renewal, one must admit that the results are in favor of natural renewal since for the last three years the natural re-grown areas were slightly less than a half of the total area; in the year 2000 naturally renewed forests amounted to 2/3 of the total area.

Figure 1: Renewed Areas by Tree Sspecies (ha)



What are the prospects of forest renewal in future? During the last three to four years, the renewal areas in private forests have shown a steady tendency to grow. One can be quite certain that the said figures will continue to grow in future. There is a number of prerequisites for that – there are still many cutting sites in private forests that need to be renewed; forest owners' expertise in the science of forestry has become greater – the long-term nature of forest management is evaluated more often; besides, the new standard regulations allow to restore a greater area by a natural way requiring less money but more care. Certain doubts are aroused by a growing proportion of soft broad-leaved trees (aspen, alder): these tree species ripen faster but their application is still quite limited – mostly, because of their low quality that may cause future losses to the owner. On the other hand, aspen, which is growing old in a relatively short time, is very interesting from the point of view of biological diversity preservation.

Summing up the issue of forest generation, one must admit that although forest renewal volumes in private forests are growing, which is mostly attributable to creation of a relevant basis of standard regulations, a more objective evaluation of the new standard regulations in the sphere of forest generation would take a longer time period in view of the long-tem nature of forest management.

CONCLUSIONS

Regarding the aforesaid regulations issued by the Cabinet of Ministers, one can expect that the problems of the near future will be commencement of implemention of the said standard regulations, the relevant authority of officials (the State Forest Service) as determined by the State Forest Service Law and the skills to apply the legislation and implement the new regulations. It can also be anticipated that not all users of the regulations will be able to obtain precise and unambiguous information from the texts of the said regulations. Implemention of the regulations is likely to become the main problem since the complicated professional texts are not equally

comprehensible both for lawyers and private persons (including forest owners) for whom the law provides certain rights and liabilities. It must be noted that users of the regulations must be able not only to read the regulations but also to comprehend them.

The provisions of the Forest Law and other regulatory acts form a legislative system regulating certain social relationships. The said regulations are interconnected and must not be viewed as separate items but as a whole system – observing the basic principles of the relevant spheres, as well as implemention stages, regulations and hierarchy of legislative norms.

Together with the validation of the new Forest Law, the theoretical issue of legislative collisions becomes urgent. It can be solved by The law of the Republic of Latvia on Concerning Publicizing, Publication, Validation and Validity of Laws and Other Acts adopted by the Parliament, President and the Cabinet of Ministers.

The aforesaid law provides that given any stated conflict between different legally effective regulatory acts, the one of higher legal force will be in effect. At the same time, if any conflict is stated between regulatory acts of equal legal force, the more recent one will be valid. Shall a conflict be stated between general and special norms included into regulatory acts, a general legislative norm will be valid as far as they are not limited by a special legislative norm.

Article 2 of the Forest Law also deals with legislative collisions and explains that there are also other laws or special laws, but highlighting the sphere of environmental protection the special norms regarding forest environment are included into such laws as the Species and Biotops Protection Law, Law of Specially Protected Areas of Nature, Protection Zone Law. Issues of legislative collisions are also dealt with in Part 3, Article 4 of the Forest Law mentioning the general principle that “a person’s economic independence can be limited in such cases as provided in this law or other regulatory acts,” however specific restrictions must be looked for in other regulatory acts.

In case of collision, the relevant laws in specific relations will be special norms, therefore the Forest Law shall only be applicable as far as it is not in conflict with the special laws. For instance, when making decisions on issues of forest cutting or renewal, the Forest Law must obviously be deemed as a special norm with respect to other norms. Things will be different in issues of liability when a special norm regarding any damages inflicted on forest environment must be looked for in the Forest Law, but any losses inflicted to a forest owner through illegitimate cutting of forests shall be reimbursed pursuant to the provisions of the Civil Law.

Interpretation of legal norms is also possible for the purpose of determination of their objectives – if, say, any of the regulations issued by the Cabinet of Ministers fail to comply with the objective of the Forestry Law (result in excessive losses or fail to ensure long-term forest management, etc.), then one must consider compliance of these regulations with the laws and the whole system of legislation and look for ways of eliminating such conflicts. It must be noted that according to the Law on the State Forestry Service, assessment of legal norms is one of the tasks of the said institution.

From now on, a great deal of responsibility should be taken by officials of the State Forestry Service whose duty is to construe legal norms and make decisions observing the basic principles of application of legal norms – justification, legitimacy and expediency.

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FOREST OWNERSHIP IN LATVIA

LĪGA MENĢELE

The forest is a peculiar environment, governed by rules of its own, not always easy to grasp. The aim of legal acts and regulations is to manage and utilise forest resources to harmonise the economic interests of forest owners or holders with ecological and social interests of the state in protecting and maintenancing forest as natural resource.

STATE ADMINISTRATION OF LATVIA'S FOREST SECTOR

The State administration of Latvia's forest sector has been changed since 1st of January 2000. In line with Latvian Forest Policy, the regulatory, supervisory and support function apply to the state as the subject of public rights, while the ownership function applies to the state as the subject of private rights and other forest owners. The Forest act clearly separates these functions. The articles of the Forest Act provide that the regulatory function of the forest sector governance is vested in the Ministry of Agriculture. There are two departments in the Ministry of Agriculture: 1) Department of Forest Policy and Strategy; and 2) Department of Forest Resources and Forest Economics. The State Forest Service's function of managing the state forests had been transferred to a new, government owned company "Latvijas Valsts Meži" Ltd at the beginning of this year. The ownership function for state forests now is vested in company "Latvijas Valsts Meži" Ltd. At the same time a restructured State Forest Service had been established with responsibilities for supervision and control over forest management by "Latvijas Valsts Meži" Ltd and other forest owners and providing consultancy services to all forest owners. Supervisory and support functions in all forests are vested in State Forest Service. The Ministry of Environment Protection and Regional Development controls nature protection in all forests.

FOREST OWNERS AND FOREST LEGISLATION.

Forest owners are the main group of people, who have to observe the forest legislation, because their interest is to get a profit from the property and to carry out sustainable forestry. Sustainable forestry is favourable for the forest owner, because he earns long-term income from the forest. It is necessary to teach forest owners to manage their property sustainabl. Then, if harm is done to the forest, state can punish the guilty one. Owners have full rights to use their property - to utilise it, to sell it, to change it, to destroy it. But the forest is a special object that can be owned by people. The forest is an object that can belong to the forest owner, but the forest is a natural resource too, and society has an interest in maintaining the forest. According to the double rule of the forest, legal acts have to contain restrictions for utilising the forest. The forest owner has right to get a profit from the property, and he has the obligation to observe all restrictions in utilising the forest for the benefit of the society.

To analyse in detail the legal issues of forest ownership and related problems, we must clarify the following points: the legislative and regulatory acts now in force to control forest management and the persons for whom the provisions of law concerning forest management and utilisation are legally binding.

The Forest Law of the Republic of Latvia, enacted by the Saeima (Parliament) on Feb. 24, 2000 (effective date March 17, 2000), cancels the law of Apr 24, 1994 “On Forest Management and Utilisation” and the law of March 30, 1995 “On the Utilisation of State-Owned Forests.” Article 28 of the law “On the State budget for the Year 2000” (effective date Jan. 1, 2000) annuls the law of June 22, 1994 “On the Revenue from Forest Resource Sales.” Thus, at present in Latvia the Forest Law is an umbrella law, regulating forest management and utilisation.

According to Article 2, the objective of the Forest Law is to provide for sustainable management of all the country’s forests, ensuring for all forest owners/holders equal rights, inviolability of property, independence in economic activities, and equal obligations. In relation to the details of forest management and utilisation, the law bears a number of references to Cabinet of Ministers (CM) regulations, which regulate the ways a particular legal norm is applied.

However, not only the Forest Law and the CM regulations under it, but also other legislative and regulatory acts, bearing relation to forest, affect forest management and utilisation. For instance, the law on forest protection belts or zones, which envisages restrictions in final felling or using clear-fells. A number of restrictions in forest management and utilisation are imposed by the laws and regulations on environmental and wildlife protection.

Paragraph 2 of Article 16 states that utilisation of wildlife is determined by the law on species and habitat protection, and the law on hunting and game management. Thus, hunting is outside the scope of the Forest Law. These issues are regulated by the Hunting Law, enacted on June 1, 1995, and the respective CM regulations under it.

The Forest Law provides CM the right to pass regulations on issues related to forestry. Paragraph 2 of the Interim Provisions of the Forest Law states that the CM passes all the regulatory acts under this law by Jan. 1, 2001. Paragraph 3 provides that the regulatory acts under the previous law “On Forest Management and Utilisation” remain valid in so far as they agree with the Forest Law, currently in force. Had there been no such provision included in the new law, all regulatory enactments under the previous law would have been null and void under the law of June 8, 1994 “On Promulgation, Publishing, Enacting and Remaining in Force of the Legislative and Regulatory Acts Passed by the Saeima (Parliament), President and the Cabinet of Ministers”

The year 2000 was not an easy one for forestry in Latvia. In practical actions it is often so that finding an appropriate interpretation of the law has more weight rather than its literate interpretation.

First of all we should enquire into the terms “forest” and “forest land” in the understanding of the law. Paragraph 1 of Article 3 defines that the object of the given law is forest and forest lands. The term “forest” is defined as “an ecosystem in all its development stages, dominated by trees, the height of which in the particular forest site may reach at least seven metres, and the present or potential tree crown cover accounts for at least 20% of the stand area.” For legal experts this definition may

appear inadequate, as it includes ecological features only. Provided a situation like that exists on a certain piece of land, then the owner, when doing some management activities there, will be obliged to abide by all the forest laws and regulations, irrespective of the fact that in the register of the State Land Service (SLS) it is formally registered as farmland. The Law on Forest Protection of Oct. 14, 1937 defined the forest by the following traits: i) land areas overgrown by forest ; ii) meadows, pastureland and other non-cultivated lands overgrown by forest, stocked to no less than a half of full density and encircled by forest; iii) felling coupes, irrespective of the situation with forest regeneration there; iv) all lands, irrespective of the tree age and density, where the owner has ceased other management activities to let the forest grow there. Stands on swampy sites, provided the tree height at the age of 60 years remained below 7 m, were not counted as forest. As it follows from the above definition, the notion “forest land” did not exist, and all these differences were covered by one single category namely “forest”.

When we compare the above definition with that in the Forest Law of today, a lot of common traits are observed, i. e. the ecological rather than the formal features of land categories for the needs of estate registration are taken as the basis. However, the ecological features as the basis for attributing the given land to forest have some positive aspects about it. According to current law, such a forest can be felled only in compliance with the Forest Law, irrespective of its formal status of either farmland or forest. In this way sustainable forest management is ensured, independently of the formal criteria of ownership status and categorisation.

With the adoption of the Forest Law of 2000 the notion of “forest” is defined in the text of the law for the first time. So far these problems were dealt with by regulatory acts on forest management and utilisation, where no definition of the concept “forest” was given. However, the first definition is already found in the regulations of the State Forest Service (SFS) and SLS “Criteria for Distinguishing between Forest and Scrubland”. These regulations were intended only for the employees of given organisations for making decisions in real situations.

The definition of the notion “forest land” is given in Paragraph 1 of Article 3 of the Forest Law: as the land carrying forest, the land under forest infrastructure facilities, as well as overflowing clearings, bogs and gaps in the forest and areas contiguous to it.

Before analysing the forest as an object of ownership rights, it is to be noted that the total forest area in Latvia is 2.9 million ha, or 45% of the land area. As to the distribution of forests by ownership, the situation on Jan. 1, 1999 was as follows: state-owned (public) forests – 50%, private forests – 42%, other owners – 4%. Latvia ranks third in Europe in standing volume per capita. For a comparison, the situation in Sweden is as follows: forest cover – 55%; the proportion of forests owned by individuals – 29%, the proportion of forests owned jointly – 19%; forests owned by landed estates – 3%; forests owned by companies – 37%; forests owned by municipalities, church, and public organisations – 8%; public forests – 5%.[1]

[1] Skogsstastistisk arsbok 2000, Sveriges officiella statistik Skogsstyrelsen Jönkōping 2000, 42., 43., 311., 312., 313 pages

According to Paragraph 1 of Article 4 the subject of the Forest Law is “any person legally possessing/holding the forest/forest land”; and “any person, pursuant to the given law and other laws, vested with the statutory rights and obligations with respect to forest management and utilisation”. For instance, a person, enjoying the right of free access to forests under Article 5, are obliged to comply with fire safety regulations, etc. and not inflict damage to forest ecosystems and the infrastructure under Article 6, may be neither forest owner nor holder.

It is necessary first of all to make clear the meaning of the terms “forest owner” and “forest holder”. According to the Forest Law, all legislative and regulatory acts of forest management and utilisation are legally binding upon the forest owner. According to Article 994 of the Civil Law, the owner of the real (landed) estate is the person entered as such in the Land Registry (Land Book). Article 993 of the Civil Law provides that transfer of the estate involves no acquisition of the ownership rights to it, unless the title, legally acquired, is accordingly registered in the Land Registry. In cases of estate alienation, the change in the ownership status is legally effected only when the respective entry, based on legal action, is made in the Land Registry. Thus, a person lawfully becomes the owner only upon this fact accordingly registered in the Land Registry.

The forest management and utilisation laws equally apply to the holder of the forest/forest land. Article 1 (Point 18) of the Forest Law defines the forest holder as: a) a person to whom, in the course of the land reform, following a legally valid decision of the respective authority, the land is given over for payment, or the property rights to it are restituted, and the estate is allotted (marked out) physically; b) a person who has acquired title to the land by hereditary right or on any other legal basis.

Since forest is not only a natural resource and a part of the environment, but also an object of property rights, i. e. it may be owned by individuals or legal persons, its situation becomes dual: the public interest to protect the forest as a part of the environment are in conflict with its economic interests in forest utilisation, including the owner’s right to enjoy the benefits of his property. It is difficult to achieve harmony between these interests with no harm done to the forest itself. In this context we should analyse in greater detail the situation in Latvia of the forest owner/holder as the subjects of law on forest management and utilisation.

According to Paragraph 1 of Article 4, provisions of the Forest Law are legally binding to any person possessing/holding the forest/forest land. As already mentioned, according to Civil Law, the owner of the real estate is the person entered as such in the Land Registry. Then the same is true in respect to the forest land, entered in the Land register in the name of a particular person. Thus, it follows the forest owner is the person in whose name the given estate is registered in the Land Registry. A question may be raised, whether the term “forest owner” as used in the Forest Law is the same as “the owner of forest land”, since in everyday situations these notions are understood as synonymous. However, such an understanding may be disputed. The term “owner of forest land” is wider and from the viewpoint of law more precise because: i) the respective entry in the Land Registry specifies also the land categories the holding comprises, e. g. farmland or forest; ii) provided the holding includes overflowing clearings, bogs and gaps in the forest, or the sites under forest infrastructure objects, the given person is, nevertheless, the land owner, if not the forest owner. So far the

interpretation of the term “forest owner” has not been disputed, as Article 994 of the Civil Law defines the legal implications the respective entry in the Land Registry involves, and, by referring to it, no disputes arise as to the owner of the given forest estate.

However, a controversial interpretation of the notion “forest” is possible in view of Article 852 of the Civil Law. It provides that a movable thing, in so far as it makes one whole of an immovable thing, is to be treated by law as immovable and accordingly dealt with. It implies, as pointed out by I. Kalniņa, that trees, branches, herbs, mushrooms, resin, etc. are part and parcel of the forest as an immovable thing, unless separated from it. In this context a standing tree is a thing ancillary to the land, which is the principal thing, when the object of property right is concerned. The forest property is entered in the Land Registry as a land area of particular size and configuration, carrying forest, yet, in terms of estate valuation, the standing trees account for two thirds of its value. Thus, the value of the principal thing is less than that of the thing ancillary to it. The standing trees, nevertheless, go with the land they stand on, and that is why the land is to be considered the principal thing here.

In practice disagreements may arise in cases of property alienation. As already mentioned, the Civil Law (Article 993) provides that a transfer of the estate as such involves no recognition of the ownership rights to it, unless the title is accordingly registered in the Land Registry. In cases of estate alienation, the change in the ownership status is validated only upon the respective entry made in the Land register. Thus, a person lawfully becomes the owner only upon this fact accordingly entered in the Land Registry.

In relation to forest management and utilisation, there may arise problems as to exactly who has the right to timber harvesting, which is legal under a confirmation drawn from SFS. It may subsequently turn out that during harvesting operations the provisions of the confirmation are violated and the operation is illegal under Article 14 of the Forest Law. Sometimes, when the forest officer is drawing up a statement concerning the case, the forest owner announces of the contract of sale for this particular estate, where the violation is detected. In such cases the forest officer has to verify the entries in the Land Registry concerning the change of ownership to decide which party is at fault – the seller or the buyer, i. e. the actual owner at the moment the forest offence is committed.

In case the forest owner has applied, as provided by Article 39 of the Forest Law, to SFS for a felling confirmation, it implies an intention to extract revenue from his forest. Provided SFS has detected a breach of law in the particular operation, it will call to account the forest owner, irrespective of the fact who has actually committed the offence. The forest owner has the right to appeal against the decision of forest authorities for imposing administrative sanctions, or in case of criminal liability, supply evidence, supporting his innocence. However, in court rulings there is no unanimity as to which party should be held accountable for an offence in situations, where the owner has sold the estate, but the buyer has not as yet registered the ownership in his name. As the Civil Law (Article 843) admits applying the norms valid for immovable things also to the movable things, which make a part of the immovable, and vice versa, a bargain with forest may be treated as the separation from an immovable thing (the land carrying forest) a thing that is movable (timber), with no legal responsibility for the

consequences to the thing immovable (in the given case a need to regenerate the forest). Provided the breach of forest law has taken place after the buyer has registered the estate in his name in the Land Registry, he assumes full responsibility for the case. However, he has the right to sue the previous owner for the damage incurred to the property through the latter's fault. It only proves that in issuing confirmations for tree felling and in deciding cases of forest offence, the ownership status at the moment the offence is committed, and the moment the estate lawfully changes hands in cases of a contract of sale, are of special importance.

The laws and regulations in forest management equally apply to the forest holder.(The term "forest holder" is specified above.) According to the law of Nov. 21, 1990 "On the Land Reform in the Rural Areas of the Republic of Latvia", during the first phase of the land reform the individuals had the right to apply to the respective authorities (the Local Land Commission) to grant them the land. Then the land development project for the rural area was worked out, and the applicants were granted the so-called "user's" (tenancy, occupancy) rights to the land, with the boundaries marked out physically. The second phase of the land reform consisted in the restitution of the property right to the land of the former owners or their successors, or the applicants could acquire the title to the land for payment or by privatisation vouchers. The owner could start forest management and utilisation, provided the Land Commission had passed a decision on granting the title to the land, but its registration in the Land Registry was pending.

The Forest Law of the year 2000 solved a number of problems caused by the legal norms of the previous law "On Forest Management and Utilisation." Article 21 of the said law provided that forest managers were the individuals and legal persons whom the user's or ownership right had been granted to the respective forest land. Article 36 provided that timber harvesting was possible under a felling permit (ticket), accordingly obtained from the forest authorities. Consequently, the individual who in the first stage of the land reform had obtained the user's right, could start utilising the forest, provided there was one on the land he had the right to use.

Article 8 of the law of Oct. 30, 1997 "On Finalising the Land Reform in the Rural Areas" rules that until Nov. 1, 1996 the individuals who have lawfully obtained the user's right to the land from the state or the individuals holding such right, may buy out the land in their use to secure a title to it. As it follows from this provision, the individual has no obligation to buy out the land and secure for himself a full title to it. He may just as well waive the user's right, as his obligations in respect to the land differ from those of a full-fledged owner. The problems with forest authorities may arise in the event the individual has drawn the felling permit, harvested the timber, afterwards giving up the user's right on purpose. In such a situation the user has exploited the forest by lawfully evading the obligation to restock it, since the regulatory acts on the land reform impose no ban on waiving the user's right, unless the holding boundaries are marked out physically.

There have been cases where the user has harvested the forest held by him without any authorisation, yet recovering damage in favour of the state is virtually impossible, since the court ruling can be made only in relation to the property owned by the defendant. In some cases it is even impossible to find the person – the user of the land where the offence has taken place. To avoid situations like that, the recent legislation provides that timber harvesting is possible in case the Land Commission has passed a

decision on granting the given land to the individual for payment or by way of the restitution of property rights, with the holding boundaries marked out physically. This is an attempt to avert relentless exploitation of forest resources.

Another problem the Forest Law of 2000 has created in relation to the forest holder is the demand of the Civil Law (Article 1100) to have a treeless boundary ride, separating the holdings in a tract of forest. It may happen that a forest holder, who has the user's rights to the given holding, cannot lawfully obtain the felling confirmation from the forest authorities to remove the trees from the ride to delineate his estate. The situation is absurd: the forest holder, in order to achieve the decision of the Land Commission on granting him the title to the given land is compelled to carry out illegal felling of trees to have the holding boundaries marked out physically, as the law stipulates. Especially forest holders encounter situations like that. The demand set to the forest owner is to keep the boundary ride clear of trees.

The needy people are yet another category grieved by the inconsistencies of law. Lots of persons possessing the user's right hesitate to make the title official in anticipation of the government to cover the related expenses, as it had been promised. However, the Forest Law of 2000 now denies them a legal opportunity to harvest even fuel wood in the forest held by them, to say nothing of commercial timber, unless a full title to the holding is achieved. The purpose of including the given norm in the Forest Law was to speed up the land reform, yet it, likewise, promotes illegal utilisation of forests on the part of the needy people. To address the problems, the Interim Provisions of the Forest Law of 2000 should have fixed a deadline by which the user must settle the formalities for the title deed, while legalising the harvesting of timber for the user's own needs and felling trees to clear the rides between holdings.

According to Article 1, Point 18, the forest holder is also a person who has acquired title to the land by way of the hereditary right. In such situations a court judgement, confirming the person's right to inherit the estate in question, is a must. No permit to forest utilisation can be granted, unless the court judgement is produced. Evidence supporting the right to inheritance is insufficient, since there may be other persons as well who have the same right.

The said article of the Forest Law also rules that a person may hold forest on any other legal basis. The holding (tenancy, occupancy) of the forest estate may be legal and illegal, while illegal holding of the property may be in good faith and in bad faith (with a malicious intent). In real life we find different situations. For example, the forest owner has made a contract of the sale of estate to person X and authorised the latter to obtain the felling confirmation from the forest authorities. After the timber has been extracted and sold, person X evades making the title to the holding official and registering it in the Land Registry. In this situation the forest owner is legally liable, as the deed is legal, the timber harvesting is done in compliance with law and the owner has extracted profit from the bargain, but failed to invest in restocking the forest exploited. Another example: person Y has, via an alienation agreement of the property rights, come to hold a forest, yet evades settling the formalities and registering the estate in the Land Registry in his name. The said person approaches the forest authorities, expecting, on the basis of notarially verified alienation deed, to obtain, as the actual holder of this forest, the right to harvest timber on the given holding.

As the Forest Law does not specify the civil relations of the forest owner and holder, the Civil Law must be applied in deciding the case. In cases of property alienation where the forest land is the subject of the agreement, one must inquire into the true purpose of the deed – either transfer of the property rights, or just getting access to the timber, with the harvesting done by the recipient of the estate.

The Civil Law (Article 1504) rules that in interpreting an agreement the emphasis is on the true meaning of the wording used, and, provided no ambiguous interpretation is possible, it should be followed literally, unless substantial evidence is obtained contradicting the true intent of the parties. Provided the recovery of timber is found as the true intent of the contracting parties, the deed is to be evaluated in terms of the business agreements under the Civil Law and the transactions with the movables. This is so because harvesting and extracting implies the separation of timber from the land, normally done by the recipient party in the agreement at his own expense, since he has bought the timber from the forest owner. In a similar situation the deed is legally binding to the both parties, where a breach of provisions involves compensation for the damage to be covered by the party at fault. Thus, in case of forest offence, SFS will recover the damage in favour of the state.

An analysis of the wording of the agreement may reveal that the true intent has been the sale of timber, where the party harvesting the timber is the buyer, although the subject of the contract is the forest as real estate. Such contracts are likely to be made, provided the contracting parties are misled as to a distinction between the forest as an immovable thing and the timber extracted from it as a movable thing. As it follows from the respective clauses of the Civil Law and judicial practice, a special law or an agreement between the contracting parties may rule that standing timber, though part and parcel of the land it is found on, may be viewed as a movable thing. This agrees with the Civil Law (Article 843), providing that the legal standing of the principal thing may, by a separate agreement, be detached from the thing that is ancillary in relation to the principal thing, i. e. disrupting the legal relations between them, although, physically, they may still constitute one whole. This principle has repeatedly been applied in court rulings to decide cases where a structure is built on the land owned by a third party. It is possible to apply this principle also to cases where sales of forest estates are involved. By applying the above norm of the Civil Law, the parties may agree that the forest is alienated as a movable thing.

In real life one often encounters the situations, where the subject of the agreement is a cutting area, falling under point 1.5 of the CM Regulations for Felling Trees in Forest Lands of Oct. 24,2000 i.e. the forest stand or its part where trees are felled or the felling is planned. In view of the Civil Law (Article 852) the forest stand or its part is immovable, while the contracting parties have in mind the standing timber, that becomes movable, when separated from the land it grows on. As the contract does not specify this difference, it may be difficult by analysing the wording of the contract to judge of the true intent of the parties.

Provided the owner’s true intent is the sale of real estate rather than standing timber, then, following the provisions of the Civil Law (Article 1007), the said alienation agreement may serve as the basis for legally holding the thing (the forest), provided the title to it cannot be acquired due to some “substantial obstacle”(Article 1006). In case it is possible to identify the “substantial obstacle” due to which the title is not

obtained and the estate not entered in the Land Registry, the person in question may be considered the legal holder of the estate. However, the interpretation of the notion “substantial obstacle” may be highly ambiguous, and since the regulatory acts do not specify the criteria for identifying it, no uniform application of this legal norm is possible.

