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Allocation of property rights on forests through ownership reform and forest policies in Central and Eastern European countries

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Publication Date:

2005

Permanent Link:

<https://doi.org/10.3929/ethz-a-005960787> →

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Working Papers
International Series

05/5

Forest Policy and Forest Economics
Institute for Human-Environment Systems
Department of Environmental Sciences

***Allocation of Property Rights on
Forests through Ownership Reform
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Source:

Swiss Forestry Journal 156 (2005) 8: 297-305

Zurich 2005

ETH

Eidgenössische Technische Hochschule Zürich
Swiss Federal Institute of Technology Zurich

*Working Papers International Series Forest Policy and Forest Economics
Swiss Federal Institute of Technology (ETH), Zurich, Switzerland*

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ALLOCATION OF PROPERTY RIGHTS ON FORESTS THROUGH OWNERSHIP REFORM AND FOREST POLICIES IN CENTRAL AND EASTERN EUROPEAN COUNTRIES

Laura Bouriaud* and Franz Schmithüsen**

Summary

The study applies some concepts of the economics of property rights to the allocation of rights on forests in Central and Eastern European countries. The classification of forest assets, according to their economic characteristics and the analytical framework proposed by Schlager and Ostrom (1992), are used to examine the impact of ownership reforms and policy changes on forest utilisation in the CEE region. It is shown that while reform ownership reforms deal with the formal definition of