However, SFS may decline a felling confirmation to the person who has come to hold the forest in a manner discussed above. The authorities need to be sure of the legitimacy of the felling permit they grant, and deny the right to forest utilisation to a person who holds the forest illegally. The problems with granting a felling permit to a person who legally holds the forest, yet the estate is not entered in the Land Registry, may be summarised as follows:

1. According to Article 1 (Point 18) of the Forest Law the forest holder is a person who has legally acquired the right to the given forest holding, i. e. in full compliance with the law. However, when the real estate sales contract is made, and the change in the ownership status for the given holding is not secured by an entry in the Land Registry, SFS has no full assurance of the legitimacy of the deed. This is because in many cases the contracts are made without explanations or it is not clear, exactly what is the subject of the contract – real estate or the right to harvest timber on it. Thus, on the basis of a real estate sales agreement alone SFS cannot have a full assurance of legitimacy of the deed, and, consequently, the holder’s right to the forest.
2. The Civil Law (Article 2060) grants the local government the priority right to purchase the real estate offered for sale in its territory. It implies that a deed with real estate is valid provided the local government has waived its right to it. In case SFS has granted a felling permit on the basis of a real estate sales agreement alone, there may arise a conflict with the local government, should it decide to exercise its priority right to purchase the estate in question.
3. In case the forest holder is at fault for illegal felling, and the forest authorities decide to reward the damage in favour of the state, the recovery of a fine may be impossible, because the Civil Law provides legal sanctions against the estate owned, but not the estate held under the user’s right.
4. After the forest holder has obtained the right to fell timber and performed the operation, he may lose motivation to acquire a full title to the holding and register it in the Land Registry, as it would imply regeneration of the exploited forest area. Provided the bargain with the forest estate is not brought to completion, and the holder of the estate has managed to obtain the right to exploit the forest, either of the contracting parties would shirk responsibility for restocking the forest.

An equal treatment by law of both the forest owner and the forest holder has its negative and positive aspects. However, the essence of the problem is not so much in the law as in the attitude people show towards forest. Popular movements oriented to environment protection have within a considerable part of population built an awareness of forest as an important component of the environment, essential to human welfare, health and recreation. Tree felling of the greater or lesser scale inflicts damage not only to the smaller constituents and parts of the environment, but also to man. For others, unfortunately still a majority, forest means the “green” gold that has to be turned into profit. Changing this attitude is more time and labour consuming than amending laws and regulations.

LITHUANIAN FOREST SECTOR – PROBLEMS AND POTENTIAL SOLUTIONS

MARIUS LAZDINIS, DAVID OSTERGREN, AND DONATAS DUDUTIS

ABSTRACT

In order to contribute to a more transparent and effective forest policy process, and to provide up-to-date information on the situation in the forestry sector, during December 2000 and January 2001 a survey was conducted among major stakeholders of the Lithuanian forestry sector. A single question was provided to the participants: "*What are the 5 main problems in the Lithuanian forestry sector?*" A total of 70 individuals were selected: Private forest owners, timber processing industry representatives, Governmental forestry decision-makers, governmental environmental decision-makers, intermediate forestry staff, forest scientists, and NGO staff. Ten individuals from each group were chosen to participate in the survey. A total of 350 problems were identified by the respondents, and they were grouped into six broad categories. The “problems” were separated according to similarity of terminology and issue. The six categories were: Forest policy, state forest management, private forest management, timber trade and processing, forest ecology, and human resources.

In our paper we outline the opinion of respondents concerning specific problems in the above categories. We also present a current situation in the forestry sector as related to these problems and indicate the policy instruments (if any) taken or forthcoming in order to improve the existing situation. We conclude by identifying overarching obstacles that hinder developing solutions: Political (policies, general management scheme), economic (general economical framework, state forest enterprises, private forestry sector), social (human resources, flow of information, cooperation), and ecological (forest protection, afforestation, reforestation, biodiversity conservation).

INTRODUCTION

Throughout the world, the policy and practice in forestry has come under increased scrutiny by concerned citizens, academics, foresters and forest policy makers alike. Nowhere is this more true than in the former communist nations since 1990. A common criticism is that while nations and agencies are eager to report success, information on challenges and weaknesses in management practices is more difficult to obtain. This analysis was conducted to help identify both successes and areas that need improvement in the Lithuanian forest sector. Internationally, the growing assumption is that forest management must be open to all stakeholders and based on learning and adaptive processes. Therefore the list of problems currently faced by the forestry sector should be made publicly available and contribute to an improvement of the current situation (Maser 1994).

Public policy is the sum of governmental activities, whether pursued directly or through agents, as those activities have an influence on the lives of citizens (Peters 1999). Therefore, “a forest policy specifies certain principles regarding the use of society’s forest resources which it is felt will contribute to the achievement of some of the objectives of that society” (Worrell 1970). In general, three separate levels of policy can be distinguished: (1) policy choices – decisions made by politicians, civil servants or other authorities and directed toward using power to affect the lives of citizens; (2) policy outputs – policy choices being put into action; (3) policy impacts – the effects that policy choices and policy outputs have on citizens (Peters 1999).

Assessment of the current situation is an essential part of national forest programs, which are the “long-term iterative processes by which countries are continuously improving their policies and strategies … for the achievement of sustainable forest management” (Intergovernmental Panel on Forests 1997). Our investigation contributes to this assessment and further assumed that Lithuania is early in the policy process vis-a-vis the framework outlined by Merlo and Paveri (1997). The policy formation part of this process consists of following steps: 1) Analysis of problems, 2) setting of goals and objectives, and 3) definition of courses of action. Assessment of forest policy impacts by a democratic and inclusive process attended by all interested stakeholders, may indicate the presence or absence of issues of concern in a national forest management program. The results may provide a comprehensive current picture of the situation in forest management on a national scale and serve as a foundation or starting point for national forest policy formation and forest management program processes.

We applied a simple survey instrument to investigate and identify current issues of concern on a national scale. The results of the survey are presented and solutions (forthcoming or already in action) to the problems are discussed.

METHODS

A case study is an empirical inquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident. Case studies are appropriate for studying trends in national forest policy implementation because the researcher has little control over the circumstances, uses multiple sources of evidence, and conducts an intensive study of relative subjects (Murphy 1980; GAO 1990; Yin 1994). Case studies fall into three general categories. Exploratory studies are employed where considerable uncertainty exists about program operations, goals and results (GAO 1990). Descriptive studies tend to collect general data and are used to discover and describe what is occurring. Explanatory studies generally test hypothesis and identify causal relationships. As suggested by the literature, studies may have a combination of all three purposes (Johnson & Joslyn 1991; Yin 1994). This investigation is the exploratory phase of a longer study that seeks to understand how national forest policy has contributed to evolving solutions as well as problems in the forest sector.

In order to contribute to a more transparent and effective forest policy formation process, and to provide up-to-date information on the situation in the forestry sector, during December 2000 and January 2001, the survey among major stakeholders of Lithuanian forest sector was carried out. A single open-ended question (see Weiss (1998)) was provided to the participants: "*What are the 5 main problems in Lithuanian forestry sector?*" After answering the question, respondents also were asked to rank these indicated problems according to importance (ranging from 5 - the greatest to 1 - the smallest of the listed problems). After completion of the questionnaire, the respondents were interviewed using a focused interview form (Yin 1989).

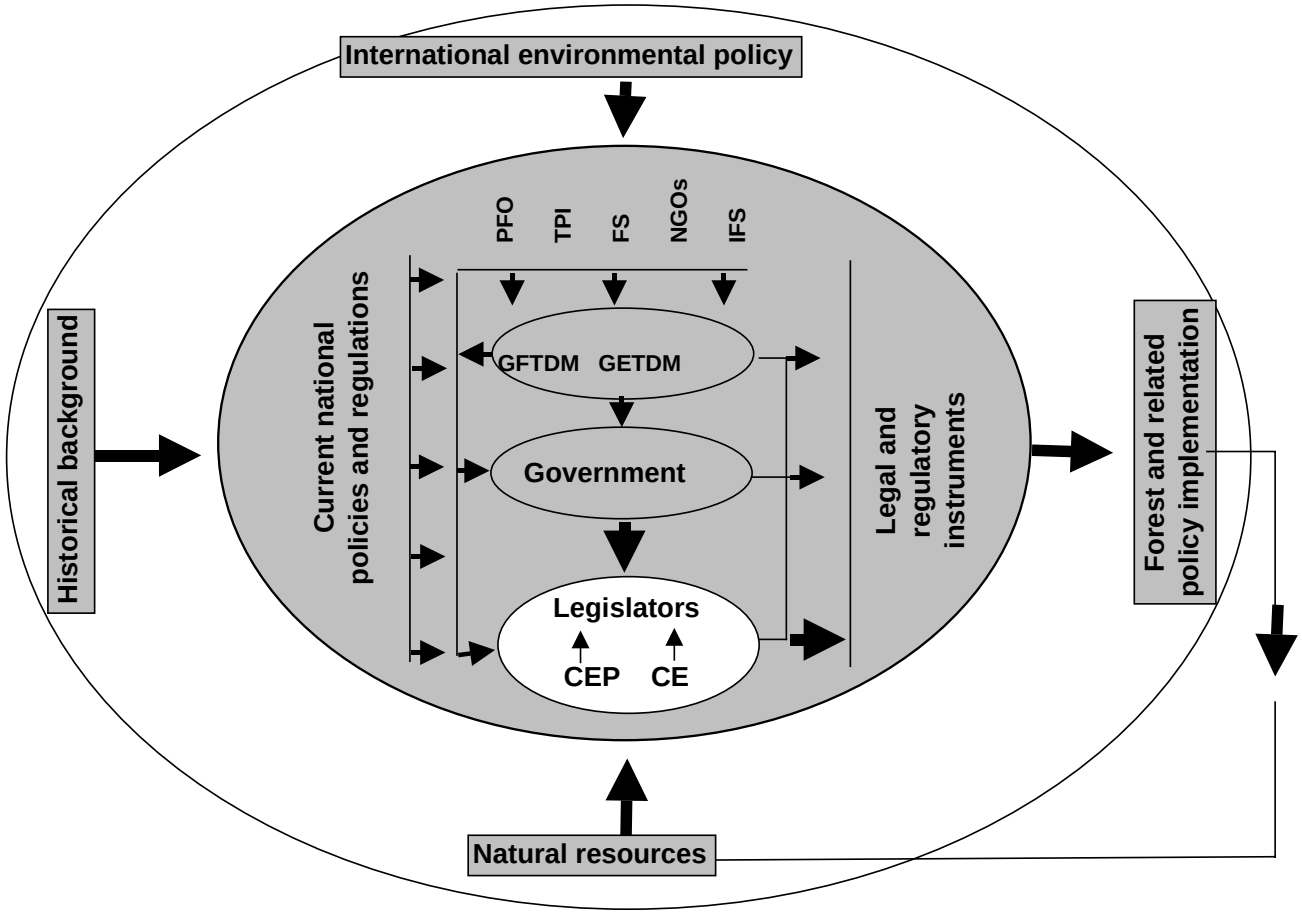
The interviewees were “elites” in forest policy making: leaders in non-government organizations, administrators in government agencies, forest specialists and industry representatives. The individuals were selected based on the best available knowledge in the sector by surveyor, as well as using snowball strategy whereby the primary investigator contacted the first round of respondents who identified subsequent interviewees — more elites in the forest sector. A total of 70 individuals were selected representing the following groups (see Figure 1 for conceptual forest policy formation process in Lithuania):

- Private forest owners (PFO);
- Timber processing industry representatives (TPI);
- Governmental forestry top decision-makers (GFTDM);
- Governmental environmental top decision-makers (GETDM);
- Intermediate forestry staff (IFS);
- Forest scientists (FS);
- NGO leaders.

Ten individuals from each group were chosen to participate in the survey. A total of 350 problems were indicated during the survey.

To a great extent the subjects in this study defined “forestry problems” themselves. We wanted to see how, ten years after the fall of the USSR, elites perceived the emergence and definition of the forestry sector. We paid particular attention to identifying over-riding (frequently referenced) problems within forest management and the interface between national policy goals and the resulting conditions in the forest sector. To collect and analyze the data we grouped responses by general category.

Conceptual forest policy formation process in Lithuania



CEP - Committee on Environment Protection
CE - Committee on Economics
PFO - Private forest owners
TPI - Timber processing industry
FS - Forest scientists
NGOs - Non-Governmental organisations
IFS - Intermediate forestry staff
GFTDM - Gov. forestry top decision-makers
GETDM - Gov. environmental top decision-makers

2001

RESULTS AND DISCUSSION

Among the seven groups we surveyed, the private forest owners had the most difficulty identifying five problems in the forestry sector. Our assumption is that private forest owners still lack enough information about forest policy, ecology or economics to distinguish when a program or forestry practice is successful or not (discussed below in more detail). The initial implication is that the Lithuanian top governmental forestry decision-makers may be able to make the largest positive impact on overall forest condition through an aggressive outreach program. Models for outreach programs include education of the landowners or consulting work by private or public foresters to provide private forest landowners with a range of management options.

Forest policy

A single most common response included an issue of “dual responsibilities in top level forest management”, i.e., the conflict in allocating some of the management functions among Department of Forests and Protected Areas under the Ministry of Environment and the General Forest Enterprise under the Ministry of Environment. The Ministry of Environment, which is responsible for drafting the policies and strategy in the fields designated under its jurisdiction, does not have corresponding units directly responsible for forest and protected areas politics. Respondents also mentioned gaps in national legislative framework, which result in complicated situations at top-level forest management. As one of the major problems were stated prolonged preparations to changes in Forest Law, which created uncertainty in the sector.

Starting with the year 2000, the Government of the Republic of Lithuania is consistently reorganising the activities of state management institutions, based on the following principles of separation between functions and fields of competence: the policy and strategy of individual sectors is drafted by the ministry responsible for state management in the corresponding sector; this policy and strategy is implemented by institutions under the ministry; and control of implementation is trusted to the relevant control institution (usually under the same ministry). These principles were followed while adopting the new draft of Forest Law in the Parliament of the Republic of Lithuania (10 of April 2001), that will come into force starting at July 1, 2001. Clauses of the Article 5 of a new draft, which define the state approach to forest management and control, indicate that forest politics should be formed by the Ministry of Environment, implemented by the General Forest Enterprise under the Ministry of Environment as a trustee of the state, and the implementation will be controlled by regional forest control offices of State Environmental Protection Inspection under the jurisdiction of the Ministry of Environment.

However, the process of separation of functions and fields of competence was not totally completed. E.g., designation of implementation responsibilities of some policy functions related to private forestry, such as establishment of common (nation-wide) system for protection against fires, pests, and insects, to the General Forest Enterprise remains doubtful. The General Forest Enterprise is meant to be responsible only for reforestation, maintenance, protection, and use of forest resources in the state forests designated for the management of forest enterprises. It

still remains unclear which state institution will be responsible for implementation of forest policy in the forests managed by national parks. Therefore, the new Forest Law also needs improvements and is expected that will be updated in the future.

Two more problems that were indicated by respondents included: a lack of long-term national and private forestry and timber processing industry strategies, and long-lasting Land Reform, i.e. delaying restitution of forests to the previous forest owners. Some other failures of the Land Reform were named as well, for example, re-allocation of previously owned forest land into more scenic landscapes, and formation of small privately owned forest parcels, which make common forestry and silvicultural practices close to impossible. Several respondents also stated that the unstable and changing political environment imposes uncertainty on the whole forestry sector and is a disincentive for capital investment.

After restoration of independence in Lithuania, while adopting new legal documents concerning forest management (Forest Law was the main document in 1994 and the Forestry and Timber Industry Development Program), clear principles of forest policies corresponding to modified socio-economic conditions still were not formulated. Besides the above, during the period of 1996-98, several unprepared institutional forestry reforms were completed. The situation was worsened by groups and structures guided by selfish interests attempting to influence institutions responsible for state and governmental decisions. Decision-making institutions in Lithuania currently are also affected by international organisations, European Union integration objectives, agricultural and especially timber processing industry representatives, the land reform process, non-governmental organisations and other bodies.

After the social and political conditions stabilised from the rush of independence, the society of foresters initiated a new draft of Lithuanian Forestry Policies and implementation strategy (the initial draft was prepared with assistance of FAO experts). An important goal was to combine the needs of all stakeholders interested in forestry production and services. Preparation of the draft was mainly led by representatives of various forestry, timber processing industry, environmental protection, and commerce-related governmental and non-governmental organisations. It is expected that discussion on the drafts of Lithuanian Forestry Policies and its implementation strategy and related documents will be transferred to the level of state institutions in the near future, and that after preliminary agreements the documents will be forwarded to the Government of the Republic of Lithuania for approval. The documents should be finalised and approved by the middle of 2002.

The draft documents of Lithuanian Forestry Policies and its implementation strategy cover the following fields of interest to the current forestry processes: 1) ecological aspects of forestry; 2) management, use, and restoration of forest resources; 3) increase of forest area; 4) forest ownership and forest management; 5) forestry economics and comprehensive forest system development; 6) social issues of forest management; 7) forest science and education; 8) private forestry development; 9) forest inventory, forest planning, and development of forest information system; 10) access to information by public and public participation; 11) issues of international co-operation.

State forest management

Another significant group of problems falls under the general category of “organisational structure and management of state forest enterprises.” Issues included improper forestry economic system, and inefficient and irrational management. Some individuals indicated that state forest enterprises are too small in size and should be enlarged to the areas optimal for management activities. It was also pointed out that the current number of forestry enterprises is too big. The general opinion seems to be that top managers of state forest enterprises should be directly responsible for financial activities in the forest enterprise.

As indicated by forest management examples in the state forests of several European countries, there is the whole range of factors influencing the choice of a particular management model such as: national forest cover, forest resources, traditional forest ownership structure, depth of integration between forestry and timber processing industries, management traditions. However, in all the cases, forest management is organised based on the principles of a market economy and equity of all types of forest ownership, creating equal legal conditions both for the state and private forestry sectors, and securing continuous supply of ecological, economic, and social functions from the forests. In summarising the situation in European countries, we argue that based on the kind of organisational structure, three types of bodies carrying out management/commercial functions in the state forests, can be distinguished: state budget institution, state enterprise, and joint stock company. All forestry enterprises, despite of their institutional status, are a complex of forestry activities – reforestation and maintenance of the state forests, use of forest resources, and trade of timber and trees on the stump.

Institutions funded directly from the state budget are common in the countries where forestry is not a profitable activity and must be subsidised by the state. Management by state enterprise is the most common in Europe (examples include Denmark, France, and Germany). This model allows economically effective management, maintaining relatively strong influence of the state over forest resources, which provides not only for economic, but also for environmental and social functions as well.

Joint stock companies responsible for the management of state forests are common in countries, which: have large forest resources, forestry is closely integrated with timber processing industry or even with pulp production, and the long-term strategic goal is total or partial privatisation of the above companies, gradually selling state share of the stocks (e.g. Sweden and Ireland). In countries with economies in transition (e.g. Lithuania) the prevailing type of bodies responsible for commercial functions in the state forests is the state enterprise. In some countries (e.g., Poland and until recently Lithuania) state forest enterprises are also responsible for implementation of state forest politics, especially as related to private forestry.

The choice between a forest enterprise or a joint stock company in the case of Lithuanian does not have a major influence on income and expenses of the forest management situation. However, during the ongoing land reform forest companies are responsible for protection and maintenance of state forests, which are set aside to be returned to previous owners or used for compensation purposes. The above forests provide no income, because timber harvesting from such forests is not

allowed. Currently, establishment of state stock forest companies is not feasible, due to ongoing land (forest) reform and unclear boundaries of the state forests. Therefore, the new Forest Law still indicates the status of the forest enterprise as a state company, trustee of the state for management and use of state forests according to procedures prescribed by the law, as well as responsible for maintaining a complex of forestry activities in the state forests.

The size of forest enterprises in individual countries is also effected by a range of factors: profitability, competitiveness, capability to attract investment to timber processing industry, and efficient administration. From this perspective, if assessing only economically efficient state forest enterprises or joint stock companies in various countries, there is no clear link between the size of the company and work efficiency (profitability). The size of an efficient forest company varies from 10-12 thousand hectares in Poland to 2 mill. hectares in Sweden. Currently in some of the Eastern European countries tendencies for enlargement of forest companies are observed. Quite often centralised companies responsible for management of all state forests are established. The increase in size and centralisation has many pros and cons. Such forest companies are attractive to large timber processing industries and increase chances of foreign investment. However, centralisation can be successful only in the countries where the majority of forests is under private ownership. Otherwise, such a centralisation may create a danger of monopolistic conditions in the roundwood market and eliminate competition and the possibility to compare economic efficiency of individual bodies responsible for management of state forests.

In Lithuania, economic capacity should be treated as the most important criterion for determining the optimal number of state forest companies. Economic capacity of forest companies is defined by considering the income from ecologically acceptable use of forest resources within the individual forest area, which allows sufficient maintenance, protection, and restoration of these forests, and provides for investment in forest development, timely payment of taxes, average salary for employees, and financing of common forestry activities (forest management planning, organisation and maintenance of common system for protection against forest fires, insect and disease outbreaks, liquidation of consequences of natural disasters, and etc.) In order to optimise the number of state forest companies (forest enterprises), their economic capacity must be calculated. This factor should be considered in analysing whether each individual forest enterprise during the period of coming 10 years will be capable of collecting enough financial resources to satisfy the above needs. By order of the Director of the Department of Forests and Protected Areas, a working group consisting of representatives of the department, the Lithuanian Forest Research Institute, the Lithuanian Forest Inventory and Management Institute, and the Lithuanian Agricultural Academy Forest Faculty was established in 1999. This group prepared a draft of potential organisational structures for forest enterprises and their smaller internal units.

Based on a common methodological guide, the assessment of forest enterprises was completed, with special consideration of the average yearly production turnover for the coming 10 years and average yearly income from commercial activities for the same period of time. Forest enterprises were divided into three groups based on their performance: high, average, and low. The additional calculations were completed in an attempt to select from the group of forest enterprises with low

performance those, which in the near future may be expected to reach a critical condition. Indicator thresholds, the presence of which is crucial for continuity of a forest enterprise, were defined: total yearly income – at least 5.0 mill. Lithuanian Litas (1.25 mill. USD), yearly production turnover – at least 60 thousand m^3 from all types of cuttings, area of state forests – at least 15 thousand hectares. After reorganisation of forest enterprises with low economic performance (merging them with or connecting their forests to neighbouring forest enterprises), the total number of forest companies in Lithuania should decrease from 42 to 34-30. The average forest areas under the management of forest enterprises should be 32-35 thousand hectares.

The first steps in actual reorganisation of forest enterprises have already been made. However, this process must be completed gradually with some transition periods, and considering the situation in land (forest) reform process. The reorganisation of state forest enterprises will be finalised only after land reform process is over.

Private forest management

There is a large group of problems related to forest management in private forests. Most commonly stated was the lack of information directed at the private forest owners: “people do not know what they are required to do,” “how to manage their forests;” “where to sell timber;” and “how to reforest.” Some of the respondents to the survey expressed an opinion that even on the state level there is too little attention paid to the management of private forests. It was also indicated, that private forestry is inefficient and somewhat “chaotic.” One of the main problems in this area is a complex and undefined interdependency among state forestry (state forest enterprises) and private forest owners. The concern was expressed that private forest owner’s consulting services are under jurisdiction of state forest enterprises. It was also indicated that there is no functional mechanism to coerce private forest owners to follow required forest management activities. Another disincentive to follow recommendations is that the requirements are overly strict “after bureaucracy is faced, the interest in proper management is lost.”

One of the most complex issues in Lithuanian forest sector is sustainable private forest management. During the process of land reform, many small, private forest holdings were formed. After the land (forest) reform is completed, some 40-45% of national forest area will be under private ownership. As of January 2001, 458.3 thousand hectares of forest (23% of national forest cover) has already been returned to the previous forest owners. The above forest area was divided among 187.5 thousand forest owners. An average forest holding currently is 3.4 hectares. Small plots do not provide the owners a continuous supply of economic benefits meanwhile assuring long-term maintenance of forest ecological and social functions.

Both the state and some private individuals promote co-operation of private forest owners. However, examples from more developed countries (France, Denmark) where forest ownership fragmentation and size of private holdings is similar to Lithuania, indicate that such co-operation is not economically feasible. Most probably the only way to enlarge the size of average private forest holding, is a functioning forest land market, which would provide the possibilities for some individuals to sell their land, and for others – to purchase it, and would lead to formation of larger

private forest holdings. Unfortunately, so far Lithuanian legal system is not prepared for such trade. The principles prohibiting land to be purchased by foreigners and forest land by legal persons are still in power. Foreign investors and Lithuanian private forestry companies, most probably, would be the ones to re-vitalise national forest land market. Luckily, with a national goal of joining European Union, the legal clauses prohibiting land ownership by foreigners will have to be changed. Currently, in the Parliament of the Republic of Lithuania, possible changes of relevant laws are already being considered. On the other hand, sometimes foreign investors, such as e.g., Scandinavian timber processing companies, are not interested in, according to their opinion, troublesome and effort demanding responsibility of putting together the "puzzle" of private forest holdings. Therefore, it is likely that problems related to small sized and fragmented private forest holdings will persist.

Another group of issues of concern related to private forestry such as flow of information to private forest owners, assurance of transparent and objective management control, and creation of a democratic, competitive environment both for state and private forest sectors, are not less important, but easier to address. The 1994 Forest law did not foresee any special institutions which would be responsible for providing specific information to private forest owners (consulting services) and carry out a function of controlling their forest management activities. The Government of the Republic of Lithuania forced the state forest enterprises to initiate establishment of informational services, professional consultations on reforestation, forest maintenance, protection, and use issues, and creation of control infrastructure for the activities of private forest owners, in forest enterprises, where professional foresters are employed. However the state forest enterprises were not provided with financial resources for these activities. Besides, private forest owners were suspicious about the quality of services, since they felt they were being controlled by a significantly stronger competitor in the timber market. This situation finally will be normalised only after clauses of the new draft of the Forest Law, which indicate that forest enterprises will be responsible only for activities of state company will come into force. Control functions related to forest condition, use, reforestation, and protection in all types of forest ownership, will be carried out by State Environmental Protection Agency and its regional units, which are funded directly from the state budget. The agency and its regional offices will be responsible for issuing harvesting licences both for state and private forest management bodies and will control the quality of forest inventory and management planning activities, and consult private forest owners on forest use, reforestation, maintenance, and protection issues.

Timber trade and processing

One of the main problem areas was directly related to timber processing and trade. Several respondents indicated that the underdeveloped timber processing industry is responsible for not creating additional employment, and losing tax generated income which could be collected with value-added timber processing. Some state forestry sector respondents indicated that while dealing with the "timber processing industry" "inequity prevails, when rights of representatives of timber processing industry are greater than those of foresters." An example provided was the delayed payment for delivered timber. The enforcement of timely payments for sold wood is not sufficient -

“there are no means to make buyers to pay on time” – the timber market is small, and therefore, wood sellers are dependent on timber buyers.

While the problems relating to timber trade and the timber industry are significant their importance and possible solutions may be debated. Due to the unfavourable trade environment for Lithuanian timber producers both in European and Lithuanian timber markets, timber buyers are currently controlling the situation. The majority of locally produced sawn timber (roughly 90%) is sold in local markets. The sawmill and furniture industries, despite unfavourable trade conditions, are gradually being modernised and conglomerated. However, due to intense competition, the majority of timber producers are forced to agree to delayed payments proposed by timber buyers and much lower, as compared to several years ago, timber prices. Payment terms are mutually agreed upon both by buyer and seller in the contract. If one of the sides to the contract do not hold to the agreement, the sanctions concerning failure to implement the contract are enforced under Civil code in court.

Another, commonly mentioned group of problems is utilisation of small-scale timber. This problem requires an intervention on the state level, while attracting foreign investors, possibly for pulp and paper plant construction. The draft for the above project was completed during the period of 2000-2001 with support from the Government of Japan and participation by Japanese experts, Swedish and local consultants, researchers, forestry planners, forest and environmental governmental decision-makers, representatives of local municipalities, and NGO’s. Three potential sites for the plant were selected and an analysis of potential requirement for raw material inputs for production (500 thousand tons per year) completed. Possible economic, social, environmental changes and effects were considered and a range of requirements for infrastructure discussed. Utilisation of small-scale timber for bio-energy production is another way to solve the problem. This issue is addressed in Lithuanian-Swedish co-operation project on “Development of timber utilisation for bio-energy production in Lithuania” in 2000. It is expected that results of the project will contribute to successful solution of the issue.

Forest ecology

Several participants of the survey pointed out that forest protection against pests in state forests is not sufficient, due to two main reasons – lack of financial resources and lack of alternative protection methods (e.g., monocultures are still being established, and no new protection methods are proposed). The opinion was expressed that the forest protection problem exists mainly because there is no mechanism for allocating financial resources. Funds should be centrally accumulated and designated particularly for forest protection against pests, diseases, forest fires, and other natural calamities. It has been noticed by private forest owners, that state forestry employees unwillingly fight forest fires and pest invasions in the forest areas under private ownership. On the other hand, the staff of state forest enterprises pointed out the lack of state financial support to properly carry out the above activities.

The lack of funding from the state may not be the main cause for insufficient forest protection from pests and disease. The real cause may rather be a lack of co-

operation and flow of information between state foresters and common society (as discussed in the following section). A misleading impression about insufficient forest protection might have been formed during the period of 1994-96, during the invasion of bark beetle to a large part of Europe, and Lithuania. The scale of this invasion overwhelmed all measures of forest protection and more than half of mature spruce forests had to be cleared. In general, forest enterprises and directorates of national parks are directly responsible for forest protection against fires, diseases and insect outbreaks in state forests. State support is provided only in the cases of larger outbreaks, when financial resources allocated for this purpose in budgets of state forest management bodies are not sufficient.

A major problem related to forest ecology issues is the responsibility for protection of private forests against forest fires and insect and disease outbreaks. Logically, this responsibility should be primarily up to the private forest owners. However, in cases, when individuals live 50-100 km away from their forests, it is natural that continuous forest maintenance by the forest owners will not take place. Therefore, part of the sanitary protection and all of the protection against fires, were carried out by forest enterprises and directorates of national parks, as charged by legal procedures and individual orders. In case of devastating disease or insect outbreaks, the support is provided by the state equally to all types of forest ownership. However, the legal basis concerning a common system for protection of forests against fires, disease and insect outbreaks was created only this year while adopting new Forest Law and will come into force on 1 July 2001. General Forest Enterprise under the Ministry of Environment is charged with the responsibility to organise a common state-wide system for protection of forests against fires and disease and insect outbreaks. This system will be implemented through activities of forest enterprises and directorates of national parks. Since the state is bearing responsibility for protection of private forests, the option of introducing forest or forest land tax, which at least partially would compensate expenses of the state, must be considered.

The problem, as indicated by respondents, concerning insufficient support for afforestation of abandoned and marginal agricultural lands, remains open. State budget are still not capable of supporting this initiative due to the large expense per hectare of forest establishment. However, this problem starting from next year, will be addressed with a help of financial resources from European Union – SAPARD program. The largest share of SAPARD resources designated to the “Forestry measure” will be available for afforestation activities in abandoned or marginal agricultural land.

Forest ecology issues related to conservation of biological diversity in forests are more problematic when dealing with Lithuanian foresters of older generations. The main cause, most probably, is that even in the recent past snags, laying deadwood, and old trees, if left in the final cutting site, were treated as a sign of poor forest management. Foresters who followed such practicies were discouraged and disrespected by their colleagues. However, principles of forest management, as a response to development of forest research and awareness with deeper consideration of biological diversity, recently started changing. E.g., currently the legal acts regimenting forest use in Lithuania, indicate that in the areas of final cutting, roughly, ten old trees, snags or uprooted trees should be left per hectare. It is

quite natural, that the more conservative foresters may reject introduction of such new ideas.

Human resources

A common concern is the “lack of openness of the foresters’ society” and that “people employed in the system are of especially conservative thinking and hardly accept any new ideas.” There is a perception of resistance by traditional foresters to new, perhaps unproven, forest management techniques and the professionals are limited to thinking about “growing wood, without paying sufficient attention to other functions provided by forests.” Changes in countries with economies in transition were (and still are) very rapid and sometimes of a drastic character, therefore raising negative reaction of a large part of society. Probably similar psychological factors in explain the resistance of some foresters to new methods of forest management. With time, experience, and co-operation between interest groups new strategies for forest management will undoubtedly evolve.

Forest planning process closed to the public wass identified as a concern. The problem was also identified by a forest management certification company, which was carrying out FSC certification of some state forests. Cooperation and communication among foresters and representatives of the timber processing industry was indicated as not sufficient, as well as public relations and relations with other forest sector stakeholders. Some of the respondents to the survey see the lack of direct contacts between timber production and forest science. It was noticed that scientists and science are “far away from reality,” and too few innovations are being introduced into forestry practices. As a solution, the state committed to prepare and coordinate with the certification company the program on public information, consulting with the public concerning forest management and public participation in forestry decision-making both on national and local levels. This program in Lithuania should be ready and started to be implemented in the fall of 2001. However, the actual results – everyday public participation in forestry decision-making – will become visible only after a few years. Public education and participation will increase as government employees invest the resources and time into outreach programs.

CONCLUSIONS

We have outlined the most recent attempts to solve the above problems and to improve the current situation in forest resource management and timber trade. Political instability (i.e. fluctuations in legislation and bureaucratic responsibility) and the fact that the policy process is not always attended by citizens and NGOs are two fundamental problems in the Lithuanian forest sector. Instead of concentrating on ecological aspects of forest management and striving for balance among ecological, economic and social functions provided by forests, key actors in forest sector are mainly concerned with political decisions related to national level forest administration. However, for a nation in transition, it may be reasonable that only after stable and secure forestry decision-making environment is created, will it be possible to address the specifics of economic, social, and ecological issues. Indeed, most of the political and financial effort appears to be concentrated policy formation stage with relatively fewer resources invested in implementation. However, it is

inevitable that as Lithuania addresses the primary political issues in the forest sector and decides on most appropriate model for state forest management, favourable solutions to many problems will be created.

Forest policy formation and national forest program processes are iterative and continuous. Lithuania appears to be embracing a more open and transparent forest policy making process. The issues and challenges addressed in this paper are a matter of time and provide an illustration of a transition government addressing its future environmental and economic well-being.

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NEW ASPECTS OF FOREST LEGISLATION IN ROMANIA

ION MACHEDON AND GHEORGHE PARNUTA

Over the period October 1999 and the beginning of June 2001, the legislative framework of the Romanian forestry has been strengthened by new normative acts of a special importance for the present and future of this sector.

We are talking about 15 new laws, ordinances and government decisions. Ten of these important documents will be included in this presentation.

1. TITLES ON LANDS, OWNERSHIP AND OTHER INTERESTS IN LAND

Law 1/January 2000 on the restoration of the ownership on agricultural and forest lands

By its content, this law has the purpose to establish *the maximum surfaces of agricultural and forest lands that can be returned to their former owners or their legal inheritors, natural or legal persons, the procedure and documents needed for this restitution, as well as conditions for compensations given to former owners*.

Maximum surfaces of forest lands that can be returned:

- 10 hectares for individuals;
- 30 hectares for religious and teaching institutions;
- up to their former sizes for lands that belonged to administrative-territorial units (communes, cities, towns);

The law stipulates that the forest lands will be returned on their former location.

But Article 24 includes the situations and categories of forest lands that are exceptions related to the restitution on the former location; 7 categories of exceptions have been identified as it follows:

- lands returned to their former owners, based on Law 18/1991 (Law on land area), not modified;
- lands with forest constructions, buildings or roads, or where such constructions are being built at the present, etc.
- lands with long term experimental forest cultures;
- forest seed orchards of special importance, mother-plantations for cuttings, stands for seeds from valuable species;
- scientific reserves, forests-nature monuments;
- forests with protection functions for soils and waters;
- land completely or partially clear-cut after 1st of January 1990.

A very important stipulation included in the law (Article 35) states and restricts the restitution of forest lands to the rightly owners only after the establishment and

functioning of territorial management structures for private forests and of the units controlling the compliance with the “forestry rules and regulations”;

The chapter “Final Dispositions” regulates the compensations given to the owners who, due to reasons clearly stated in the law, cannot receive the lands, neither on their former locations nor in any other area;

At present, there are being completed the necessary steps for modifying and completing the Law 1/2000, in order to eliminate some ambiguities and incomplete stipulations which might raise serious difficulties in the implementation of the law.

2. INTERVENTIONS AND RESTRICTIONS ON THE PROPERTY

Emergency Government Ordinance 226/2000, on the legal circulation of lands with forestry uses.

It is an organic law, derived from the *Law on the legal regime on lands*, enforced in 1999, that states, among others, the fact that the legal regime on forest lands is regulated by a special law.

The main aspects that the Emergency Ordinance regulates are the following;

- Alienation, by selling, of lands within the forest area, private property; the procedure mentions, expressly, the pre-emption right of the state before any other possible buyer;
- Exchange of lands in the private forest area among natural persons or among legal persons, or among natural and legal persons.
- Buying, by the state, of degraded lands, unsuitable for agricultural uses, for afforestation, by the National Forest Administration.

The Ordinance did not have as purpose the regulation of the legal circulation of state public forest lands, which is included in the Forest Code – Law 26/1996.

At the present moment, the Ordinance has been approved by the two Chambers of the Parliament, and is waiting for the promulgation.

3. REALIZATION, TRANSLATION OF POLITICAL IDEAS INTO ACTION

Government Decision 1046/November 2000, approving the Rules and regulations on the set up and functioning of the control on the implementation of the forestry rules and regulations at central and local levels.

This normative act is derived from the Government Ordinance no. 96.1998 on the forestry rules and regulations and the management of the national forest territory.

The main regulation issue is represented by the set up of state structures, at central and territorial levels, for the control of the forests management, no matter of their owners, as well as by the functioning of these structures. At central level, there is a Directorate for Forestry Rules, Regulations and Inspection, and in the territory, 16 inspectorates, subordinated to this Directorate.

It states the attributions of the central and local authorities for the control on the compliance with the forestry rules and regulations.

It must be noticed that, during the implementation of Law on the restitution of forest lands, the territorial inspectorates play a special part in the entire process for the validation of the requests and, especially, in the actual restitution and in the issuing of titles on lands for the new forest owners.

Also, an important part in the tasks of the territorial inspectorates is represented by the relationships between state structures and the forest owners (especially natural persons), relationships that refer to two distinct components:

- Education and information of owners on the obligations stipulated by the law concerning the management of their forests, according to the requirements of the forestry rules and regulations and the control of the way these obligations are complied with.
- Support to the forest owners, by granting some subsidies from the state budget, for performing some operations (drawing up of forest management plans, forest protection, prevention and extinction of fires, etc.).

Decision of the Romanian Parliament no. 39/December 2000 for granting the Government with the trust.

With this normative act, the Romanian Parliament has entrusted the Government, validating its composition after the general elections from November 2000 and approved the Government Program of the new Cabinet.

In the frame of the Government Program, a distinct chapter is entitled *"Forestry Development"*, where the following objectives are included:

- preservation of forest area integrity, as a tool for environment protection;
- sustainable forest conservation and protection, despite the ownership;
- continuation of the reform on the land management, by accelerating the pace of the restitution of forests to their former owners (min. 30% in 2001);
- expansion of the area with forests and other vegetation forms, with 100,000 ha over the period 2001-2004;
- assuring the forest health by implementing complex measures for biological and integrated pest control;
- intensification of the forestry transition towards a market economy.

Government Decision 12/ January 2001 on the organisation and functioning of the Ministry of Agriculture, Food and Forests, modified and completed by the D.G. 440/ May 2001.

Issued as a consequence of the reorganisation of the Government after the general elections in November 2000, *this normative act brings together, for the first time after 1990, under the same central public authority, the forestry with the agriculture* .

Among other important aspects included in these normative acts, we *emphasise the harmonisation, in respect to the administrative organisation of agriculture and forestry, with the institutional structures existing in most of the countries members of the European Union.*

According to the last changes to the Decision, in May this year, *the forestry structures* within the new Ministry have the following composition:

In the headquarters of the Ministry:

- A Secretary of State for Forests;
- A Directorate for Forest Strategies, Policies and Legislation;
- A Directorate for Forestry Rules, Regulations and Inspection.

In the territory, as units subordinated to the Ministry:

- 16 territorial inspectorates for forestry and hunting rules and regulations.

National Forest Administration, as the manager of the state forests, subordinated to the Ministry of Agriculture, Food and Forests, which has in the country:

- 36 forestry branches;
- a Forest Research and Management Institute (ICAS).

Government Decision 173/ 2001 on the reorganisation of the National Forest Administration.

The main changes as compared to the previous Decision (D.G. 982/1998) involve the territorial structures of NFA.

Therefore, the number of territorial forestry branches has increased from 25 to 36.

The Forest Research and Management Institute is added to these forestry branches as a distinct unit of NFA, working in the field of forestry research and planning.

Decision of the Government 295/ 2001, approving the annual allowable cut for 2001.

It is a manifestation of the Romanian state policy in forestry, after 1990 to limit the annual allowable cut in accordance with the forest possibility, which is of *17 million cubic meters in 2001.*

As compared to the previous years, the present Decision gives a special attention to the *construction of forest roads* for the accessibilisation of the forest area, in order to be able to make available in the future years about 2 million cubic meters of wood which might be harvested but which is now in inaccessible areas.

4. LAWS ON NATURE CONSERVATION AND ENVIRONMENT PROTECTION, IMPACT OF ENVIRONMENT LEGISLATION RELATED TO FOREST MANAGEMENT AND CONSERVATION

Emergency Government Ordinance 236/2000 on the regime of natural protected areas, conservation of natural habitats, of wild flora and fauna.

Elaboration of a normative act, as a special law, which derives from the stipulations of the *Law on environment protection 137/1995*.

The categories of protected natural areas are as follows:

- categories established at the national level: scientific reserves, national parks, nature monuments, natural reserves and parks;

- categories established by international regulations: natural sites of the universal natural patrimony, wet areas of national importance; biosphere reserves, special areas for conservation.

A special section refers to *"establishment of the regime for protected natural area"*, that generally refers to the:

- priority to establish the regime of protected natural area as compared to other interests (Article 6);
- establishing the protection regime, no matter of the land destination and of the owner (Article 7);
- the authorities that have the right to have initiatives in establishing the regime of protected natural area (Article 8).

The Ordinance also regulates *the system to manage the national network of protected natural areas* (section 3), mentioning the institutions co-ordinating the management of this network, that is *the central public authority for environment protection, the Romanian Academy and the National Committee "MAN-BIOSPHERE".*

The Law also *states the institutional structures* that assure the management of the protected natural areas (Article 18).

The Ordinance has a special chapter for disregarding the regulations on the establishment and management of the protected natural areas, namely *"sanctions".*

Although it represents an important step towards a better management and protection of the natural areas in Romania*, the Emergency Government Ordinance 236/2000 has a series of weak points that are related mainly to the impact on the forest sector:* Therefore:

- the initiator did not took into account the fact that most of the protected natural areas (national parks, natural reserves, etc.) *are located in the national forest area managed, at present, by the National Forest Administration, by its territorial branches, with a forestry staff;*
- in this context in which the forests are not subordinated to the same central authority as environment protection, it is obvious that the central public authority for forestry should have attributions in this field;
- considering the establishment of the National Network of Protected Areas as a positive step, *we think that the authorities and the experts involved in forest management should not miss from the process of setting up the administrative authorities for protected natural areas;*
- the introduction in the law of the possibility to forbid or limit the harvesting of certain resources of flora and wild fauna, ignores the present regulations on the establishment of the forest possibility and on the evaluation of the game stock.

Law 3/ February 2001 ratifying the Kyoto Protocol to the United Nations Framework Convention on Climate Changes.

Romania as a country signatory of the Framework Convention and of the Kyoto Protocol *is the first European country that ratified, by a law, this Protocol.*

By ratifying the Protocol, Romania engaged itself effectively in the reduction with 8% of the emission of gases with greenhouse effect on its territory, over the period 2008-2012, compared to the reference year, 1989.

Taking into account the estimated economic restoration in Romania in the future years, it is very important to establish, at national level a monitoring system which to permanently observe the level of the emissions with toxic gases and which to lead to practical measures to assure their maintenance below the 92% of the reference value.

Within the complex of measures for the implementation of the regulations and commitments of the Kyoto Protocol, *a special part is played by the ones related to forest conservation and development,* which act as true sinks storing the carbon in the biomass accumulated also in the soil.

5. OTHER RELEVANT regulations CONCERNING FOREST LAW

Emergency Government Ordinance 59/2000 on the Statute of the forestry staff.

This normative act derived from the fundamental forestry law/the Forestry Code (Law no. 26/1996) regulates a problem very important for the sustainable forest management in Romania.

We are talking, first of all about the legalisation of the rights and obligations of the forestry staff managing the forest area, despite the ownership.

Also, it established the professional categories of the forestry staff, which is an objective criterion for promotion and for getting employed in some positions in the forestry administration, as well as the ways to employ the staff according to these professional categories.

A very important chapter is related to the protection of the forestry staff while performing their job duties, on one hand, with serious penalties for the ones assaulting the forestry staff, and on the other hand, it establishes the compensations, in money or other goods, to the assaulted forestry staff or, in case of decease, to their families.

Finally, in order to strengthen the professional discipline of the forestry staff, the law contains a special chapter “Disciplinary measures, sanctions”. In this context, it is very important to introduce the institution “Disciplinary Council”, both at central level and in the territory, formed of famous experts, whose moral and professional authority is recommended among the forestry staff.

At present, this Ordinance has been approved with insignificant changes, by the Romanian Parliament, waiting to be promulgated by the President.

RECHTLICHE REGELUNG UND ORGANISATION IN DER SERBISCHEN FORSTWIRTSCHAFT

DRAGAN NONIC

1. INTERNATIONALE RESOLUTIONEN UND TRANSITIONSPROZESS

In internationalen Resolutionen wurden in den letzten zehn Jahren Forderungen nach verstärktem Umweltschutz, nachhaltiger Forstwirtschaft und multifunktionaler Wald-nutzung zum Ausdruck gebracht. Diese Resolutionen als rechtlich verbindliche Instrumente der nachhaltigen Entwicklung wurden von fast allen Transitionsländern unterzeichnet. Dies entspricht ihrem neuen politischen Klima, das die Übernahme von internationalen Verpflichtungen und anderer Ergebnisse des internationalen Dialogs über Wälder unterstützt.

Die Anfänge des Transitionsprozesses und die politischen und wirtschaftlichen Veränderungen in den Transitionsländern überschnitten sich zeitlich mit der neuen Orientierung der internationalen Wald- und Umweltschutzpolitik. In allen Transitions-ländern war es notwendig, die Waldgesetze den gesellschaftlichen, rechtlichen und wirtschaftlichen Veränderungen anzupassen. Umfangreiche Gesetzesänderungen waren erforderlich, um die Rolle des Staates als Verwaltungs- und Kontrollorgan und den Schutz der Biodiversität in der Forstwirtschaft neu zu definieren. Dazu war nötig, die Prinzipien einer nachhaltigen Forstbewirtschaftung im Prozess der Restruk-turierung und bei der Erarbeitung neuer Gesetze zu beachten.

Im Unterschied zu den meisten europäischen Transitionsländern, befand sich Jugoslawien in den letzten zehn Jahren unter dem Einfluss politischer Geschehnisse (Zerfall Jugoslawiens) und seit 1992 unter dem Einfluss der wirtschaftlichen Sanktionen der UNO. Während dieser Zeit war das Land von den meisten inter-nationalen Prozessen und Institutionen ausgeschlossen. Erst nach dem neuesten demokratischen Wechsel versucht Jugoslawien, stabile institutionelle und rechtliche Rahmenbedingungen aufzubauen und die internationale Zusammenarbeit wieder aufzunehmen,

2. DIE FORSTWIRTSCHAFT SERBIENS

Die Bundesrepublik Jugoslawien besteht aus zwei Bundesstaaten: der Republik Serbien und der Republik Montenegro. Die gesamte Fläche der Republik Serbien beträgt 8.836.100 ha. Serbien gliedert sich die drei Gebiete Wojwodina, Zentral-serbien und Kosowo.

Die *Waldfläche* der Republik Serbien beträgt 2.312.867 ha. Die geographische Ver-teilung der Waldflächen ist jedoch ziemlich ungleichmässig. Ganze 77% der serbischen Wälder liegen in Zentralserbien, 18,6% in Kosowo und Methohien und nur 4,4% in der Wojwodina. Von der Gesamtfläche Serbiens ist 26,3% mit Wald bedeckt. In der Wojwodina sind nur gerade 7% der Fläche Wald, während es in Zentral-serbien 32% und in Kosowo und Methohien 40% sind.

Die Aufteilung der Waldfläche Serbiens nach *Waldarten* zeigt, dass der Hauptanteil (rund 60%) den reinen Laubwäldern zuzurechnen ist. Davon sind 28% Buchen,

25% Eichen und 6% andere Laubbäume. Der Anteil reiner Nadelwälder beträgt rund 5%; davon sind 2,7% Schwarzkiefern, 1,5% Fichten und 0,2% Kiefern. Die gemischten Wälder bedecken rund 35% der gesamten Waldfläche, wobei der Anteil der gemischten Laubwälder 30% beträgt.

Der gesamte *Holzvorrat* der Republik Serbien beträgt etwa 235.000.000 m^3, was einem durchschnittlichen Vorrat von 107 m^3 je ha entspricht. Der durchschnittliche Zuwachs je ha und Jahr beträgt 2,6 m^3, Der Gesamtzuwachs der serbischen Wälder beläuft sich somit auf etwa 6.180.000 m^3 pro Jahr.

Die *Eigentumsstrukturen* in der Serbischen Forstwirtschaft veränderten sich im Laufe der Zeit in Abhängigkeit der Gesellschafts- und Wirtschaftsordnung. Im Moment dominieren zwei Eigentumsformen: das staatliche und das private Eigentum. Die wichtigsten Eigenschaften der Staatswälder sind, dass sie in grossen Komplexen zusammengefasst sind, dass sie eine relativ günstige Struktur vorweisen und dass das Management und die Bewirtschaftung auf einem relativ hohen Niveau ist. Private Wälder sind zum überwiegenden Teil in einem schlechteren Zustand und mit geringen Ertragsmöglichkeiten. Dementsprechend können sie nur unwesentlich zur Auslastungung der Verarbeitungskapazitäten beitragen.

In dem 1979 erschienenen Verzeichnisses des Waldbestandes wurde die Eigentumsstruktur in der Serbischen Forstwirtschaft folgendermassen ausgewiesen: die staatlichen Wälder nahmen 49,4% und die privaten 50,6% der Gesamtfläche ein. Die Staatswälder hatten den grössten Anteil in der Wojwodina (95,5%), im Kosowo war der Anteil mit 62,1% etwas niedrigeren, während er in Zentralserbien, wo die privaten Wälder mit 56,3% überwiegen, am niedrigsten war.

Inzwischen sind bestimmte Veränderungen bei der Waldbesitzstruktur aufgetreten, so dass sich nach den neuesten Angaben (1996) 56,2% der gesamten Fläche im staatlichen und gesellschaftlichen Eigentum und 43,8% im privaten Eigentum befindet. Diese Daten (Tabelle 1) zeigen eine gegenläufige Entwicklung im Vergleich mit anderen Ländern Mittel- und Osteuropas, wo in der Folge von Privatisierungen und Restitutionen der Anteil des Privateigentums zunimmt.

Tabelle 1: Die Eigentumsstruktur der Waldbestände Serbiens

Eigentümer	Fläche		Volumen		Zuwachs	
	ha	*%*	*m^3*	*%*	*m^3*	*%*
ÖU „SRBIJAŠUME“	1.372.180	51,7	135.658.027	52,8	3.967.893	55,2
ÖU Nationalparks	75.159	3,2	13.468.305	5,3	370.999	5,2
ÖU „Borjak“ V. Banja	8.447	0,3	1.789.000	0,7	41.335	0,6
Wasser- und Landwirtschaftl. Organisationen	23.415	1,3	3.058.678	1,2	80.272	1,1
Forstwissenschaftliche Fakultät	5.843	0,2	1.116.391	4,3	26.888	0,4
Insgesamt (staatliche und gesellschaftliche Wälder)	1.485.044	56,2	155.090.401	60,3	4.487.842	62,5
Private Wälder	1.169.533	43,8	102.206.449	39,7	2.697.126	37,5
Σ	2.654.572	100	257.296.850	100	7.184.968.	100

QUELLE: (1996)

3. FORSTORGANISATION UND FORSTGESETZGEBUNG

Der organisierte Forstwirtschaftsdienst in Serbien entstand in der zweiten Hälfte des XIX. Jahrhunderts und erhielt seine grösse Bedeutung mit der Verabschiedung des *Waldgesetzes* im *Jahr 1891*. Damals wurden auch die ersten regionalen Forstverwaltungsorgane und Forstämter gebildet, die in verschiedenen Formen fast ein Jahrhundert lang existierten. Die Forstdirektionen entstanden in den zwanziger Jahren des XX. Jahrhunderts, als auch das Forst- und Bergbauministerium sowie die Generaldirektion gegründet wurde. In Serbien besteht also eine lange Tradition der Organisationsformen innerhalb der Forstverwaltung.

Im Bereich der Forstverwaltungs- und Bewirtschaftungsorganisation in Serbien kam es mit der Verabschiedung des *Waldgesetzes* im Jahr 1991 (Gesetzblatt der Republik Serbien, No. 46, 31. 07. 1991) zu wesentlichen Veränderungen.

Das oberste administrative Organ der Forstwirtschaft ist das *Ministerium für Land-, Forst- und Wasserwirtschaft*, bzw. seine Abteilung für Forst- und Jagdwirtschaft.

Im Waldgesetz wurden 27 Waldgebiete gebildet und die Wälder dieser Gebiete wurden von bisherigem Gesellschafts- in Staatseigentum überführt. Diese Wälder waren von 54 öffentlichen Unternehmungen bewirtschaftet worden, deren Vermögen, Rechte und Pflichten, sowie deren Beschäftigte durch das öffentlichen Unternehmen für Waldbewirtschaftung „Srbijašume“ übernommen wurden. Nach diesem Gesetz wurden 90% Staatswälder in dem öffentlichen Unternehmen „Srbijašume“ vereinigt.

Die staatlichen Wälder ausserhalb des öffentlichen Unternehmens „Srbijašume“ befinden sich innerhalb von Naturschutzgebieten (5 davon in *Nationalparks*: Djerdap, Kopaonik, Tara, Fruška Gora und Šarplanina). Sie werden von anderen öffentlichen Unternehmen bewirtschaftet und vom *Umweltministerium* verwaltet.

Die öffentlichen Unternehmen sind gesetzlich verpflichtet, fachliche und technische Tätigkeiten der Waldbewirtschaftung von Privatwäldern durchzuführen, wofür früher die Staatsdienste zuständig waren.

Die *Waldinspektoren* sind nach Art. 78 des Waldgesetzes als öffentliche Staatsorgane direkt dem Ministerium unterstellt. Die Inspektoren erfüllen ihre Arbeit selbständig und sind verpflichtet, die Kontrolle der Gesetzanwendung unabhängig von der Eigentumsform durchzuführen. Nach räumlicher Organisation sind alle Inspektoren in der Forst- und Jagdwirtschaft in 29 administrative Gebiete eingeteilt.

Nach dem gültigen Waldgesetz der Republik Serbien müssen „... *Wälder als Gemeinschaftsgut so gepflegt, erneuert und genutzt werden, dass ihr Wert und ihre Funktion erhalten und erhöht wird, und ihr Fortbestehen und die ständige Erhöhung des Zuwachses und des Ertrags gesichert ist*“ (Art. 2).

Es wurden Waldgebiete gebildet „*zum Zwecke der rationellen Durchführung der Massnahmen der Bewirtschaftung des Waldbodens und anderen Waldpotentials auf einem bestimmten Territorium*“ (Art. 5). Waldgebiete stellen die grössten Einheiten der Waldunterteilung dar und werden in der Regel nach den geographischen und natürlichen Bedingungen gebildet. Sie umfassen sowohl staatliche als auch private Wälder (Art. 21), womit die Bedeutung, der Bedarf und die Verpflichtung der Durchführung aller Tätigkeiten der Waldbewirtschaftung unabhängig von der Eigentumsform sichergestellt sind.

Staatliche Wälder werden aufgrund allgemeiner Grundlagen und spezieller Waldgrundlagen bewirtschaftet. Diese Grundlagen werden für eine Periode von zehn Jahren geschaffen. Allgemeine Grundlagen werden für ein ganzes Waldgebiet geschaffen und bestimmen Grundrichtung und Ziele der Waldbewirtschaftung, Massnahmen für die Verbesserung, Erhaltung und Stärkung der allgemeinen Waldnutzung und für den Waldschutz. Spezielle Waldgrundlagen, die für jeweils eine Bewirtschaftungseinheit erstellt werden enthalten eine Analyse der bisherigen Waldbewirtschaftung, eine Darstellung des Waldbestandes, die Ziele der Waldbewirtschaftung und den Umfang der durchzuführenden Arbeit. Die Ausarbeitung der Grundlagen wird von spezialisierten Institutionen durchgeführt. Namentlich vom Institut für Forstwirtschaft und von der forstwissenschaflichen Fakultät.

Privatwald wird aufgrund eines allgemeinen jährlichen Bewirtschaftungs-Programms verwaltet (Art 24).

Nach dem Waldgesetz (Art. 10) ist das öffentliche Unternehmen „Srbijašume“ für folgende Tätigkeiten zuständig: Pflege, Schutz, Bewahrung und Nutzung der Wälder, Jagd, Aufzucht und Nutzung des Wildes, Projektierung, Bau und Instandhaltung von Waldstrassen, Ausarbeitung von Programmen, Projekten und Grundlagen der Waldbewirtschaftung, Durchführung von Facharbeiten in Wäldern, Verbesserung der allgemein nützlichen Funktionen der Wälder, Gross- und Einzelhandel usw.

Die dreistufige Organisationsstruktur: des öffentlichen Unternehmens „Srbijašume“:

Niveau I Generaldirektion

Niveau II Unternehmensteile (33):
- Forstunternehmen (27);
- Jagd-Forstunternehmen;
- Institut für Forstwirtschaft;
- Planungs- und Projektbüro in der Forstwirtschaft;
- „Srbijašume-Jagd“;
- „Srbijašume-Handel“;
- Schutzwerk und Arbeitsschutz „Srbijašume“;

Niveau III Arbeitseinheiten (136):
- Forstämter (107);
- Jagdämter (4);
- Arbeitseinheiten (25).

Auf der dritten Stufe des Organisationssystems des „Srbijašume“ stehen die Arbeitseinheiten: Forstämter, Mechanisations-Arbeitseinheiten, Arbeitseinheiten des Bauwesens und andere Arbeiteinheiten. Dieses Niveau kann als Mikroorganisation des öffentlichen Unternehmens bezeichnet werden. Zweifellos muss ihm die grösste Bedeutung unter den Arbeitseinheiten der Forstämtern gegeben werden. Aufgrund des Reviersystems der Bewirtschaftung bilden die Forstämter, Grundarbeits-, Planungs- und Organisationseinheiten der Waldbewirtschaftung die Grundeinheiten.

Die von den serbischen Forstunternehmen bewirtschafteten Flächen sind unterschiedlich gross. In Tabelle 2 sind die Forstunternehmen mit Namen, Geschäftssitz, Gesamtfläche und Waldgebiet dargestellt.

Tabelle 2: Forstunternehmen und Waldgebiete in Serbien

№	Forstunternehmen			Waldgebiet
	Name	Sitz	Gesamtfläche ha	
1	Vranje	Vranje	76026	Juznomoravsko
2	Šuma	Leskovac	39553	Jablanicko
3	Pirot	Pirot	40393	Nišavsko
4	Niš	Niš	58716	Moravsko
5	Toplica	Kuršumlija	65828	Toplicko
6	Timocke šume	Boljevac	79929	Timocko
7	Severni Kucaj	Kucevo	62224	Severnokucajsko
8	Juzni Kucaj	Despotovac	46755	Juznokucajsko
9	Stolovi	Kraljevo	48655	Donjeibarsko
10	Šumarstvo	Raška	36143	Gornjeibarsko
11	Kragujevac	Kragujevac	28627	Šumadijsko
12	Golija	Ivanjica	83268	Golijsko
13	Uzice	Uzice	35696	Tarsko-zlatiborsko
14	Rasina	Kruševac	61342	Rasinsko
15	Prijepolje	Prijepolje	63133	Limsko
16	Boranja	Loznica	39655	Podrinjsko-kolubarsko
17	Beograd	Beograd	16067	Posavsko-podunavsko
18	S. Mitrovica	S. Mitrovica	40828	Sremsko
19	Banat	Pancevo	51320	Banatsko
20	Sombor	Sombor	23827	Severnobacko
21	Novi Sad	Novi Sad	13759	Juznobacko
22	Gnjilane	Gnjilane	38433	Pomoravsko
23	Štrpce	Štrpce	39003	Nerodimsko-lepenicko
24	Prizren	Prizren	48099	Šarsko-podrimsko
25	Pec	Pec	73685	Prokletijsko-bistricko
26	Leposavic	Leposavic	69993	Ibarsko
27	Priština	Priština	56995	Kosovsko
Ingesamt "SRBIJAŠUME"			1.337.952	

Quelle: Interne Dokumentation öffentliches Unternehmen “Srbijašume

4. ANALYSE DES RECHTLICHEN, INSTITUTIONELLEN UND WIRTSCHAFTLICHEN RAHMENS DER FORSTWIRTSCHAFT

Das Waldgesetz aus dem Jahr 1991 mit den Ergänzungen und Änderungen aus dem Jahr 1997 bildet einen klaren Rechtsrahmen für die Forstwirtschaft der Republik Serbien und sichert grundsätzlich die Nachhaltigkeit der Waldbewirtschaftung (Kontinuität der Erträge und Einnahmen) und des Waldschutzes.

Das Waldgesetz beinhaltet verschiedene Bestimmungen, die eine nachhaltige Waldbewirtschaftung ermöglichen sollen. Es ist jedoch zu betonen, dass einige wichtige Gesetzesbestimmungen zur nachhaltigen Waldbewirtschaftung nicht implementiert wurden und dass der Grad der Umsetzungung der Schlussbestimmungen in diesem Bereich sehr bescheiden ist. Ein zusätzliches Problem für die Forstwirtschaft stellen andere, mit dem Waldgesetz nicht gänzlich vereinbare Gesetze dar.

In der Republik Serbien gibt es einen festen und zentralisierten institutionellen Rahmen im Bereich der Verwaltung und Bewirtschaftung der Staatswälder. Die Staatswälder wurden durch das Waldgesetz dem öffentlichen Unternehmen für die Waldbewirtschaftung „JP Srbijašume" (JPS) anvertraut. Die Kapazität des Rahmens des JPS ist stark und ermöglicht grundsätzlich eine dauernde Waldbewirtschaftung. Die Kapazität der staatlichen Forstverwaltung und die Kontrolle ist hingegen sehr gering und andere staatliche forstwirtschaftliche Institutionen existieren nicht.

Wesentliche Elemente des institutionellen Rahmens der Forstwirtschaft sind die einheitliche Organisation der Verwaltung und Bewirtschaftung der staatlichen Wälder durch JPS, die Personalstärke des JPS, die Existenz eines besonderen Amts für Planung in der Forstwirtschaft innerhalb des JPS, eine einheitliche Bewirtschaftung der staatlichen Wälder durch die gleichzeitige Zuständigkeit des JPS für die Planung und die operative Durchführung, die fachliche Unterstützung in Privatwäldern durch JPS, klare Elemente der Forstwirtschaftspolitik in den staatlichen Wäldern (innerhalb der JPS), die Einhaltung von ideellen Grundprinzipien der Forstwirtschafts-politik durch die "Assoziation der Ingenieure und Techniker in der Forstwirtschaft", aber auch die Trennung der Funktion der Waldinspektion von der Funktion der Verwaltung und Bewirtschaftung, wodurch im Prinzip eine unabhängige Aufsicht möglich ist.

Elemente des institutionellen Rahmens, die die Waldbewirtschaftung erschweren sind folgende: die Unterordnung der Funktionen des Forstdienstes unter die produktionswirtschaftlichen Funktionen (innerhalb JPS), der starke politische Einfluss auf die Tätigkeiten des JPS, geringe professionelle Fähigkeiten und Kapazitäten der privaten Unternehmen; sehr niedrige Kapazitäten und fehlende personelle und materielle Kontrollen bei der staatlichen Forstverwaltung (die Inspektion arbeitet in der Praxis nicht unabhängig von den Kreisen oder von JPS).

Fehlende institutionelle Elemente, die wichtige Voraussetzungen für eine dauernde Bewirtschaftung wären, sind die Folgenden: spezielle Abteilungen für die Privatwälder innerhalb des JPS oder ein unabhängiger Forstdienst innerhalb MPŠV, ein staatlicher Rahmen (z.B. in der Form eines Waldfonds) zur Finanzierung der Waldreproduktion, andere staatliche Waldinstitutionen (ein nationales Forstinstitut), das Fehlen von modern ausgebildetem wissenschaftlichen Personal, von der herrschenden Politik unabhängige NGO's.

Die Entwicklung und Stärkung der institutionellen (Gesetzgebung und Kontrolle) und wirtschaftlichen Rahmen der Forstwirtschaft ist eine der grundlegenden globalen und europäischen Pflichten. Sie ist auch Grund für die strategische Unterstützung der EU für Länder in der Vormitgliedschafts-Periode. In diesem Kontext ist besonders die Pflicht zur Besorgung von entsprechend ausgebildetem Personal für alle Wälder inklusive die private Wälder zu betonen.

Die Erfüllung der internationalen Verpflichtungen und Initiativen auf diesem Gebiet erfordert neue gesetzliche Lösungen bzw. eine Harmonisierung der Gesetzgebung und des institutionell-rechtlichen Systems der Forstwirtschaft. Dabei ist es wichtig, fachliche Tätigkeiten von öffentlichem Interesse zu definieren, die fachlichen Fähigkeiten und die Unabhängigkeit des Forstdienstes, der Verwaltung und der Kontrolle zu stärken, die Organisation der Forstwirtschaft anzupassen, Privatisierungen einzuleiten und Markt-Preis-Mechanismen einzuführen.

Besonders wichtig ist die Sicherung eines entsprechenden wirtschaftlichen Rahmens zur Finanzierung der Forstwirtschaft, insbesondere des Forstdienstes (wenn diese getrennt wären), der Inspektion und der biologisch-technischen Waldreproduktion. Künftig wird es notwendig sein, eine öffentliche Finanzierung der Forstwirtschaft einzuführen, insbesondere bezüglich des Schutzes und der Sanierung der Wälder, aber auch zur Finanzierung der Waldreproduktion in gefährdeten Gebieten, beispielsweise in Wäldern in Nationalparks und anderen geschützten Gebieten, sowie in Wäldern, die Schutzzwecke erfüllen.

5. SCHLUSSFOLGERUNGEN

Zieht man alle spezifischen Umstände in der Republik Serbien in Betracht, insbesondere die Situation des Landes in der Folge des Krieges, der UNO-Sanktionen und ihrer Folgen, die sozialen und wirtschaftlichen Probleme, den politischen Druck auf verschiedenen Niveaus, die Nichtexistenz eines Rechtsstaates und eines funktionierenden Marktes, so kann man schliessen, dass sich die Forstwirtschaft, trotz ihrer Probleme (Probleme in der Holzverarbeitungsindustrie, Mangel an Verarbeitungskapazitäten für weniger wertvolles Holz, allgemeine Transitionsprobleme) im Vergleich mit den anderen Wirtschaftszweigen auf einem Niveau befindet, das eine gute Grundlage für die weitere Entwicklung darstellt.

Internationale Verpflichtungen und Initiativen auf dem Gebiet des Schutzes der Wälder, der dauernden Waldbewirtschaftung und der Erhaltung der biologischen Waldverschiedenheit sind für die Politik der Republik Serbien wichtig. Sie sind in die folgenden thematischen Gruppen zusammenzufassen:

1. Schaffung einer nationalen Forstwirtschaftspolitik und eines nationalen Forstwirtschaftsprogramms für die nachhaltige Bewirtschaftung und die Unterstützung der Waldökosysteme. Ebenso die Schaffung nationaler Programme auf dem Gebiet der Erhaltung der biologischen Verschiedenheit,
2. Entwicklung und Stärkung des institutionellen und wirtschaftlichen Rahmens der Forstwirtschaft,
3. Entwicklung und Stärkung der Partizipierung aller an der Forstwirtschaft Interssierten bei der Erarbeitung neuer Politiken, ebenso wie bei der Planung und Bewirtschaftung),

4. Integration der Erhaltung und Konservierung der biologischen Verschiedenheit in die Forstwirtschaft, bzw. in die Planung und Bewirtschaftung,
5. Umfassende Förderung der nachhaltigen und vielseitigen Nutzung der Wälder bei gleichzeitiger Erhaltung der biologischen Vielfalt,
6. Durchführung eines Monitorrings und Abschätzung des Standes der biologischen Vielfalt auf nationaler Ebene,
7. Erhaltung und Konservierung der biologischen Vielfalt,
8. Einrichtung und Erweiterung von Waldschutzgebieten und Waldreservaten in repräsentativen und einmaligen Wälder,
9. Waldschutz sowie Inventur und Monitorring des Gesundheitszustandes der Wälder auf nationaler Ebene,
10. Sanierung und Erneuerung der gekränkten Ökosysteme,
11. Förderung der sozio-ökonomischen und ländlichen Aspekte des Forstwesens durch dauerhafte Bewirtschaftung der Wälder,
12. Förderung der Holzverarbeitung und der Nutzung des Holzes und anderer Waldprodukte,
13. Entwicklung von Forschung, Lehre und Ausbildung mit dem Ziel der dauerhaften Bewirtschaftung der Wälder und der Erhaltung der biologischen Vielfalt.

Die grundlegenden Rahmenbedingungen, die auf den globalen Initiativen, aber auch auf Initiativen auf europäischer und EU Ebene (Mitglieder und Beitrittskandidaten) beruhen. bedeuten zahlreiche Verpflichtungen für die Forstwirte.

Obwohl Serbien, wegen objektiven Gründen, die internationalen Verträge noch nicht unterzeichnet hat, wird, in bezug auf eine zukünftige europäische Integrationen, eine Eingliederung der internationalen Verpflichtungen und Initiativen in zeitgemässere Gesetze und Politiken notwendig sein. Eine Harmonisierung des Waldgesetzes und der Waldpolitik mit den „Weltstandards“ ist eine moralische und ethische Verpflichtung, die im Fall Serbiens auf einer traditionsreichen Forstwirtschaft und auf einem Reichtum an europaweit einmaligen, wertvollen Ökosystemen beruht.

In bezug auf die grundlegenden Forderungen der Forstpolitikreform in der Republik Serbien wird es notwendig sein, dass im Rahmen einer besonderen Studie zum Forstgesetz, zur institutionellen Entwicklung und zur Politik der Entwicklung der Republik Serbien folgendes gemacht wird:

1. Eine detaillierte Analyse der Nachhaltigkeit der Forstwirtschaft, insbesondere der institutionellen Rahmenbedingungen (Organisation und Funktionsweise).
2. Aufzeigen der Inhalte der internationalen Verpflichtungen und Initiativen, aber auch von modernen, weltweit gültigen Privatisierungs- und Organisationsmodellen bei den serbischen Forstwirten.
3. Eine detaillierte Analyse der Waldgesetze mit Vorschlägen und Empfehlungen für Änderungen. Dabei soll Rücksicht auf andere, für die Forstwirtschaft und den Wald wichtige Gesetze, sowie auf internationale Verpflichtungen genommen werden (Harmonisierung).

4. Erarbeiten von Empfehlungen für eine Implementierung der internationalen Verpflichtungen und Initiativen auf dem Gebiet der dauerhaften Bewirtschaftung in die nationale Forstpolitik.
5. Unterstützung des Privatisationsprozesses beim öffentlichen Unternehmen “Srbijašume”, inklusive einer Abschätzung der Validität der aktuellen Privatisierungstrategie.
6. Vorschläge für mögliche Reorganisationmodelle für die staatlichen Forstunternehmen und für deren weitere institutionelle Entwicklung.

Wegen der Vielschichtigkeit des Gutachtens wird eine umfassende Untersuchung notwendig sein. Diese Untersuchung wird auf einer vertieften Analyse des Waldzustandes, der Bewirtschaftung des Waldes, der Organisation und der Funktionsweise der Forstwirtschaft, des Forstrechts und des allgemeines Rechts basieren. Ausserdem werden die aktuellen internationalen Lösungen, Kriterien, Kennziffern, sowie die Erfahrungen anderen Länder genutzt und den spezifischen Bedingungen der Republik Serbien angepasst werden müssen.

Die Vorschlägen und Empfehlungen des Gutachtens, insbesondere derjenigen des institutionellen Teils, werden schrittweise umgesetzt werden müssen.

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ON THE LAWS CONCERNING SUSTAINABLE MANAGEMENT OF FOREST ECOSYSTEMS OF THE PROTECTED AREAS OF SERBIA

SNEZANA PROKIC AND PETAR TODOROVIC

INTRODUCTION

The issue of sustainable management in general is one of the most important and most widely discussed issues of development and conservation. Different management models are being applied, all under the provision of sustainable management. A very important question is, whether all these management models correspond in fact to the sustainability principle.

Over the past decade or so, forest conservation has become one of the highest priority issues throughout the world. At the United Nations Conference on Environment and Development (UNCED) in Rio de Janeiro in 1992, a set of non-binding “Forest Principles” emerged. It was followed by the 1993 Ministerial Conference on the Protection of Forests in Europe and a wide range of other international forest initiatives, altogether dealing with the issues of tropical and temperate as well as boreal forests. Despite the opposing interests, opinion seems to be prevailing world-wide that there is no more debate on whether to conserve forest ecosystems to promote economic, albeit sustainable, development, but rather how to do it [1].

The legal zoning system of the national parks of Serbia permits certain limited and controlled types of utilisation in the II and III degree of protection. The idea in the case of forest ecosystems might be interpreted in terms of achieving World Wide Fund for Nature (WWF) forest policy objectives. Unfortunately the practical application of law is still lacking. Had this been the case, the intended management system might have served as an example to be widely introduced in the forests of Serbia, with the eventual objective of their certification by FSC and complying their management with ISO 14000 standards.

In addition to the management of the forests in the national parks, the Environmental Law of the Republic of Serbia also takes care for the general protection of forests, and Article 32 of the Law can be a very good introductory example: “In order to protect and develop forest ecosystems, forests are managed so as to secure their protection, preservation and renewal and to secure and maintain the genetic fund; another priority is the improvement of the structure and achievement of the priority functions of forests.“

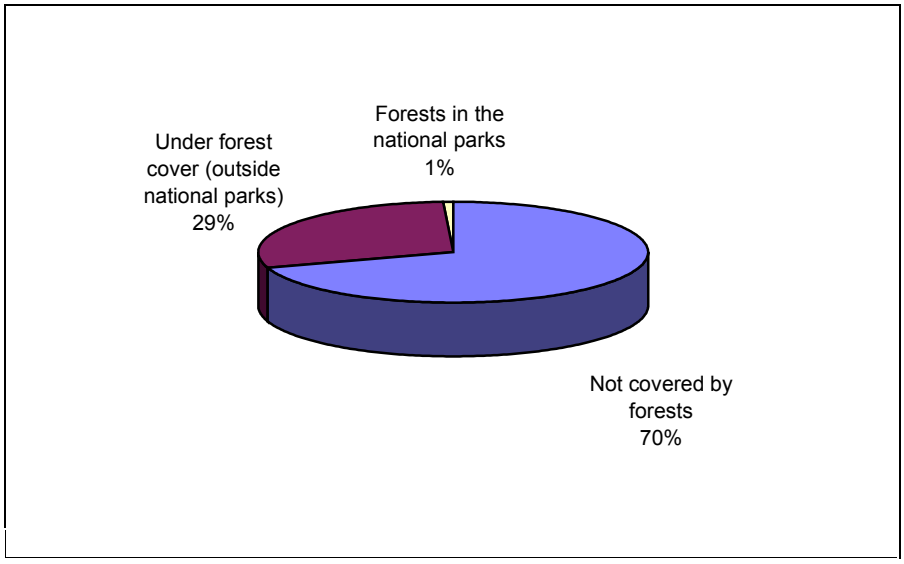
However, in a more general Law on Forests of the Republic of Serbia of 1991, there is but one article (Article 45) in which an attempt was made to adjust protection of rare and endangered species of forest trees, as well as the collection of the forest fruits, seeds and plants with the Act on Protection of the Natural Rarities and the Writ, concerning the control and circulation of wild plant and animal species.

In this paper it is shown that an urgent and inevitable adjustment is needed and as well as a coordination of the Forests Act with the Environment Protection and National Parks Acts. This is essential particularly bearing in mind the necessity of adjustment to the EU legislation, in particular with Natura 2000 (the Directive on Birds and Directive on Habitats).

LEGISLATION RELATING TO THE NATIONAL PARKS OF SERBIA

By the National Parks Act of the Republic of Serbia (1993) five National Parks were declared, Tara, Fruska Gora, Djerdap, Kopaonik and Sar Planina national parks. The management of these parks is the duty of the public enterprises of the respective names, founded by the same Act. The surface areas of the national parks are mostly covered by forest ecosystems. It is for this reason that the measures for preservation and promotion of the protected natural values in these parks in the management sense are directed primarily at the preservation of the biodiversity. Out of the total surface area of the protected natural values in the Republic of Serbia, amounting to 266583.36 ha, the total surface area of the national parks amounts to 158853 ha, out of which 75159 ha are covered by forests. Within the national parks, an estimated volume of 13468305 m^3 is contained of the total wood mass, with the annual volume increment of 370999 m^3. The management of forests in the national parks of Serbia is being performed in accordance with the protection regimes of the I, II and III degree. Under the I degree of protection, utilisation is prohibited of natural values and all other forms of utilisation of space and activities are excluded but scientific research and controlled education. In the II degree of protection a limited and strictly controlled utilisation is allowed of natural values, while the activities in the area can be performed to the extent facilitating the promotion and presentation of the natural value without harmful consequences to its primary values. In the III degree of protection, a selective and limited utilisation is allowed of natural values, as well as controlled interventions and activities in the area, provided that they are in agreement with the functions of the protected natural value or are related to the inherited traditional forms of performing economic activities and living, including building for tourist purposes.

Fig.1: Percentages of the surface areas of the Republic of Serbia relevant for the forest cover



In Fig.1 the percentages are shown of the total surface area of the Republic of Serbia (8 836 100 ha) covered by forests outside (2 579 413 ha), and within the national parks (75 159 ha). The legislation relevant for management of forests in the national parks of Serbia is contained within the Environment Protection, the National Parks and the Forests Acts.

LEGISLATION RELATING TO THE GENERAL PROTECTION OF FORESTS

An extract from the environmental law of the Republic of Serbia can be used as a very good illustration of the intentions in this legislation. Thus, it is useful to quote Articles 33 and 34 of this Act:

“ As protective forests, meaning forests with a priority function, the following may be determined:

1. forests protecting from land erosion;
2. forest which directly protect sources of water supply, springs, thermomineral and mineral water springs and spas;
3. forests which are located in the upper limits of vegetation in high mountainous areas;
4. forests which protect facilities (water accumulations, railroad lines, roads) and settlements; and
5. forests which compose protective belts in agriculture.

Forests located in the unprotected area between a flood protection embankment and the river have the priority function of a protective forest.”

“ As forests intended for special use, meaning forests with priority function, the following may be determined :

1. forests or parts of forests singled out for production of forest seed;
2. forests appropriate for outings and recreation;
3. forests appropriate for carrying out scientific research, teaching or game animal breeding; and
4. forests of special interest for national defence.

Forests located in areas rich in protected natural resources have the priority function of forests for special use.”

Also, because of its importance both in general terms and in particular concerning the effects upon forest ecosystems, it is useful to quote the legislation dealing with monitoring of the effect of air pollution upon forest ecosystems (in the Writ on Monitoring of Air Quality for the years 2000-2001): “By this Writ the system is established of air quality control, comprising the systematic measurements of immissions, assessment of the effect of the polluted air upon climate, human health and forest ecosystems, for the necessary measures to be taken for purpose of environment and human health protection.

Within the frames of this Writ the influence of air quality is monitored and investigated upon forest ecosystems on the bases of the results of measurements from the meteorological stations’ networks and the investigations of transport and deposition of the pollutant substances and heavy metals.”

However, as already indicated in the introduction, the Law on Forests of 1991 provides for forest protection only to a minor extent. Thus, Article 45 of the afore-mentioned law states:

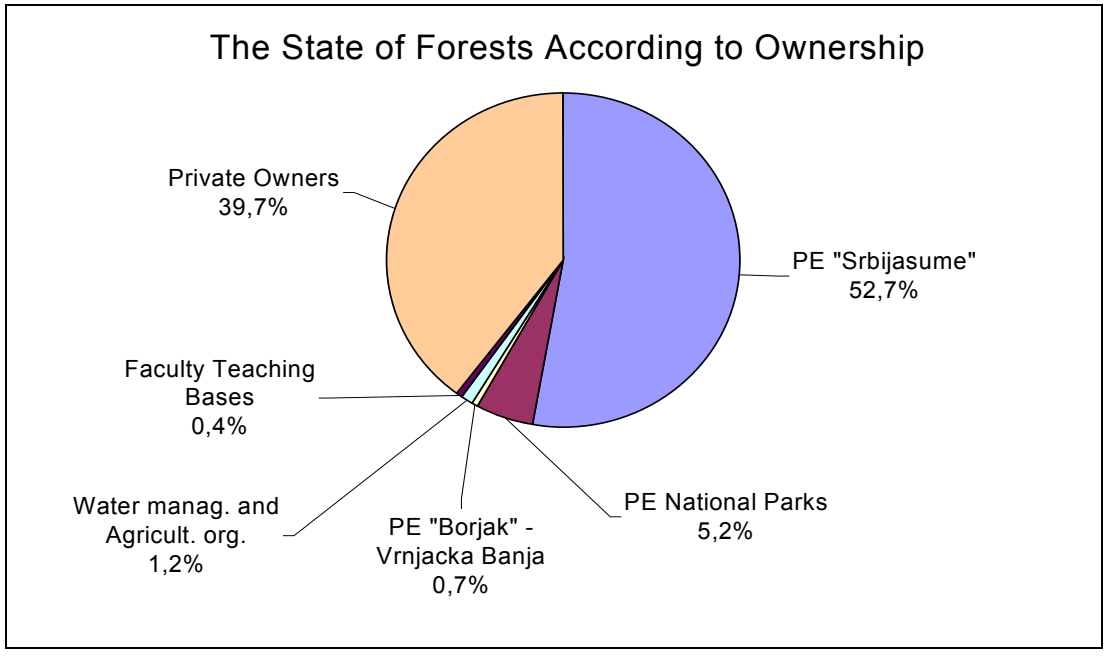
“Cutting is forbidden of the trees of serbian spruce (Picea omorika P.), common yew (Taxus baccata), Constantinople nut (Corylus colurna L.), common elm (Ulmus minor Miller), *dzeverasti javor* (.... maple - Acer .....), European hackberry (Celtis australis L.), of separated and acknowledged seed trees and stands, of trees of rare and endangered species of forest trees, as well as collection of forest fruits and plants protected by special provisions.

Trees of forest tree species from para. 1 of this Article, if they are dry or damaged to such an extent that their drying is imminent or they represent an origin of infection by plant diseases or pests, as well as in the case of performing care measures in plantations and natural forests and in the other cases foreseen by regulations, may be cut with the approval of the Ministry.”

Other protective measures are indicated in Article 65, which however relates only to the protection from fire, other acts of God, plant diseases, pests and other damages, as well as to the measures of caring for the forest plantations.

Despite the general legislation relating to all the forests irrespective the category state of ownership, the situation in privately-owned ones generally is worse than in the state-owned forests. An illustration of the impact of this difference can be obtained from the data on the forest and forest lands surface areas according to the ownership.

Fig.2: A survey of the total forest surface areas according to ownership



Another indication of the state of forests can be shown by the the volume increment per hectare p.a., which is in the range of 2,3 - 4,9 m^3/ha.

The potential value of the increment average of 6m^3/ha p.a. indicates the present rate of utilisation of the productive potential of the stands in the forests of Serbia. Namely, the present stands are utilising 40-50% of the realisable productive potential, by which each year cca 7.000.000 m^3 of wood is lost, while on the negative consequences regarding the other functions of forests (defensive, erosion control, water protective, climate protective, counteremmissive, recreational, aesthetic, scientific research etc.) one can still only guess.

Table 1: The State of Forests and Forest Lands According to Ownership

Owner	Surface Area (ha)	%	Volume (m^3)	Vol. Incr. (m^3/ ha)
State and Community Forests (55,8%)				
PE "Srbijašume"	1372180	93,2	135658027	2,89
PE National Parks	75159	5,8	13468305	4,94
PE "Borjak" - Vrnjacka Banja	8447	0,6	1789000	4,89
Water manag. and agricult. org.	23415	1,3	3058678	3,43
Faculty Teaching Bases	5843	0,4	1116391	4,60
Total	1485044	100	155090401	3,02
Private forests (44,2%)				
Private owners	1169533	100	102206449	2,31
Total	2654572	100	257296850	2,71

Forest funds - Programme of protection and promotion of forests (1996-2000)

PRACTICAL RESULTS

As an indication of the extent to which the legislation has influenced the forest mana-gement in the protected areas, surveys are given of the surface areas of the national parks in which silvicultural and meliorative works were performed (Table 2 and Fig.3).

According to the Forests Law, for each 1000 m^3 of total mass (or rather volume) cut, on a surface area of cca 2 ha silvicultural and meliorative works should have been performed. Therefore it is of interest to get an insight also into the total volumes cut (Table 3 and Fig.4).

Table 2: Silvicultural and Meliorative Works (in ha) in the National Parks for the Period 1996-2000

National park / Year	Tara	Fruska Gora	Djerdap	Kopaonik	Sar Planina
1996	41.05	2468.61	375.4	599.18	279.09
1997	79.36	2081.96	10958.81	2512.75	301.48
1999	3	5479.53	763.57		
2000	112.23	9483.03	2623.71	1309.02	

N.B.: The data are lacking for the year 1998 due to circumstances in FRY in the spring of 1999, due to which the data are also lacking for the National Park Sar Planina in the years 1999 and 2000.

Fig.3: The surface areas (in ha) in which the silvicultural and meliorative works were performed per year and national park

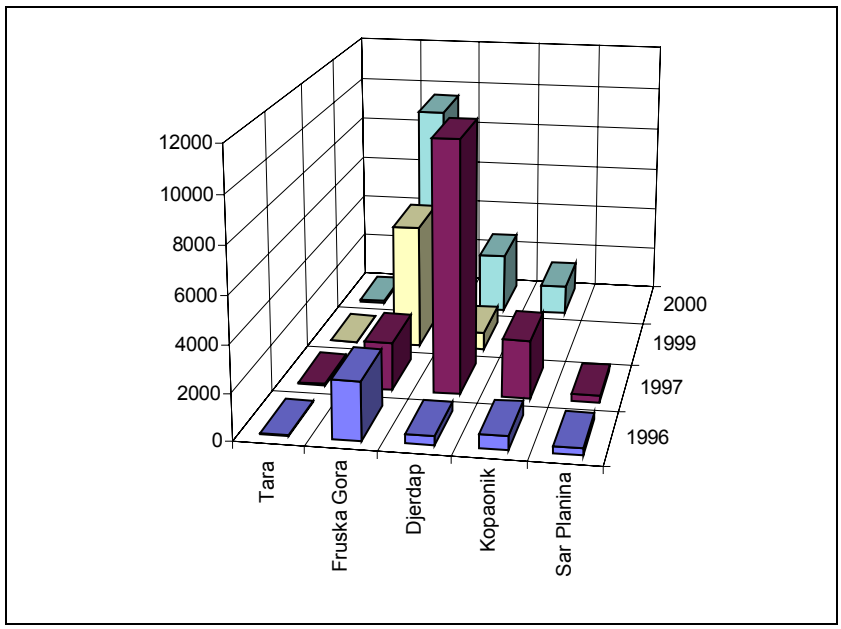
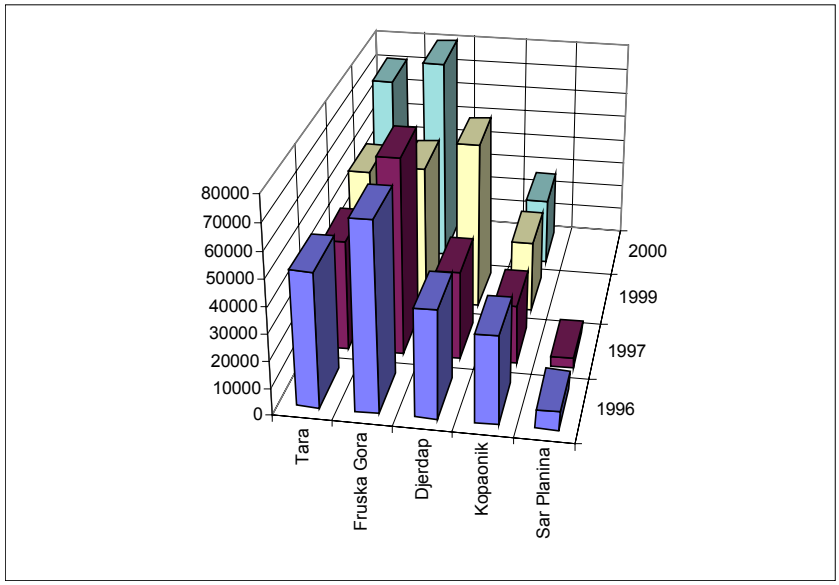


Table 3: Volumes, in m^3 cut in the National Parks for the Period 1996-2000

National park / Year	Tara	Fruska Gora	Djerdap	Kopaonik	Sar Planina
1996	50518	70840	40374	32941	6972
1997	42037	74913	33559	22738	4176
1999	50907	53782	64282	27451	
2000	71059	79750		25914	

Fig.4: The total volumes (in m^3) cut in the national parks per year and the national park in the period 1996 - 2000



The utilisation of the total volumes cut can be seen from the data on the net masses (or rather volumes in m^3) obtained, and presented in Table 4 and Fig.5, as well as from the data on the respective degrees of utilisation, presented in Table 5 and Fig. 6.

Table 4: The Net Masses (Volumes, in m^3) Cut in the National Parks for the Period 1996-2000

National park / Year	Tara	Fruska Gora	Djerdap	Kopaonik	Sar Planina
1996	37432	63756	35108	17150	5041.03
1997	30404	67422	28439.83	15308.95	3286
1999	38529	48404	54482	17700	
2000	55560	71775	77414	17340	

Fig.5: The net volumes (in m^3) cut in the national parks per year and the national park in the period 1996 - 2000

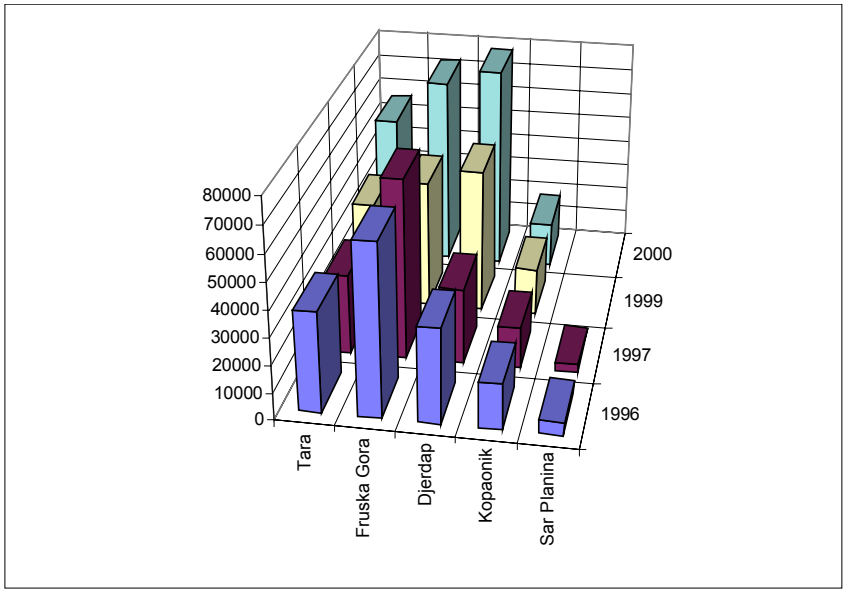
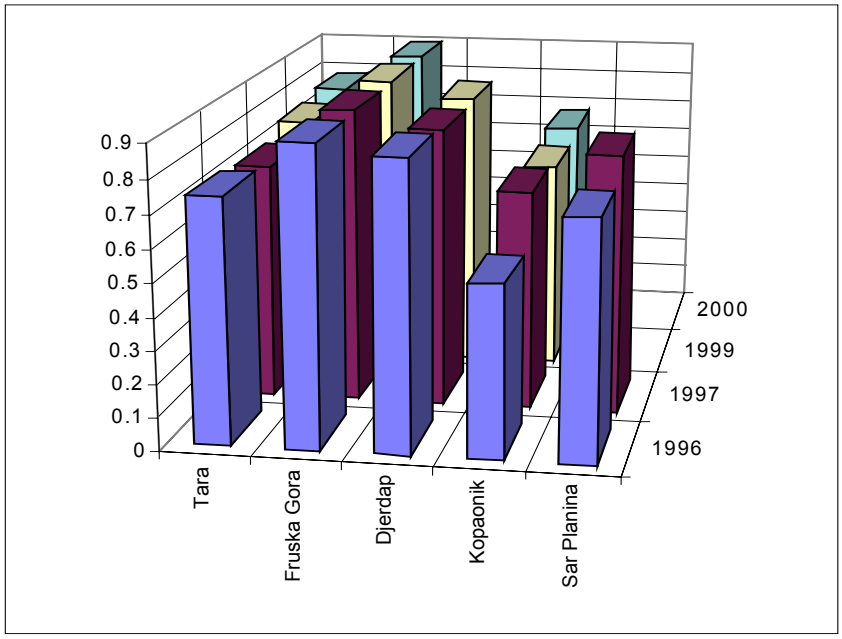


Table 5: The Degree of Utilisation (Net/Total) Volumes Cut in the National Parks for the Period 1996-2000

National park / Year	Tara	Fruska Gora	Djerdap	Kopaonik	Sar Planina
1996	0.74	0.9	0.87	0.52	0.72
1997	0.72	0.9	0.85	0.67	0.79
1999	0.76	0.9	0.85	0.64	
2000	0.78	0.9		0.67	

Fig.6: Degree of utilisation (net/total volumes cut) in the national parks per year and the national park in the period 1996 - 2000



It is important to note that in the total volumes cut all the types of assortments are included (veneer logs, logs for cutting, cellulose and other technical wood, as well as the fuel wood), i.e., it indicates “economic” utilisation rather than sanitary cuts.

By the data shown, it is obvious that treatment in the sense of silvicultural and meliorative works is so far unsatisfactory. The only exception is in the NP Fruska Gora, while the extensive works performed in NP Djerdap in 1997 were due to the pest (Limantria dispar L.) invasion, rather than to the favourable impact of the law.

DISCUSSION

By analytical study monitoring of state in management of the protected values, as well as the analysis of the reports on establishment of the basic function according to the law and fulfilling the objectives and tasks in the area of protection and development of the regions of the national parks, a dominantly unsatisfactory state has been found. Performing planned priority tasks and activities resulting from long-term spatial-plan and programme acts indicate only partial application of the active protection and development measures as the basic function.

The principle of integrated management of the natural resources (water, forests, land, game and fishing, fauna etc.) has not completely evolved with the corresponding mechanisms. Difficulties are particularly present in establishment of mechanisms of adjustment of all the specialised management plans of particular resources with the Protection and Development Plan of a Protected Area. (Setting up of a new law on the environment protection is now in progress, with integrated protection of all the natural resources)

The monitoring of the influence of air pollution upon forest ecosystems in the recent years is not being performed according to the UN/ECE methodology (Gauss - Krueger net 16*16), but using a local network of urban stations. Occasionally on bioindicative points only first level parameters are followed - visual assessments of defoliation and decolouration of trees, while the finance has been lacking over the years already for the soil chemism, diameter increment and air pollution.

The global effects of the present state of forests (anthropogenic factors) represent significant factors of the environmental hazards with serious consequences - mass deforestation, erosion, decrease of the natural soil fertility, disturbed water regime, disappearing of ever increasing number of flora and fauna species and alike. It indicates the necessity of setting up a national strategy for forest protection and promotion of legislation in forestry on principles of sustainable development.

Problems are also present in game fauna management in the national parks for reasons of mutually unadjusted legislation in the areas of hunting, forestry and environment protection. The imperative of preservation of biodiversity requires also the introduction of monitoring of all

Coenobionts of the natural ecosystems, whereas until now the game fauna was treated merely as an industrial resource, with the established management measures for the bred game species.

There are differences in the success in different forms of management of the national parks, since some of the areas now included in the national parks were originally areas of forest management enterprises, with different management principles inherited. Therefore the regulative system of protection and development of the national parks is not implemented on a unified basis.

The information system as a necessary instrument for identification, valorisation and monitoring of the particular natural values and co-operation in management has not been established as yet (anticipated in the Programme of Development of the Unified Information System of the Environment of the Government of the Republic of Serbia)

The training and organisation of experts and other emplyees for performing of given duties on the unified basis, in accordance with the international criteria, have not started.

The financial support for performing the management plans, i.e. the protection and development programmes, is lacking continuously, since the budget funds for this purpose are limited. Although a self-financing mechanism is anticipated, and the system of compensation payments, forest management and other development activities is established, they are not sufficient to finance the protection and promotion activities in agreement with the sustainable development principle. Thereby activities of resource utilisation are dominantly performed, while the priority protection and development functions are being postponed and not implemented.

In agreement with the phenomena generally noted in the countries in transition, the significance and the possibilities of the private initiative by far exceed the amount of funds which could be provided directly from the state budget. The significance of the state regulation is in the very establishment of the corresponding incentives. The analyses indicate that both the private enterprises and the households would tend to manage resources sustainably, under the condition that the access is provided to the corresponding funds, technologies and relevant economic incentives. Their contribution is essential, since the amount of needs to prevent resource degradation is too much of a task for international programmes of assistance in development or non-government donor organisations, whereas the extent of the private sector and the interested households might provide enormous financial, technological and managing capabilities.

The fundamental condition to encourage capital flow into activities important for the sustainable development is to provide the investors with long-term efficient return by such development. The present state is such that destructive exploitation often results in such short-term profits due to inappropriate incentives in the sense of sustainable development, that it is difficult to confirm its necessity by the logic of economy. The World Resources Institute report established already in 1989, that “benefits of many conservation investments - clean air and water, genetic diversity and untouched ecosystems - can not be sold to the consumer”, as well as that “there is both quantitative and qualitative shortage: neither is enough funds channelled into conservation programmes, nor are they spent accordingly.” However, examples of successful investment into long-term conservation programmes might attract even sums much larger than those invested in such programmes, provided that the investors would be persuaded by the corresponding incentives in usefulness of such investments.

CONCLUSIONS

1. The volume of activities performed in the simple and extended reproduction and protection of forests during a year, as determined by the Forests Act, has to be proportional with the volumes of the cuts performed in the preceding year. The proportion has to be adjusted with the existing forest management plans. In the cases studied this requirement has been fully satisfied. However, the general planning of promotion of state of the forest ecosystems in the national parks in accordance with the sustainable development principles requires certain transformations in research and planning of management of forest ecosystems in the protected areas.

2. It is generally recognised that ecosystem management is a holistic process, requiring very diversified inputs. These come from different disciplines, sectors and interests, and represent informations without which no correct collaborative decisions can be made. As a result of this necessity, ecosystem managers (especially in the protected areas) have to promote collaboration of different sectors. Based upon this wide information basis, and also an understanding of the interrelationships that exist between the various components of the ecosystems, either natural or man-made (soil, water,

vegetation - forests, etc., animals; urban, industrial, agricultural, etc.), with a good knowledge of the ecosystem's structure, in ecosystem management the extent can be established to which it can be exploited without risking the loss of the system's functional integrity.

3. The existing methodology both in theory and practice is founded upon the traditional methods of the economic management. The ecosystem approach however as well as the new guidelines on biodiversity preservation require a different, or even higher level of planning. This is at the moment present in the new research project in the form of the methods explored and suggested. At the moment a framework is set for standardisation of the habitat types, the criteria for their valorisation and categorisation, parameters for estimate of the effects of measures of protection and utilisation etc. for purpose of efficient and co-ordinated management planning both in the protected areas and outside them. With this respect for forest ecosystems the most important is the legislation of the European Community, such as the Habitat Directive and the Natura 2000 Project, both leaning on the habitat typology of the international programme CORINE.

4. Therefore it is necessary and inevitable to adjust the existing legislation (in particular the Forests Act) with the Environment Protection and National Parks Acts, as well to adjust the whole legislation in its transformations to the sustainable development concepts and the legislation of the European Community. This would at the same time lead to the conforming of the management in question to the international standards. It is also very interesting to note that the economic estimate of the capital contained in the natural resources as well as the values of the protected areas (as is already being introduced elsewhere) might be very useful in the countries in transition for purpose of promoting these values and their sustainable development.

5. There is a strong interest on part of FR Yugoslavia to develop cooperation with EU in the area of the environmental protection, in particular since an adequate protection of the environment is not possible without the participation of all the countries. At the same time and for the same reason, it is a real interest both of the EU and the countries in transition for FR Yugoslavia to be actively included in the international processes in this area. It is especially clear on the basis of the vast environmental problems in the whole area which originated in the spring of 1999, especially destruction of the large areas of forest ecosystems in the Fruska Gora and Kopaonik national parks, as well as the pollution of the rivers Tisa and Danube. The international cooperation in this area is an obvious imperative.

RECOMMENDATIONS

In accordance with the sustainable development principles as well as the global policy principles in the area of protection and preservation of the biodiversity, the following steps are recommended:

First step:

THE NEED TO HARMONISE THE NATIONAL ENVIRONMENTAL LEGISLATION WITH EUROPEAN COMMUNITY LAW (Including EU PHARE Programe Project - Preparation of Environmental Legislation for Serbia)

Second step:

THE NEED TO HARMONISE THE NATIONAL ENVIRONMENTAL LEGISLATION WITH REGIONAL ACTION PLAN FOR CENTRAL AND EASTERN EUROPE

Third step:

THE NEED TO HARMONISE THE NATIONAL ENVIRONMENTAL LEGISLATION WITH NATIONAL LAWS IN OTHER RELEVANT SECTORS

Fourth step:

THE NEED TO HARMONISE LAW ON FORESTS AND LAW ON HUNTING WITH THE LAW ON THE NATURE PROTECTION

Fifth step:

ESTABLISHMENT OF REGIONAL CO-OPERATION IN MONITORING OF THE INFLUENCE OF AIR POLLUTION UPON FOREST ECOSYSTEMS

Sixth step:

THE SYSTEM OF SUSTAINABLE MANAGEMENT OF FORESTS TO BE ADJUSTED WITH THE ISO 14001 SYSTEM, OBLIGATORY SECURING THE SUPPORT OF NGO'S (EXAMPLE OF FSC)

Seventh step:

FOR PURPOSE OF MORE EFFICIENT CONSERVATION AND SUSTAINABLE USE OF FOREST ECOSYSTEMS IN FR YUGOSLAVIA - TO TAKE THE NECESSARY STEPS FOR JOINING THE WASHINGTON, BONN AND BERNE CONVENTIONS, AS WELL AS THE CONVENTION ON BIODIVERSITY, BY FR YUGOSLAVIA.

Eighth step:

TO PREPARE THE REGIONAL STRATEGY OF SUSTAINABLE DEVELOPMENT OF FORESTRY FOR RIO + 10 CONFERENCE, TO BE HELD NEXT YEAR IN JOHANNESBURG.

In addition to these steps, meeting the IUFRO strategy for 21st century, it is necessary:

In accordance with the sustainable development principles, and for purpose of preservation of biological and landscape diversity of the forest ecosystems, it is necessary to establish a national strategy of the sustainable development of forestry, including the social and economic aspects of the issue through the following development areas, as expressed in the Declaration on Forest Ecosystems of the National Parks (International Scientific Conference on the Forest Ecosystems of the National Parks, Tara National Park, Bajina Basta, Serbia/Yugoslavia, 1996), and the accompanying Resolutions:

1. ON THE NEED FOR INTERNATIONAL COOPERATION AND CO-ORDINATION BETWEEN NATIONAL PARKS IN EUROPE, FOR THE CONSERVATION AND SUSTAINABLE USE OF FOREST ECO-SYSTEMS

   (The integration of the Yugoslav National Parks in the EUROPARC Federation, i.e. the establishment of the Yugoslav Section of EURO-PARC (1996), is one of the significant steps towards this.

   The network of Yugoslav Netional Parks has the main prerequisites to join actively in the programmes of international coooperation and to play an important role in protecting and sustaining biological and landscape diversity of forest ecosystems at the global level, the European level, in the Central European-East European region, Mediterranean, and the Balkan Peninsula.)

2. ON THE NEED TO JOIN THE CONVENTIONS AND ADOPT INTER-NATIONAL DOCUMENTS ON THE CONSERVATION AND SUSTAIN-ABLE USE OF FOREST ECOSYSTEMS IN NATIONAL PARKS
3. ON THE SUSTAINABLE USE OF FOREST ECOSYSTEMS
4. ON THE BIOLOGICAL AND LANDSCAPE DIVERSITY OF FOREST ECOSYSTEMS
5. ON EDUCATION AND INCREASING OF AWARENESS OF ECO-LOGICAL FUNCTIONS AND VALUES OF FOREST ECOSYSTEMS, AND
6. ON THE NEED FOR SCIENTIFIC RESEARCH OF FOREST ECO-SYSTEMS

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FINANCING OF SUSTAINABLE FORESTRY – PROVISIONS IN THE PROPOSAL OF THE SLOVAK REPUBLIC FOREST ACT

RASTISLAV ŠULEK

ABSTRACT

The paper deals with financing sustainable forestry which is anchored in the proposal for the new Forest Act in the Slovak Republic. The objectives and principles of financial support from public resources (mostly state budget) are discussed together with the rules of allocation and control of public resources use. Special attention is given to indemnification of forest owners for the detriment due to lower sales and yields resulting from restrictions on forest asset management caused by environmental (nature) protection legislation.

Key words: forest act, financing of forestry, sustainable forestry, indemnification, subsidies

1. LATEST DEVELOPMENTS CONCERNING FOREST LEGISLATION IN THE SLOVAK REPUBLIC

At the beginning of 2001, the Forestry Section of the Ministry of Agriculture of the Slovak Republic (SR) elaborated and made publicly available the official proposal for a new Forest Act. Development of this document was one of the most important measures for implementation of the strategic intentions of the newly formulated forest policy principles. According to these principles, the proposal and application of a special financial policy in the forestry sector is the key to success in implementing principles of sustainable forest management.

Taking into consideration the present situation in the Slovak forestry sector and with respect to the problems of financing sustainable forestry, the need for a new Forest Act has originated from the following issues:

- Slovak forestry legislation should be harmonised with other related legislation as well as with the forestry legislation of neighbouring countries and also with EU countries,
- Slovak forestry authorities as well as forest owners are demanding the introduction of legal instruments that would provide effective financing of sustainable forestry based on justified requirement for subsidies and other forms of support from public sources,
- There is also a strong need for implementation of legal provisions dealing with compensation of forest owners for restrictions imposed on the utilisation of their forests in the interest of general public welfare (especially in the sphere of nature and landscape conservation).

The approximation of new forest legislation in the SR to EU legislation is considered to be a very important task of forestry authorities. Since the new legal regulation will be a main prop of sustainable forest management in the SR, it is necessary to pay extraordinary attention to its development. According to the *Report on Forestry in the*

Slovak Republic 2000 (Green Report), the "Survey on the EU forest legislation, relevant SR legislation and the tasks connected to its implementation in the SR" was developed and the analysis has implied that the SR forestry sector will not have problems in adapting to the EU legal system as the new Forest Act, which is being prepared, will be in harmony with it.

Adequate financial means are essential for ensuring achievement of forestry objectives. The main sources of finance come from revenues from commercial activities, first of all from timber sales. However, these revenues do not cover the total financial needs for sustainable forest management. The government should provide the necessary financial means to ensure regeneration and expansion of the national forests as well as achievement of their public welfare functions, including elimination of negative impacts on biotic and abiotic factors in forests. Moreover, issues related to forest property detriment have not been settled yet by governmental legal regulation dealing with conditions and ways of reimbursement of detriment due to restrictions on forest property management.

Thus, the main issues of the Forest Act proposal in the sphere of financing of sustainable forestry in the SR that remain to be discussed are:

1. the objectives and principles of financial support to forestry from public sources, and
2. indemnification of the forest owners for the detriment due to securing forest functions beneficial to the public.

The introductory provisions of the Forest Act proposal set the aim of the Act as follows:

- to preserve and improve forests as a part of the country's natural wealth,
- to ensure sustainable management of forests,
- to harmonise the interests of a society with the interests of forest owners, and
- to create and develop legislative and economic conditions of sustainable forest management.

Following these introductory provisions, it is clear that the problem areas mentioned above are among the most important subjects of the proposal of the new Forest Act and they need to be examined more specifically.

2. SUPPORT TO FORESTRY FROM PUBLIC SOURCES

Slovak forestry representatives share the idea that society, understanding the multiple roles of forests and recognising the importance of conservation and sustainable management of forests, should support such management by providing financial framework based on the use of public sources. Furthermore, the reason for financial support of sustainable management is strengthened by the following economic facts *(Les extra, 2001)*:

- during the past years, the costs of providing public welfare forest functions exceeded 1.5 billion SKK (approximately 30 mil. USD) annually,
- average annual lost of increment due to long–term impact of air pollutants reached the value of 0.8 billion SKK (approximately 16 mil. USD).

Hence, the Forest Act proposal sets provisions on the obligations of the state to provide financial means for co–financing of sustainable forest management, with special attention devoted to the forests providing a great share of public–beneficial functions. These provisions are as follows:

1. The state, represented by the Government, is co–responsible for ensuring strategic intentions of forest development. It supports realisation of legislative aims in the sphere of sustainable forest management by providing sufficient financial means in the form of:
   a) subsidies from the state budget,
   b) loans with low interest rates from the government's special funds or state financial institutions.
2. Financial means from the state budget are granted by the Ministry of Agriculture of the SR and can be used for specified activities or special projects and services, namely for:
   a) forest owners with insufficient (low) yields resulting from fulfilment of publicly–beneficial forest functions,
   b) forest owners who ensure provision of ecological and environmental forest functions under the principles of sustainable development and management of forest resources,
   c) ensuring forest protection, especially in the case of extraordinary circumstances and unpredictable damage in forests, including reimbursement of part of insurance costs,
   d) improvement of the tree species composition (especially increasing the share of non–coniferous tree species),
   e) regeneration and tending of forest stands,
   f) realisation of special projects in forest management,
   g) support of associations of non–state forest owners (small private forest owners) and forest extension programs for these owners,
   h) reimbursement of the costs of activities of professional forest managers in forests of private owners with forest holdings not exceeding 50 hectares,
   i) elaboration of forest management plans; among the compulsory parts of such plans are management measures that include economic analysis of costs and revenues of forestry activities (this analysis serves as a tool for implementation of the effective state financial policy in forestry),
   j) forest research of the publicly–beneficial character of forests and for the needs of the administration of forestry.
3. Except for the state budget, the other sources of financial means for support of forestry are:
   a) levies for exemption of forest land from fulfilment of forest functions,
   b) fines imposed on legal entities or private persons who do not observe or who breach provisions of the Forest Act and regulations issued in accordance with this Act,
   c) other sources (grants, donations, interests),
   d) contributions from the EU funds.

4. Support to forestry from public sources is provided under the conditions specified annually by the Ministry of Agriculture of the SR.
5. Use of public financial resources is controlled by the organs of the state administration of forestry. Forest owners who use the public financial resources are obliged to provide these organs with necessary information and to enable them to enter forest lands, objects and facilities. If forest owner obtains support from public resources on the basis of providing improper data or he (she) uses it for other purposes than specified, he (she) is obliged to refund the support.

The Ministry of Agriculture of the SR will specify in a legally binding norm the rules for providing state support from public financial resources to forest owners, legal entities and private persons who implement principles of the state forest policy in the interest of ensuring sustainable development and management of forest resources.

3. RIGHTS OF FOREST OWNERS

All forest lands on the territory of the SR are owned by the state, legal entities and private persons. All kinds of ownership are equal by law. The forest owners have equal rights and duties. In cases when proper management of forests is subjected to a hazard, the organs of state administration of forestry are entitled to decide about the performance of management by other subjects.

Considering economic and financial provisions, according to the Forest Act proposal, each forest owner has a right to ask for following:

- indemnification for the detriment, namely reduction of sales and yields due to restriction on the management of forests or increased cost of management of forests in favour of other forest functions (in favour of public interests); detriment due to ensuring publicly–beneficial forest functions is covered by the state or the subject in favour of whom the functions are ensured (such indemnification is reviewed by organs of state administration of forestry),
- indemnification for the detriment due to permanent or temporary exemption of forest lands or restriction on the use of forest lands,
- indemnification for the detriment due to damage to forest lands and forest stands,
- tax relief, namely exemption from real estate taxes in the case of protection forests and forests severely affected by air pollutants.

Moreover, the non–state forest owners are entitled to ask the state – free of charge – for forestry extension programs. The owners of forests with a small area are entitled to ask for technical and professional co–operation and aid.

The Ministry of Agriculture of the SR will specify in a legally binding norm the procedure of the indemnification of forest owners for the detriment due to ensuring publicly–beneficial forest functions as well as the procedure for evaluation of damages to forest lands and forest stands.

4. CONCLUSION

Forests play an important role in Slovak society. They provide not only timber but also ecological and environmental benefits for the well–being of the nation. However, forestry plays only a small part in the national policy as it makes only a minor

contribution to the total economy and its contributions to the quality of environment and life, although widely recognized, are difficult to quantify.

The key problem of forest policy in the SR is to convert the general appreciation of forests into a willingness of the public and government to give forestry more active support. A first step towards obtaining this support is to have a clear statement of forest policy objectives as well as all necessary pieces of forest legislation. Since the basic objectives and priorities of the SR forest policy were developed in 2000, approval of the new Forest Act, which have been recently prepared and made publicly available, is the next important step towards ensuring the base for support of sustainable development and management of forest resources, including financial support.

However, except for financing of sustainable forest management, there are still some impending problems concerning forest policy and legislation in the economic sphere, such as:

- evaluation of publicly–beneficial (non–production) forest functions *(Kolenka, 2000)*,
- reform of state subsidy policy in forestry *(Šálka, 2000)*,
- improvement of marketing of timber and other forest products *(Klubica, 2001, Klacko, 2001)*,
- introduction of an appropriate forest certification scheme *(Paluš, 2000)*,
- increasing the profitability of forest enterprises *(Holécy, 1999, Hajdúchová, 2001)*.

All of these problems need to be discussed very carefully in the near future so remedial action can be incorporated by SR forestry representatives and finally included in the respective legal provisions.

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FOREST POLICY FROM THE VIEWPOINT OF THE EFFECT OF MULTIFUNCTIONAL POLITICAL GOALS IN THE SLOVAK REPUBLIC

VIERA PETRASOVA

CHARACTERISTICS OF THE FORESTRY SECTOR'S POSITION

The present period in the Slovak Republic is one of continuous amendment of legislation, change of economic tools and organizational (institutional) structure. Changes in the ownership's relations, in the industry have been going on along with the stabilization in the bank sector and privatization of state natural monopolies of industrial enterprises. State forest property, which is being managed by state forest enterprise Lesy, š.p. Banská Bystrica, was pursuant to the Act no. 92/1991 of the Collection on large privatization exempted from privatization. It represents 40% of the area of forests in Slovakia. Forest land tenure according to the kind of forest ownership and forest use is presented in Table 1.

Table 1: Forest lands tenure in the Slovak Republic to 31 Dec 1999

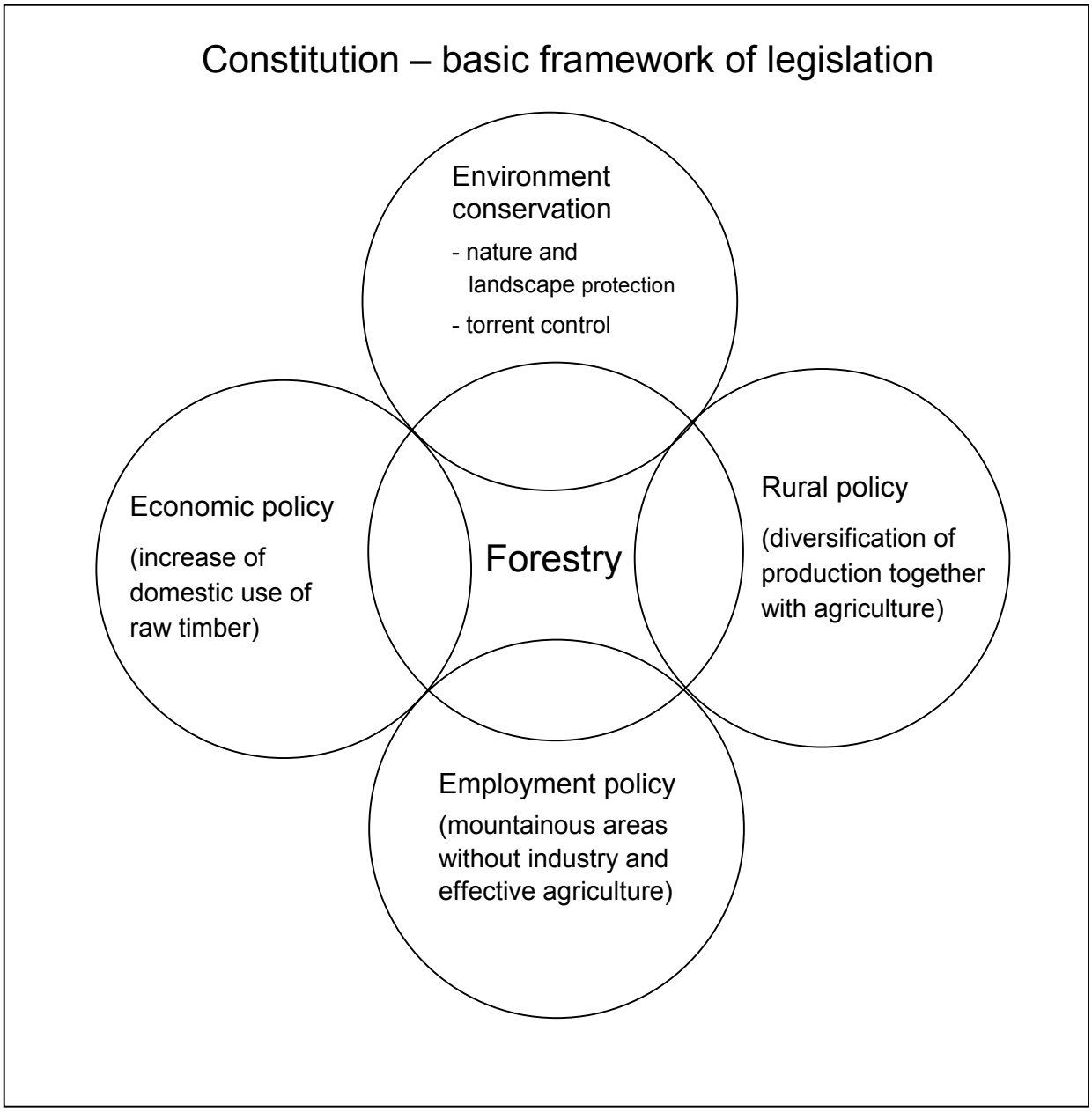
Kind of ownership	Way of management			
	Ownership		Use	
	ha	%	ha	%
State	808 164	42,0	1 195 181	62,1
Private	289 424	15,1	101 795	5,2
Communal	486 961	25,4	404 923	21,1
Church	65 752	3,4	47 368	2,5
Cooperatives	2 183	0,1	4 249	0,3
Municipal	184 843	9,6	168 435	8,8
Unknown	84 843	4,4	-	-
Together	1 921 951	100,0	1 921 951	100,0

Source: Report on Forestry 2000

The organizational structure of forest enterprises has almost stabilized after 10 years of re-privatization. The exception is small forest holdings of private owners. In this case the process of validating ownership's rights is still going on.

The management of the forests in Slovakia is governed by special laws, which were issued in 1977, as well as by some other legal norms on management of forests and the economics of forest enterprises (fig. 1).

Fig. 1: Position of forestry in the legal system of the Slovak Republic



Forestry does not exist as an individual element of state policy. It is influenced by various measures of the state, whereas the effects of these measures can be direct or indirect (table 2).

Table 2: Impact of state measures on forestry

Kind of measure	Direct effect of state policy measure on forestry at present
Legislative:	
- the Constitution and related laws and lower legal norms	/
- harmonization of the legislation with the EU legislation	/
- specialized laws – forest law, law on game management...	/
From legislation other measures are derived:	
Economic: monetary: prices	-
Economic: monetary: credits	/
Economic: monetary: currency	/
Economic: fiscal: taxes	/
Economic: fiscal: state expenses (subsidies)	/
Economic: fiscal: deficit of budget	/
Economic: trade: customs	-
Economic: trade: quotas	-
Economic: trade: phytosanitation measures, etc.,	/
Organizational: - system and competencies of state administration and self-administration	/
- foundation of state organization (research, development, phytosanitation control, etc.)	/
- foundation of specialized organizations which deal with the issues of for example environment conservation, forest extension, etc.	/

The state forest policy in the period of transformation, 1990-2000, can be characterized only by partial amendment of forest laws from 1977 and a formation of new economic tools for forestry, which consider also environmental conservation. These are reflected in tax policy, subsidy policy and employment policy. Some requirements of forestry were not fulfilled successfully, and therefore the process of selecting effective economic tools for environmental conservation will continue.

TAX POLICY

The interrelationships of forestry and the state budget through taxes and subsidies indicate a passive status. Tax obligations of forest enterprises are higher than the subsidies allocated for forestry (table 3).

Table 3: Interrelation of the forestry of SR to the state budget

Indicator	Actual state in million SKK						
	1993	1994	1995	1996	1997	1998	1999
Subsidies for forestry altogether	593	617	546	703	511	698	366
Taxes from forestry subjects:							
▪ Income tax	3	15	29	90	110	-	-
▪ Road tax	28	31	32	33	33	35	33
▪ Real estate tax	73	77	92	90	91	110	90
▪ Value added tax	592	666	812	850	855	930	910
Together	696	798	965	1 063	1 089	1 075	1 034
Balance ±	-103	-181	-419	-360	-578	-377	-668

Source: Report on Forestry

Based on the given analysis we can state that forest enterprises (owners and users) transfer more than 1 billion SKK into the state budget. In addition to their own commercial activities, forest enterprises are obliged, pursuant to the Act no. 61/1977 of the Collection on forests and the wording of later regulations, to engage in forest improvement. They are obliged to protect forest land and forest stands and to use them rationally for fulfilment of forest functions. Forest enterprises transfer annually more than 1 billion SKK into the state budget but support by the state does not reach the level of the transferred money. Therefore, the possibilities of tax relief and transfer relief are being sought to eliminate the unfavourable economic situation of some forest enterprises through state supportive policy.

Value-added tax

The value-added tax accounts for the greatest proportion of taxes in forestry. This tax should play a neutral role for raw timber and should not burden financial management of forest enterprises, as it is only a suspense (current) item for them. The present unfavourable situation in the wood industry causes payments for timber delay or they become irredeemable liabilities, and thus they reduce the resources of forest enterprises. A reduced value-added tax of 10% is not applied for raw timber as it is in the EU countries.

The exception is seed and plants, which have an average rotation of 107 years. Therefore, a zero rate of the value-added tax should be applied in this case. Similar problems represent services of silviculture performed on contract.

Real estate tax

Pursuant to the Act no. 317/1992 on the Collection of the real estate tax and in the wording of later regulations, protective forests and special purpose forests are exempted from this tax, providing timber logging as an economic activity is not performed in these forests. There are exempted from this tax also forest holdings, starting from the year after clearing has arisen to the year of planned beginning of tending felling (first thinning). Then, there are exempted from real estate tax the forest lands of protected territories and protected natural formations, windbreaks,

electric lines, etc. The base for the tax is the price of forest holdings, which is determined according to the Decree no. 465/1991 on the Collection on valuation. 0.25% of this value is real estate tax. Moreover, the different yield possibilities and reflected in the tax base. Also the price of land, determined in accordance with the regulation, considers different natural and production conditions. The real estate tax is the most important one in forestry. Other taxes are not so significant as the forest enterprises mostly reach the border of good yields. Subsidies in forestry are decreasing tendency and they cannot be provided to all subjects. Therefore, to alleviate lack of finances, it is proposed to reduce this tax rate from 0.25% to 0.15% as a general measure to improve the financial situation of forest owners.

Income tax

The regime of the income tax on individuals carrying out forestry activities is governed by the tax act no. 366/1999 on the Collection of laws. Providing the revenues of a tax- payer do not exceed in a calendar year 1.5 million SKK, he/she is entitled to claim for lump expenses reaching 65% of these revenues. Providing the individual claims in this way, the income tax rate is 7%. Providing the individual does not claim this right, he/she can act as follows:

- If the individual is an independent forest manager, he/she can claim lump expenses of the amount of 60%,
- If the individual is the member of a land partnership, or of any other legal form and takes revenues from forestry, he/she can claim lump expenses amounting to 25%.

A newly starting independent forest manager is fully exempted from income tax in the first three years. He must not interrupt forest activities for three years.

At present, forest enterprises are liable to an income tax amounting to 29%. In contrast the previous law subsidies are not exempted from the income tax, which means, that subsidies increase an individual tax base.

This specific of forestry reflects in this law, particularly in § 24, article – tax expenses. A forest enterprise income taxpayer can include into its expenses a reserve for silvicultural operations. The Act no. 366/1999 on the Collection of laws on reserves and adjustments to find out tax base for income tax enables formation of expense (costs) for taxpayers who are obliged to carry out regeneration, protection and tending of young stands. The reserve is used in carrying out silvicultural operations. The formation of the reserve is set in the annual plan of silvicultural operations, which must be confirmed by a professional forest manager.

The Act on income tax no. 366/1999 on the Collection of laws does not enable a reserve to be formed, if the owner was provided a subsidy. The subsidy is included into his revenues exempted from tax.

Road tax

There are exempted from road tax vehicles used exclusively in agricultural and forest production, which use only communications on the managed territory. Therefore, this tax has no significant effect on management of forest enterprises.

POLICY OF EMPLOYMENT SUPPORT

The policy for labour markets is a system of support and assistance to citizens in entering jobs. Forestry can participate in this policy by means of:

- Active support to employment by creating new jobs, maintaining existing jobs, creating the conditions for professional mobility and territorial mobility,
- Passive form through alleviating negative consequences of structural changes, employment-related organizational and rationalization measures.

The supportive system for forestry can use finances from active policy of labour market, whose tools are as follows:

- Support for creating new jobs,
- Support for drafting projects for employment revival.

The most frequent in forestry is provision of jobs on contract to carry out publicly-beneficial works. Among these works there are the ones directly connected with forest production (establishment of forests and natural areas, afforestation, construction of fencing, setting up the equipment for forest excursions, etc. as well as agro-tourism related activities (maintenance of tourism trails and cycling trails, establishment of the centre for fans of nature and leisure center, elaboration of transportation and recreational possibilities and proposals for new tourism trails), which are closely connected with game management (damage prevention caused by game, establishment of game reserves). Such jobs are created on the basis of the agreement between the district labour office and a respective employer. The district labour office provides the employer an allowance to cover the wage of an employee, to cover health insurance, sickness insurance and pension insurance, an allowance for insurance for the case of unemployment being paid fully by the employer and to cover the costs of accommodation, travel costs and meals at the amount as agreed.

SUBSIDY POLICY IN THE FORESTRY SECTOR

We should understand the subsidy policy in forestry as an intentional re-allocation of finances in the country in a way to accomplish social goals set by respective legislative and economic measures of the state. These finances can be re-allocated as direct or indirect subsidies or state orders.

Direct subsidies for the forestry sector

State Fund for Forest Improvement

In the forestry sector direct subsidies are provided on the basis of special act no. 131/1991 on the Collection on the State Fund for Forest Improvement. Simultaneously with the foundation of the Fund the direct relation of state forest enterprises and the state budget was cancelled. Thus the procedure in allocation subsidies for state and non-state sectors was made uniform. The finances from this Fund are used for forest land resources in the Slovak Republic regardless organizational structure and ownership's relations. There is no legal right to claim of the finances from this Fund. Forest management is supported only selectively, especially in silviculture, including forest protection, and it concerns mainly actions of long-term development and works of national importance (Tab. 4). In 1990, the subsidies for forestry formed almost 28% of the costs of forest production, while the current proportion does not reach even 5%.

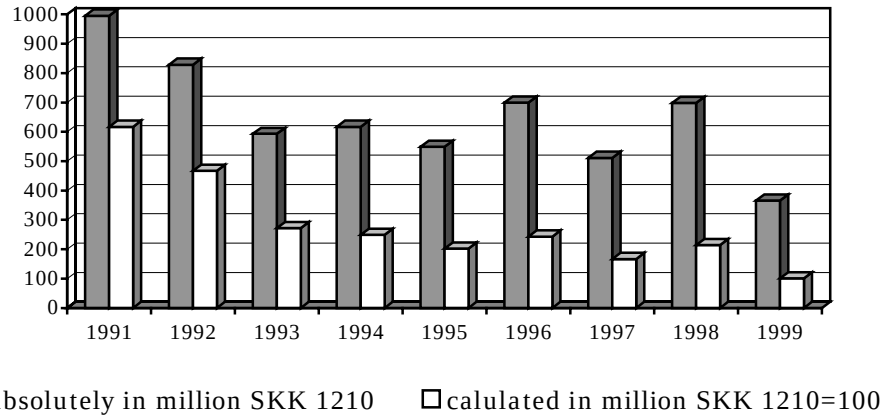
Table 4: Purpose of the allocation of subsidies from the State Fund for Forest Improvement in the years 1992-1999 in million SKK.

Object of subsidies	1992	1993	1994	1995	1996	1997	1998	1999
Silviculture	59,5	24,7	52,7	337,3	396,4	307,7	361,0	271,0
Works of national importance	164,0	5,9	38,3	40,1	83,8	21,6	48,9	18,0
Programmes	0,5	14,6	82,6	37,4	90,2	38,0	102,3	44,0
Forest management plans	0,0	7,0	3,7	3,1	6,6	9,0	13,0	26,0
Research	2,4	5,0	8,1	9,1	7,0	5,7	6,6	7,0
Altogether	226,4	57,2	185,4	427,0	584,0	382,0	531,8	366,0

The economic situation of state forest enterprises has been favourable in the time of the Fund establishment, particularly thanks to liberalization of raw timber prices and subsidies. In 1990 the subsidies amounted to 1.007 billion Kčs, and in 1991 the total value of subsidies reached 789 million Kčs, of that 545 million SKK were non-investment finances. Since 1991 the volume of subsidies has been decreasing (Ďurkovič, 2000).

Besides the shortcomings of the current subsidy policy regarding the State Fund for Forest Improvement, which necessitates that this system is reevaluated, it is also necessary to realize that due to inflation, current subsidies do not reach 10% of the volume of 1990. The effect of inflation is illustrated in Figure 2.

Fig. 2: Inflation impact on subsidies in forestry



State Fund for the Environment

The State Fund for the Environment (the Act no. 128/1991 of the Coll.) concentrates financial means, re-allocates and secures their effective use in the interest of conservation and formation of the environment.

By the year 2000 there were provided for the forestry sector subsidies for the actions of smaller regional importance such as construction of forest parks, trails in forests, professional actions aimed at ecology, etc. At present, pursuant to the Act no. 69/1998 on the Collection of laws, finances provided from the Fund can be

irrecoverable financing (subsidies, subventions) and recoverable financing (loans and credits). There is not legal right to claim for the finances from the Fund. The finances from this Fund can be used in forestry to support actions aimed at attaining the objectives of state environmental policy, at environmental education, training, research, information science, monitoring, etc. The finances can be also used to cover the detriment due to some restrictions on management of forests, which concerns non-state legal entities in forestry. A part of the finances can be used for revitalization of forests damaged by air pollutants. The finances from the group of irrecoverable financing can be used to purchase lands, where specially protected parts of nature and the landscape are situated.

Since the year 2001 the performance of the State Funds has been within the competency of the Ministry of Agriculture and the Ministry of Environment.

Indirect subsidies for the forestry sector

Issues of indirect subsidies in the forestry are very complicated. There is a whole scale of political measures aimed at the prices of inputs and outputs in the forestry as well as general measures aimed at solving the needs of the policy of state. They are, for example, the measures as follows:

In social policy

- Minimal wage – it influences the level of wages,
- Employment in rural areas – implementation of publicly-beneficial works, creating new jobs,
- Social assistance – it influences the level of wages, etc.

In regional policy

- Support to the development of selected regions,
- Maintaining the settlement of rural areas, etc.

In economic policy

- Support of state to related branches (wood industry, pulp and paper industry, building industry, mining industry, etc.),
- Pro-export measures – trade liberalization,
- Support to foreign investments, etc.

In the care of the environment

- Reimbursement of detriment due to restrictions on management of forests,
- Solving of preventive and recovery measures to reduce damage to forest stands caused by air pollutants,
- Public relations – enhancing the importance of forests in the country, increasing the awareness of the public of the value of forests, training aimed at forest improvement, etc. (Lehocká et al. 2000).

In these cases it is very difficult to evaluate qualitative and quantitative benefits. The possibility of such forms of indirect subsidies is great and sometimes not directly aimed at the forestry, but it affects the competitiveness of the sector.

FORESTRY LEGISLATION AS A TOOL OF THE STATE FOR SUSTAINABLE DEVELOPMENT FROM ECONOMIC VIEWPOINT

Historically confirmed need of society to improve forests is reflected in Slovakia in the legal measures enacted including the restrictions on the management of forests. This need requires the forest owner to engage in administrative requirements and documentation production performance. These in final result causes increased costs for the forest owner are not reimbursed by the state. Subsidies in the forestry sector have a facilitative character. The exception is when the owner of non-state forest land has a legal right for reimbursement of detriment on property due to restrictions on current management of own land following from the regulations of the organs of state administration of environment pursuant to the § 47 of the Act no. 287/1994 of the Collection of laws on nature and landscape conservation. The reimbursement of the detriment on property has not been realized actually in practice.

Intervention of the state upon forest management to protect a part of the national wealth manifests itself in direct as well as indirect economic restrictions in forestry, particularly by the acts on forest that follow (these legal measures are not amended in a new draft of the act on forest yet):

The Act no. 61/1977 of the Collection on forests in the full wording:

- Protection of forest land resources is obligatory. Pursuant to this Act ”the users of forest lands are obliged to protect forest land and forest stands and to use them rationally for the fulfilment of forest functions. For this purpose the organs of state administration of forestry can impose to the users of forest lands to carry out on their own costs necessary measures on forest land.”
- The owner (user) is restricted by the Act also in excluding particular land from forest land resources. Though the owner (user) agrees with the change in the use of land, the consent must be issued by the organ of state administration of forestry. In addition, the Act specifies the obligation: ”The one who requested the excluding of forest lands from forest land resources is obliged to pay a payment to the State Fund for Forest Improvement.” The state has strong influence on the protection of forest land resources, not only through restrictions but also through financial payments from the side of persons who cause reduced fulfilment of publicly-beneficial functions of forests though only temporarily.
- The Act is strict also regarding damage to forests. Pursuant to this act. ”Everyone is obliged to prevent damage to forest land resources, objects and constructions on forest holdings, which serve forest management.” The organ of state administration has great competence, as it is entitled to impose recovery or prevention measures.

The Act no. 100/1977 of the Collection on the management in forests and state administration of forestry in the wording of later regulations:

- The owner (user) is by law obliged to manage forests in accordance with plans to secure and improve fulfilment of forest functions with maintaining permanent effect of forest benefits and to create preconditions for rationalization of the management of forests. Forest management serves these purposes.

- The owner (user) of forest land is by law obliged to manage his/her own forests according to the prescribed obligatory data. For the units of area stand arrangement they are namely silvicultural system and its forms, upper level of the volume of regeneration planned felling, upper level of the volume of tending planned felling in the stands at the age over 50 years, lower limit of the volume of tending planned felling in the stand at the age within 50 years, the area of cleaning and tending felling, regeneration composition of main tree species. These indicators are incorporated into forest management plans. For the forest holding with the area within 50 hectares the organ of state administration of forestry can permit an elaboration of simplified forest management plan (Article 3 of the Act no. 100/1977 of the Coll.). The elaboration of plans is covered from the state budget and by the finances from the State Fund for Forest Improvement.
- The Act prescribes an obligation to regenerate forests, mostly within 2 years to regenerate and to secure within 5 years as well as prescribes tree species composition and use of genetically suitable seed and plants. The owner is obliged by law to carry out felling, especially in eliminating the consequences of natural disasters or of other injurious activities. The act then prescribes obligations what concerns forest transportation and forestry reclamation.
- The Act prescribes professional supervision of the management in forests being carried out by professional forest managers. Providing the owner or user do not secure professional management of forests, the organ of state administration of forestry may appoint a professional forest manager for the owner (user), and he/she is obliged to cover the costs of the manager's work. Since 2000 it is possible to claim for the reimbursement of wage being paid to the professional forest manager from the State Fund for Forest Improvement.
- The forest owner (user) is obliged in his/her own activities to take care of forest. He is obliged to carry out measures to prevent damage in forests. In case of extraordinary circumstances and unpredictable damage the owner (user) is obliged to take measures to eliminate or prevent the damage. Besides to the obligation to improve the forests, the owner (user) is obliged to protect permanently forest stands against damage by game.

The mentioned legislative measures had been valid in the Slovak Republic for almost 30 years. Qualitative and quantitative values of the indicators of cutting regulation had been changing (Halaj et al. 1990, Halaj et al. 1986, Petráš et al 1999) similarly to the ways of determining and evaluation of timber production (Halaj et al 1998, Petráš et al. 1995, Petráš et al. 1996) according to given and other results of research.

CONCLUSION

Since 1993 forestry in the Slovak Republic forms a part of state agrarian policy, which is being adapted currently to the Common agrarian policy of the EU. All economic tools of state supportive policy, being used in agriculture, are not used for forestry. Liberalized trade with raw timber shall not enable state support of market prices but the subsidies shall have to change to have multi-functional effect, including a positive effect on ecology (tab. 5)

Table 5: The effect of multi-functional impact of support in agriculture sector

Measure of state	Financial transfer	Impact on the revenues of land owner	Impact on employment rate	Impact on trade	Impact on ecology	Impact on international trade conditions
Support to market prices		-	-	-	-	-
Pension subsidies		/	/	-	/	-
Subsidies for production inputs		/	/	-	/	-

None effect

The impact on forestry ecology in the Slovak Republic has not been solved systematically. The basic problem, namely in which phases of the production and reproduction process it is necessary to apply respective legislative and economic tools (taxes, payments, subsidies, advantageous credits, etc.) in the field of ecology, has not been resolved. It is simpler, for example, to burden oil by ecological tax and not the number of machines, which need oil for operation. The state should choose such tools, which would increase the quality of the environment. At the same time, a systematic, multi-sector approach should be applied with the aim to meet expectations. It is impossible to resolve these problems only partially, in respective sectors with considering the impact on all sectors of the state. Our country must approximate the legal norm with EU legislation. Due to these reasons we must continue to address the problems of harmonising forestry legislation with the environmental protection. The current framework of legal norms, which is applied, does not enable systematic resolving of ecological tools of the state policy in relation to forestry.

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RESTRICTIONS ON OWNERSHIP OF FORESTS IN SLOVENIA DUE TO THEIR ENVIRONMENTAL ROLE

DARIJ KRAJČIČ AND IZTOK WINKLER

ABSTRACT:

Due to special public interest in the conservation and development of forests, and enhancement of their ecological, social and economic functions, some restrictions are placed on forest owners as regards forest management. The state prescribes certain management practices that are aimed at protecting public benefits of forests. On account of these restrictions, the state provides different kinds of compensation and free-of-charge professional counselling.

Key words: forest functions, right of ownership, restrictions of ownership, compensation

INTRODUCTION

The attitude of society towards forests has been subjected to constant changes in the course of social development. Recently, the awareness of ecological and social forest functions has been steadily growing. The economic function of forests, as accounted for in GDP, is on the decrease in developed countries. On the other hand, the generally beneficial role of forests, which is hard to evaluate properly, is more and more of importance to public interest and not only to individual owners. Thus a problem has arisen, which the state attempts to solve with a special legal status for forest property and with compensations provided to forest owners for restrictions placed on forest management.

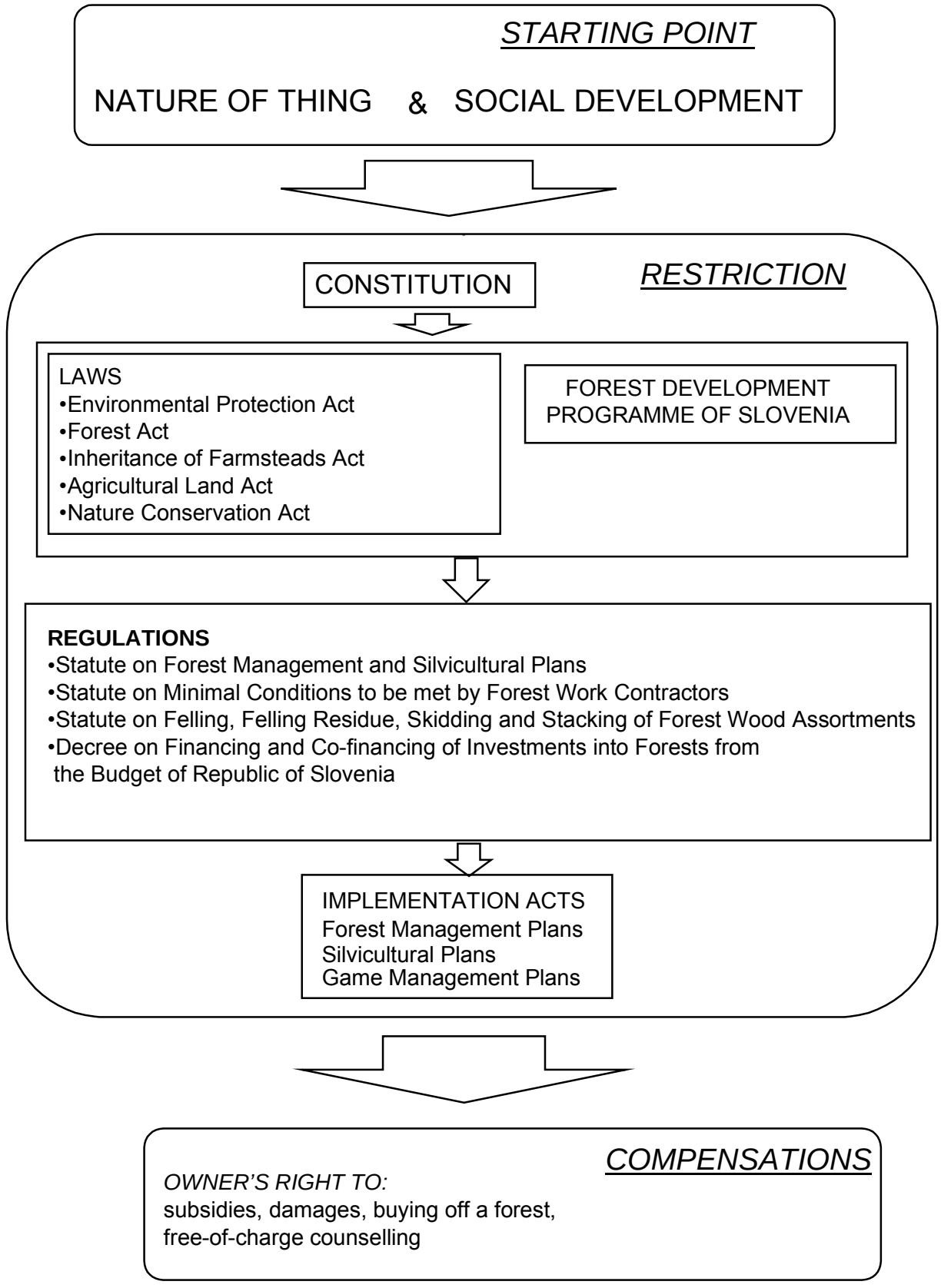
DETERMINATION OF THE PROBLEM AND METHODS

Forest functions may be in conflict with one another if one of them is of special significance. This is particularly true for the economic function on the one side, which is chiefly of benefit to the owner of a forest, and for social and ecological functions on the other side, which the forest provides for the whole community. Therefore the aim of the study was to investigate if ecological and social forest functions impose restraints upon forest ownership. An analysis of Slovene legislation was carried out to determine if restrictions of forest ownership have a legal basis and if forest owners are entitled to compensation due to restrictions placed on forest management.

THE IMPORTANCE OF FOREST OWNERSHIP IN SLOVENIAN LEGISLATION AND IN PRACTICE

The importance of forest ownership in Slovenia is based on the nature of things (i.e. forest) and social development. Therefore limitations have been imposed upon forest property and owners may claim different kinds of compensation (Fig.1

Fig.1: The importance of forest property in Slovenia



The nature of things and social development

Under the 1993 Forest Act, a forest is an area of land covered with forest trees in the form of a stand or with other forest growth, which ensures any forest function (economic, ecological and social). This legal definition and identification of characteristic features of forest property determine the nature of things, i.e. the nature of a forest.

Due to the current level of social development, economic benefits of a forest have been highly diminished in comparison with its ecological benefits. The owner, however, is mainly interested in economic benefits, therefore it is essential that restrictions be placed upon forest management of individual owners due to public interest beneficial to all citizens.

Restrictions on the right of ownership of a forest

The right of private property is ensured by the Slovenian constitution. Yet the constitution also prescribes that property be used in such a way that its economic, ecological and social functions are ensured. It also provides for restrictions on ownership or even expropriation due to public benefits. The clause which states that an economic activity cannot be carried out in conflict with public interest is to be pointed out.

Laws prescribe orders and prohibitions, which state that a particular thing must be done or allowed or must not be allowed. Due to multiple functions of forests, a special regime applies to them.

The Environmental Protection Act (1993) prescribes that information on the condition of the environment and environmental changes be available to the general public. Land use changes must be conducted in conformity with regulations concerning such an intervention so that the rights of other citizens to a healthy and clean living environment are ensured. The protection of the right to a healthy environment is also the responsibility of the ombundsman. Wildlife is the property of the state regardless of who the owner of land or forest is. If a natural resource is protected (this applies to rare, more valuable and precious natural goods), and has been designated as such by the state or a local community, the law provides for tax incentives, subsidies, compensations or damages, which are based on a legal prohibition or restrictions. In such an area the right of ownership can be withdrawn or restricted. If property is sold in such a case, the state or the local community in question has the pre-emption right.

The Forest Act (1993) stipulates forest management which ensures ecological and social functions of a forest. Therefore forest owners must manage their forests in accordance with laws and regulations, management plans, and administrative acts. They must allow the following: free access to and movement in their forest to other people, beekeeping, hunting and the picking of forest fruits, plants and wildlife for recreational purposes according to regulations. Forest owners must allow considerable freedom to potential users of their property. What they may retain for themselves is especially economic utilisation of their property, while other uses are similar to those which are regarded as public goods (UDE 1994). In practice, the level of tolerance of forest owners as to the access of other people to their forest is shown in Table 1.

Table 1: The attitude of private owners to free access of other people to their forest

Does it bother you	This is not a problem	It does not bother me	It bothers me, but not a lot	It bothers me a lot	I feel threa-tened	I do not know
	%					
if people walk about in your forest?	30.3	50.8	13.1	4.1	0.5	1.2
if they pick mushrooms in your forest?	30.6	53.4	9.4	5.4	0.5	0.6
if they pick other forest fruits in your forest?	34.0	52.6	7.4	4.5	1.0	0.6
if they pick herbs in your forest?	35.5	53.3	7.2	2.9	0.5	0.6
if hunters shoot wild game in your forest?	32.1	54.8	5.5	5.5	0.3	1.7
if people ride motor-bikes along the pathsof your forest?	32.3	25.8	14.2	21.3	5.4	1.1
if they ride bikes along the paths of your forest?	38.0	35.9	11.2	11.2	2.3	1.2
Total	33.3	46.7	9.7	7.8	1.5	1.0

Source: WINKLER/MEDVED 1995

Responses to the questionnaire show that most forest owners are not bothered by free access of other people to their forest since only 20% answered that they feel more or less bothered. This attitude is closely related to the size of forest property. Those who own a larger forest property are considerably more upset by free access. The proportion of owners who are not indifferent to free access to their property increases with the size of forest property. This attitude could be the result of close contact with and dependence on the forest of owners with a larger property.

Under *The Nature Conservation Act (*1999), an owner of land must allow to other people not only free access but also the execution of measures aimed at conserving biodiversity and of nature protection measures. Restrictions placed on property increase with ecological importance. Right of ownership can be restricted or even taken away due to public interest if natural values need to be protected.

A forest owner must not carry out any activities that have an adverse effect on productivity of a stand or site fertility, on stability or sustainability of a forest, and endanger its functions. If land use changes are to be carried out in a forest, the owner must obtain permission, in compliance with regulations concerning physical planning, which has also to be approved by the Forest Service.

Clearcutting is not allowed and regeneration of the forest after degradation is compulsory. A forest must not be fenced off except to protect young growth, water resources, natural and cultural sights, and study sites. Forest owners are responsible for the execution of protective measures in their forest. The Forest Service provides counselling and issues obligatory guidelines. Owners must neither themselves nor let other people use their forest for grazing. But they must allow other people to use forest roads which are part of their forest.

Compensation for restrictions on the right of ownership

The state imposes a number of restrictions on the right of ownership on the one hand, but on the other hand it requires owners to assume complete responsibility for the condition of their forest. Therefore it provides compensation by means of:

- a policy of subsidies,
- a policy of damages and tax incentives, and buying off forests with a special purpose or protective forests, and
- free-of-charge counselling by the Forest Service.

This raises the question as to which limitations on forest management should be regarded as such to justify compensations. By providing free-of-charge counselling, the state recognises public importance of forests to *all* forest owners. When it subsidises forestry activities, the state differentiates between individual owners. As for damages, tax incentives and buying off forests, owners are entitled to them only if the ecological and social role of their forest is of more significance than in other forests. Owners, for example, whose forest has an ecological and social role that has already been socially verified (e.g. free access is permitted to other people) are not entitled to compensations.

Subsidies

The state finances forestry operations either completely or partly *(The Decree on Financing and Co-financing of Investments into Forests from the Budget of the Republic of Slovenia, 1994, amended in 1999)*, depending on types of measures, size of forest property, significance of ecological and social forest functions and the socio-economic condition of the owner.

In 1996, for example, the state covered 31% of all investments into state forests, 31% of forest regeneration measures, 25% of forest tending measures, and 37% of protection measures (WINKLER/KRAJČIČ 1998). The state also covered 30% of road maintenance measures.

Damages, tax incentives and buying off forests with a special purpose or protective forests

A forest owner is entitled to compensation if the state or a local community has designated their forest as a protective forest or a forest with a special purpose (Forest Act 1993), or if a forest is situated in a protected area (Nature Conservation Act 1999), which imposes restrictions on the right of ownership. The owner can even require the forest to be bought off by the designator. The state or the local community in question has the right of pre-emption if such a forest is sold. The

legislation then, provides that the owner gets compensation if their right of economic benefits is encroached upon. Restrictions on the right of ownership which apply to all forests (e.g. free access of other people) are not compensated.

Under the Forest Act (1993), forests in which the scientific and hygienic-health functions or the natural and cultural heritage-protection function are of special significance are designated as forests with a special purpose. Forests in which the protective, recreational, tourist, educational, defensive or aesthetic functions are of particular importance may also be designated as forests with a special purpose. This also includes forest land which is intended for defence purposes and is administered by the Ministry of Defence.

Forests with a special purpose are also forests situated in areas designated as natural sites in accordance with regulations concerning natural heritage protection. Forests in which the scientific and hygienic-health functions or the natural and cultural heritage-protection function are of special significance are protected as a natural treasure and are designated as such by law. Forest reserves also belong to this category. In Slovenia there are, at present, 10,879 hectares of forest reserves, an area that will be increased to about 14,000 hectares (1.3% of all Slovenia's forests).

Free-of-charge counselling

The right of free-of-charge counselling is ensured by the Slovenian Forest Service for all forests regardless of ownership. Professional counselling and training of forest owners are one of the main tasks of the Forest Service. In addition to formal counselling, the Slovenian Forest Service also provides informal counselling and education as regards everyday forestry operations.

CONCLUSION

The results of the study suggest that restrictions on the right of ownership due to the ecological and social role of a forest play an important part in Slovenian legislation. The state is aware of the significance of forests for all the citizens, which is corroborated by the whole concept of how their role is dealt with. The rights of owners are restricted due to public interest in the forest, on the one hand, but on the other the state provides certain compensation.

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LEGAL STATUS OF FORESTS AND PRIVATIZATION ARGUMENTS IN TURKEY

AYNUR AYDIN COSKUN

ABSTRACT

In this article, an evaluation of forests that are important natural resources due to their various ways of utilization and functions will be argued according to the Turkish legal system. The privatization dispute on forests will also be presented.

Forests are accepted as public property in the Turkish legal system as in many other countries. Therefore, forests are subject to a protective and a special legal regimen.

The Forest Law, numbered 6831, in force classifies forests from different aspects. One of these classifications is from the aspect of ownership and administration. Again regarding the same law, forests are also classified on the basis of their quality and character. Each class of these forests is subject to different legal status. The differences in these legal statuses will be briefly described in the article.

After this short compilation the on Turkish forest regime, arguments of different parties on privatization of forests are presented. After evaluating these arguments a conclusion on the subject will be offered.

GENERAL STATUS OF FORESTS

Forests are important natural resources due to their functions and the various ways they are utilized. Many countries have accepted forests as public property because of this importance.

Within Turkish Law, however, a common opinion on the right of property of forests has not been reached. Forests are accepted as ownerless public domain (res nullius) by some authors, whereas others accept forests as common goods; yet, from the point of view of a third party, forests are service properties. No matter what the arguments are, The General Council of Turkish Supreme Court of Appeal, YARGITAY, has already decided in 1978 that forests should be accepted as ownerless public domain. Another legislative classification is according to the Section 16 of the Law 3402, on cadastral survey of public domain; and according to this Section, forests are a special group of public properties.

Unfortunately, the concept of public property does not ease the dispute since there is also a dispute on the concept of public property itself as there is no agreement on the kind of relation between the state and public property. This relation is just a power of control according to some authors [3], where some others argue that this relation is a right of private ownership. A third party claims that it is public ownership. Generally, the relationship is considered as public ownership [9], [10].

The argument of public ownership is based on Article 641 of the Turkish Civil Law. With reference to this article, the State has the power of establishing suitable ownership right on public properties, and this relation is defined as ”public ownership”

in Turkish Law. The state's power on public properties originates from the concepts of "dominium" of the Law of Goods and "imperium" of the Public Law. [3]

Public properties are subject to a general protective regime according to 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 accusatory prescription.

c) Public domain is not dependent on registration.

d) Public domain cannot be obscured.

e) Public domain cannot be mortgaged and pledged.

f) Utilization of public domain is dependent on certain permission, license, privilege etc.

g) Except for public benefit, right of servitude cannot be established on public domain.

h) Public domain cannot be subject of compulsory purchase.

i) Public domain is exempted from any kind of tax, fee, etc.

Although forests are subject to this general regime, constitutional and legal regulations indicate that forests are subjected to a more special regime among public domain [15].

CONSTITUTION RULES

Article 169 of the Turkish Constitution of 1982 deals with the protection and improvement of forests. Accordingly;

> "The State enacts necessary laws and takes necessary measures for protection of forest and for extension of forest areas. New forest should be established on burned forest areas and no kind of agriculture or animal husbandry activity will be carried out on these areas. Whole forests are under the care and the supervision of the State.
>
> State forest ownership cannot be transferred. State forests are administrated and exploited by the State according to Law. These forests cannot be owned by accusatory prescription and cannot be the subject of the right of servitude except for public benefit.
>
> Any activity or action that is harmful to a forest is forbidden. Any political propaganda that is harmful to forest cannot be made. General or special amnesties cannot be declared exclusively for forest crimes. Crimes that cause burning, destroying or reducing forest areas can not be included in to the content of a general or special amnesty.
>
> The forest boundaries can not be narrowed except the places which are definitely no more beneficial as a forest but can be better used as an agricultural land; and the places which totally lost their character as a forest before the date of 31 December 1981; and the places reverted to agricultural or grazing land or reverted to settlements as village, town or city or the places which will be beneficial to use for the same purposes."

As can be clearly seen, three basic concepts that are State Ownership, State Forest Service and Sustainable Principles are consisted in Article 169 of the Constitution.

FOREST LAW 6831

According to the Forest Law numbered 6831 in force; forests are classified from two points: Ownership and management, and quality and character.

Ownership and management classes are

a. State forests
b. Forests belong to the public legal entities
c. Private forests

Public ownership vests in government agencies the responsibility for formulating and implementing policies affecting these forests. Private ownership gives management responsibility to individuals or to legal entities. Private ownership is always subject to social purposes and public control [7].

Recently, the forestland of Turkey is approximately 20 million hectares that is roughly 26 % percent of the total country and about 90 percent of the forest area is owned by the state. The rest, 10 percent of the forest is classified as either public legal entities or private forests

According to quality and character classes, forests are grouped as,

a. Natural parks
b. Protected forests
c. Production forests

Different legal characteristics of forests involved in these classifications should be presented briefly to complete the picture.

OWNERSHIP AND MANAGEMENT CLASSIFICATION

State Forests

Forests with property rights belonging to the Treasury, and management rights and protection responsibilities belonging to General Directorate of Forestry, are called state forests. Articles 26 to 40 of the forest law numbered 6831 deal with the topic of management of these forests.

According to Article 40 of forest law numbered 6831, any kind of work in state forests should be done by the General Directorate of Forestry (OGM). However, this article also permits OGM to contract some work such as afforestation, nursery production, forest inventory and planning, road construction to private companies. Again, according to Article 40, during the contracting period, people living in forest villages have priority in work such as harvesting, amelioration, and seedling production. for this reason.

This contract never means to transfer protection and exploitation powers to private companies or forest villagers as Article 169 of the Constitution definitely prohibits such a transfer of responsibility.

In a State forest the followings are forbidden:

a) To cut or uproot grown or planted seedlings, to damage plantation areas, to choke or wound trees, to cut their branches and tops or to wooden tiles from the trees,

b) To cut old or young trees or to uproot them or to get tar or bark or resinous wood from them, to cut leaning or overthrown trees or to take or uproot them or produce coal from them.

c) To collect forest seeds or any kind of forest flora, valonia, lime tree, galnut, medical and industrial plants.

d) To fish in lakes, dams and streams through using dynamite or poison.

e) To get soil, sand pebbles for one's own needs without commercial purposes.

Forests belonging to the Public Legal Entities

Forests that are under the control of the State to great extent, where the management and utilization rights and the protection responsibilities belonging to public legal entities are classified as forests belonging to public legal entities. The construction, management, exploitation and protection of these forests are the topics Articles 45 to 49 of the Forest Law numbered 6831.

Although the management and operation of these forests is carried out by the public entity itself, or a contractor of the public legal entity, this management is under the control of OGM. In order to fulfill this task, it is required that the management and operation of the forests be carried out through management plans and maps prepared by OGM free of charge. The forest administration controls obedience to these plans.

The public legal entities have to put these plans in action in the shortest time possible. This time is limited by the first business period after the announcement of this plan to the owner.

A forest that belongs to a public legal entity can not be divided by the public legal entity to be transferred or assigned to persons or institutions together with their land.

The management and protection of forest that belong to public institutions are undertaken by their owners under the control and supervision of the State by the provisions of this Law.

The provisions of Articles 14, 17, 18, 19, 20, 21, 41 of the law numbered 6831 about State forests is also applicable to forest that belong to public institutions acquiring legal entity.

Private Forests

The management and protection of forests that belong to private persons are undertaken by their owners under the control and supervision of the State by the provisions of the Law numbered 6831.

The important article that should be emphasized in this section is Article 52 of the Law numbered 6831 which prohibits dividing private forests into parts smaller than

500 hectares by the way of assignment or inheritance on forests. Unfortunately, this rule is frequently violated by municipalities and land registry administration. Neither the municipalities nor the land registry administration nor the General Directorate of Forestry does respect this prohibition.

The second paragraph of the Article 52 gives permission for building construction to the owner of a private forest if the private forest is in settled land such as a village, town or city. However, this permission is valid if the total construction area is up to 6 percent of the total forest area, and if condition that provides this permission according to the Article 17 is attained.

QUALITY AND CHARACTER CLASSIFICATION

Protected Forests

Forests that are under threat, or forests aiming to protect things like special species, environment, or having special measures like national defense are classified as protected forests according to Article 23 of the Forest Law numbered 6831.

Protected Forests are defined in Forest Law Article 23 as follows:

Forests under the threat of landslides and leach out and forests protecting the air, macadam and railroads of habituated areas against sand storms and preventing river beds from getting filled or State forests vital for national defense or areas covered with chaparral and heather are permanently reserved as protection forests by the Ministry of Agriculture whereas the burnt or damaged State forests are reserved as protection forests until they become productive.

The boundaries of protected forests are determined and declared to the surrounding villages. The conditions, principles and periods of separation of such forests and management, development, improvement and making use of them are decided by the Ministry of Agriculture.

As defined above, protected forests are part of State forest properties. Management of these forests belongs to OGM. Accordingly, in fact, protected forests can not be accepted as a different class from public properties. Differences can be only find in the priorities between various forest functions. Namely, in protected forests, the function of protection becomes the major function but this does not result in any difference in the legal status of these forests. Shortly, protected forests are either public domain or state forests.

Article 24:

Forests belonging to someone other than the State that are needed to be reserved as protection forests and all other owned areas that should be added to complete the existing protection forests, are reserved as protection forests by the Council of Ministers. In case the owners do not comply with the decision of reserving these areas as protection forests, then such areas are confiscated according to general provisions.

National Parks

National parks are defined in Forest Law Article 25, as areas to meet the needs of the society like recreation, sports, and tourism and to protect nature.

OGM allocates, plans and manages suitable forest and forest lands as national parks, nature parks, nature reserves, natural monuments and forest recreation sites, to provide for the needs of the society for scientific, environmental, aesthetic and recreational purposes.

Production Forests

Areas that can be exploited to supply forest products are classified as production forests In other words, these are financially managed and exploited forests.

THE CONCEPT OF PRIVATIZATION

In the changing, developing and globalizing world, the privatization concept has been recommended for different properties. Privatization is the process of transformation of the State property to private property. Since there is a general agreement that private owners manage scarce resources better than state officials, all over the world such a transformation takes place, in contrast to previous decades, while the socialist ideology of state ownership prevailed. The Thesis therefore is very simple ”Privatization is beneficial to everybody” [16].

Similar arguments have also occurred related with forests in Turkey where forests are owned by the State with a ratio of 90 percent. To understand the reason for this high ratio, the reasons of State ownership on forests in Turkey have to be explained firstly.

Between 1924-1937, forest subject is analyzed by indigenous and foreign specialists with various aspects. At the end of this analysis, first Turkish Forest Law numbered 3116 came into force 1937. [3]

Technical and scientific forestry began in 1937, when Forest Law numbered 3116 was enacted. In this law, the idea of state ownership and state exploitation was dominant and authority was given to the State to impose strict controls on the forests belonging to the private sector.

With the enactment of the Forest Law no. 4785 in 1945, the bulk of private forest was expropriated. People reacted against this expropriation, and many forests were destroyed by forest fires, grazing and illegal cuttings.

After a period of expropriation of forests, today in Turkey, almost all forests are managed by the State. This task has been entrusted to the OGM, which works under the Ministry of Forestry.

Provisions that emphasize the importance of State ownership are involved in the reasons of Forest Law No. 3116. According to these provisions, State ownership must be organized on forests that are public property in any case.

Due to damages that may result from the former utilization, planned management ensured by the State is necessary. Accordingly, free benefit from forests has been abolished and illegal cutting has been forbidden.

Forests that are bigger than 50 hectares that are adjacent to State Forests and forests bigger than 1000 hectares that are not adjacent to the State Forests have been nationalized (expropriated) and they have been under the control of the State with temporary rules of the Forest Law.

Private Forests of a total area of 23839 hectares have been transformed to State Forest. All forest management has been left to the State.

Consequently, the management of 97 percent of Turkish Forests is dependent on OGM.

Following the Forest Law numbered 3116, the Law numbered 4785 came into force in 1945. All private forests were expropriated without any notification or process with this Law numbered 4785.

The reasons of necessity of State Forest Ownership are also explained in the Forest Law no. 4785. These reasons are:

- Private forest ownership usually occurs with the occupation of state forests.
- Profitability has taken precedence on the private forests. At the end of this, reduction appears on the forestland.
- Private forests are the origin of the smuggled from the state forests.
- Private forest ownership causes new ownership claims on state forests with various ways.

In this manner, state forest ownership has been accepted. After amendments on legislation, forest destruction has become to be seen with applied populist policies between 1950-1960. Strict provisions have come into force with the Constitution 1961 to avoid destruction of forests. Similar provisions are involved in the Constitution 1982 that is still in force.

From the end of the period from the first law numbered 3116 to today, the necessity of State Forest ownership has appeared.

There are also the defenders of privatization at the other side of privatization arguments. Their opinions can be presented as:

- Experience shows that State can not protect forests as they should be protected.
- Most of forests are owned by private persons in Europe.
- There is a privatization tendency in the world.
- If forests are owned privately, forest fires will decrease.
- There is no addition to economy from state forests.
- Profitability should come first on the forest management.

ARGUMENTS

In the above paragraphs, different opinions on the ownership of forests and the scope of privatization are presented briefly together with the legal status of forests. When these opinions are evaluated on a legal basis, the following results will appear.

- The claim that State can not protect forests seems unrealistic. State forests are protected by the military forces of the Commandment of Gendarmerie. It is clear that the protection of forests under the control of private persons is very difficult.
- Worldwide, forests that have been inventoried are owned as public property with an average percentage of 77, whereas private property has a percentage of 23. Without a detailed research, it seems erroneous to claim that most of forests are under the property of private persons in the world. Even if it is accepted that the claim is right for Europe, this can not be accepted a universal rule of thumb, as the social, cultural, economical and educational conditions of each country is different from one another. Consequently, a claim accepted for Europe may not be accepted for Turkey, unless detailed researches may present that the conditions of Europe and Turkey are identical.
- It is not possible to admit the claim that forest fires will decrease with privatization of forests. In the research that covers the Mediterranean Territory of Turkey, it is testified that forest fires do not decrease with privatization. The process of fire protection is costly. Private persons can not always carry this high cost to take the necessary precautions. It seems a more realistic approach to have the fire protection of forests be the responsibility of the state.
- The claim that there is no addition for economy from state forests is unfair. Forests have multiple uses and functions. Public service appears on the base of these functions. It is clear that forests have more non-economical values than economic values. Consequently, this claim can not be thought as acceptable. A private ownership that is after an economic profit may not always meet the needs of the public for recreation or the needs of the state for national security.
- The necessity of profitability on forest management is not right. As stated above, forests have public benefits. As a prerequisite of this character, high expenditure for compulsory services is necessary. When forests are privately owned, the forest owner may try to have a higher profit from his property. For this reason, private person may not make the expenditures for necessary services that must be involved in forest exploitation and he may try to cut his expenditures that are in fact necessary for conserving, preserving and improving the forests.
- Within the reason of the Forest Law No. 4785, the expropriation of forests is foreseen. The structure of this law is against the private ownership. Although experience shows that state forest exploitation may not always protect forests as is due, exploit the forests in a productive manner, or improve forests properly. However this deficiency that may rise time to time can not accepted as the source of the problems in forestry [13].

CONCLUSION

When forest privatization is analyzed on a legal aspect, it can be deducted that forest privatization concept seems unrealistic for Turkey.

The conditions that had caused the expropriation with the Forest Law 4785 are unfortunately increasing day by day. Especially in big cities, forests are usually accepted as potential settling areas. With the increasing desire for profits, the destruction of forests is also increasing. A more detailed look on the private forests shows this destruction more clearly. Some provisions related with private forests (Article 52) give permission to build facilities not to exceed 6% of the horizontal area of the private forest. In practice, this permit however increases up to 36% with illegal cheating of owners and negligence of the OGM and other institutions. Owners of private forests are clearing their forests for building. Worst than that, municipalities change city plans to be able to construct buildings in forest areas and land registry bureaus confirm this change of city plans in spite of the prohibition [3]. Consequently, private forests have nearly been transformed in to settling areas. Many examples may be presented about this destruction of private forests.

As both technical and legal basics of the problems of forestry are the cadastre of forests, any discussion on privatization should also be based on this basic fact. Although to complete the cadastre of state forests in five years was set as a goal in 1937 when the Law numbered 3116 was enacted, this cadastre work has not been completed yet [8].

Obviously, without any technical data available, and without any detailed research on the forest facts of Turkey and a comparison with Europe and the world, it seems the privatization of forests can not be accepted in Turkey. The question is very simple: "How can you privatize a forest while you do not know even the boundaries of that forest?"

In the beginning of this paper, the rules of 1982 Turkish Constitution about forests were presented that clearly declares that forests are under the ownership of state and state forests can not be transferred to private ownership in any case. Clearly, there is no legal basis for the privatization of forests. Besides, there is no apparent approach in any research, report or document at global scale that certainly suggests transferring state forests in to private forests [11].

There is no research indicating that effective usage of forests increase with privatization. The results of verification on private and state forests must be analyzed carefully taking into consideration of forest conditions in Turkey [18].

Consequently, the two conclusive points appear in the evaluation of the forest privatization concept in Turkey. The first point is that starting from the Constitution, the Turkish legal system does not allow privatization, and secondly, Turkey is not ready for privatization of forests from economic, social, cultural and educational aspects as basic researches and data are not yet available.

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THE PERSPECTIVES OF REFORMS IN LEGISLATION BASE OF FORESTRY OF UKRAINE

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The Forest Policy of Ukraine today, as in the past, is based on the principles of equitable and sustainable use of forest resources, while taking into account the social, economic and intellectual needs of future generations. These principles are immutable for us. The main cause is to ensure the science based use of forests, their effective protection, conservation and regeneration, genetic, species and landscape diversity, and increasing their protective and resource potential.

In accordance with the “Forest Code of Ukraine” (1994) the Ukrainian forests have mainly ecological functions, such as water quality protection, recreation, conservation of biodiversity and have limited operational significance. Forests functions are:

- productive (economic): forests that produce biomass, wood and non-wood forest products.
- ecological (protective): a positive impact of forests on global and local climates (climate-regulating functions), conservation of landscapes, ecosystems and cenosis’ biodiversity, anti-erosion, water protection, sanitary-hygienic functions, etc.
- social: a positive influence on human health, a working place, a component of the country’s defence, recreational, scientific, cultural, educational, cognitive potential.

The forest cover of Ukraine has been radically changed by human beings, not only quantitatively, but also qualitatively. During the last five centuries, the forest area of Ukraine was diminished three times and the areas of oak and beech plantations in the Carpathians by 25% in the last 100 years. Native forests (untouched by economic activity) are retained only in fragments. At the same time, the general status of Ukrainian forests is satisfactory. More than 160 tree species and shrubs grow in the forests of State Committee of Forestry of Ukraine.

After last 40-50 years, forest coverage in Ukraine was increased 1,3-1,4 times (1946 - 10,3%, 1996 - 15,6%). The extension of area was resulted by forest creation from land not fit for agricultural use. The average forest cover for Ukraine is 15,6%, which give it the attributes of a European countries with low forest coverage. The general area of woodlands of our country is proximately equal to those of Belgium, Denmark, Holland, Switzerland, Great Britain, Hungary and Czech Republic taken together.

Practical forest coverage in Ukraine is insufficient, and in many regions is extremely low (1,5-2 beneath the optimum). For reaching optimum forest coverage, which is 19 %, we should increase forest area on 2 mill. ha at a minimum. This will permit an integrated optimal ecological system on all the territory of the country.

The forests are State property and managed by state forest enterprises. At the present time 54 ministries and departments manage the Forest fund of Ukraine. The most part of the forests (7114,9 th. ha or 66%) is in the menage of the State Committee of Forestry of the Ukraine. For the first time, 6800 ha of the forests (0,06 %) were lent to Ukrainian citizens for use and as property.

General control for forest management is entrusted by the State to the State Committee of Forestry of the Ukraine and its regional institutions. In parallel with forestry, the State Committee of Forestry conducts also hunter ranges. 7 mio. ha or 14% of the general amount of hunter shoots in the state are assigned to it. More than 5% of hunter shoots are with untraditional organizations (for example hunter's clubs, private firms and other).

The law „About Hunter Ranges and Hunting" was passed in the Ukraine in February 2000. The State Committee of Forestry is the central organ of the executive in hunter ranges and has wide authority in functions of state control and management. It was established for the first time that hunter shoots entail payment on the basis of a contract between user and owner of the land where these hunter shoots are situated.

In present time, nearly 300 state forest enterprises, forest-hunting and hunting enterprises, 2 national parks and 5 reserves are functioning in forestry of Ukraine.

Ukraine belongs to the young Eastern European states with economies in transition. Forestry of Ukraine ought to be adapted to these changes, which take place both in policy and in the economy of the state. Therefore it is important to define the strategic areas of development of forestry under the new conditions and the previously developed New Forest Policy. The following basic aims of forest policy in the country are:

- increasing of forest coverage of the territory to the optimum in all natural zones;
- conserving biodiversity of forest ecosystems;
- increasing forest ecosystems' capacity to withstand negative environmental factors such as climate change, anthropogenic loading, forest fires, diseases and harmful insects;
- rational and sustainable forest management for the satisfaction of demand for domestic market in wood;
- development of forest melioration and afforestation in Steppe zones.

In this year the working out of a new state program „Forests of Ukraine" is finished. The perspectives of development of forestry for 15 years in the country are given in this program. Scientific, normative and prognosis parameters for this program are grounded by the Ukrainian Institute of Forestry and Forest Melioration.

However, in contemporary conditions, forest policy firstly ought to take into account the international decisions and bonds of Ukraine, and secondly be founded on an adequate_normative-legislative base. As it's known, Ukraine has associated with

the pan-European process of forest protection and signed the resolutions of Ministerial Conferences on the Protection of Forests in Europe (Strasbourg, Helsinki and Lisbon Resolutions). That's why in the forest legislation in force ought to be reflected in:

- conservation of biodiversity of forests on genetic, species, ecosystem and landscape levels;
- certification of forest resources and forestry operations. (At present time, this work has started in our country with foreign help and 200 th. ha of forests are certified already);
- intensification of ecological aspects of silvicultural operations;
- forming of national criteria and indicators of stable forest management

During the last ten years (after proclamation of independence), a system of ecological legislation in Ukraine was formed. From the basic legal documents about the conservation of the environment, the Parliament of Ukraine passed nearly 80 laws and more than 30 normative acts.

It must be noted that the Forest Code was adopted in January 1994, which was 2,5 years after Ukraine declared its independence. Its arrival in that period had played an important role in the forming of a system of state legislative acts about the using of nature and protection of the environment. In the same time it was sufficiently complicated to take into account the tendencies and perspectives of the development of the economic-legal base of forestry and the country in the transitional period, without having market experience. Therefore the Forest Code in force has some problems, basic of which are following:

- imperfection in the system of dividing the forests into categories and groups of protection;
- uncertainties in questions of financing of silvicultural actions. Flexible budgetary financing is not provided, which in conditions of changing economic times complicates effective forest protection;
- irrational distribution of authorities and responsibilities in forest management and in processes of forests' state control (this is of concern to users, local authority organs, and also the highest State legislative organs: Supreme Soviet, Cabinet of Ministers, Ministry of Protection of Environment, State Committee of forestry), doubling in questions of forests management;
- not taking into account international principles of stable forest management;
- conflicts with other laws ("Land Code" admits a possibility of privatization of some land lots covered by forest in certain conditions, the area of these lots being not more than 5 ha. In the "Forest Code" state property of forests is proclaimed);
- multiplicity and crockhood of the articles. This is a precondition which leads to the development of a great number of sublegislative normative documents regulating economic activity in forest. This complicates control and does not contribute to timely arrival of adequate decisions.

During the forming of new public relations in Ukraine, considering the dynamic of national economy development, it is necessary to regulate and renovate Forest legislation as legal basis for forest using and forest management.

The system of forest legislation can be seen as several groups of legal and normative acts. The laws belong to the first group of legal acts. Forest legislation is interlinked with laws about conservation of nature, the animal world, land, property, leasing, privatization, and with the Land Code, too. The second group of legal acts includes the decisions and orders of the Cabinet of Ministers of the Ukraine, which are issued for developing of normative acts of the first group. These acts first of all are directed on conservation and rational use of forests. The departmental normative acts (orders, norms, regulations, directions, methods, regulations) about using, renewing, conserving and protecting of the forests belong to the third group. These acts are obligatory for carriage by other ministries and departments, enterprises and other organizations irrespective of their submission. An important issue is with also another group of normative acts, the normative decisions and orders of committees within the framework of competence allotted to them.

In the present situation, while the market economy is incipient in Ukraine, it is particularly important to define ways of resolving actual problems and clearly formulating the strategic areas of development of forestry in the Ukraine. That's why after completion of administrative reforms called for to avoid doubling of the management system, it was necessary to develop and to ratify as an independent document „Forest policy of Ukraine“ with criteria and indicators for stable forest management and also the new Forest Code of Ukraine.

After this, it is necessary to complete development of an adequate normative-legal base for reforming the forest management system.

This normative-legal base ought to be coordinated with the system of other state laws to create a suitable economic-legal management field for formation of market relations. It ought to follow these basic priciples:

- reinforcing the role of forestry as an independent industry in the state sector of the economy of the Ukraine with retention of the state form of ownership of forests;
- development of private forestry on lands of agricultural destination (private farms) by creation of protection stands on private lands.
- distinction of powers of legislative and executive branches of authority that predestine the apportionment of national and communal forests (forests of administrative-territorial units), which form one system of forests with the state form of property;
- realization of a one-state forest policy to control to implementation of forest legislation and the normative-legal base of forest relations and silvicultural activity in all forests.
- gradual de-monopolization of control in state forests; in the first instance the State Committee of Forestry of Ukraine as the basic forest user and special representative state organ of forestry; to revise state functions which regard

to administration and management; until 2005 reforming will be materialized in the framework of present organizational-production structures and future preparation for deep reform of forestry.

- improving financing in forestry, creation of special forest budget; the distribution of forest budget materializes by state forestry organs. Provide basic regulations of forest fiscal policy (ecological taxes on contamination of the environment, ecological taxes for worsening of state natural objects, taxes for forest income, ecological duty)
- creation of market infrastructure (forest exchange, contemporary forest-trading storage sites, information services on marketing, etc).
- key forest terminology in accordance with international claims and juridical terminology use in civil cases.

The above-mentioned approaches for reforming forestry make sense nationwide. At the present time the Ukrainion Parliament is considering a new formulation of the “Land Code”. Some of the above-mentioned propositions have been included in this “Land Code” already. In the main, the changes will touch upon questions of forest management, the methods of economic adjustment of management in forests with different forms of property.

After the arrival of the new “Land Code”, adequate changes will be brought into “Forest Code”. For further perfection of National Forest legislation, our country will be interested in studying the experience of other countries.

Realization of the strategic directions of forestry development in the Ukraine including perfection of its normative-legal base to the requirements of a market economy, will allow more effective management of forests and forestry.

ANNEXES

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THE IUFRO RESEARCH GROUP 6.1300
FOREST LAW AND ENVIRONMENTAL LEGISLATION

HOMEPAGE: http://iufro.boku.ac.at/iufro/iufronet/d6/hp61300.htm

The Research Group on Forest Law and Environmental Legislation of the International Union of Forestry Research Organizations (IUFRO) was established in 1981 during the XVIIth World Congress in Kyoto, Japan. At present the group has more than 60 members who contribute according to their research interests and within the limits of their available time. More than 120 contributions presenting country case studies on 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.

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http://iufro.boku.ac.at/iufro/iufronet/d6/hp61300.htm (IUFRO Secretariat)

http://www.fowi.ethz.ch/ppo/biblio.html (Chair of Forest Policy and Economics - ETH Zurich)

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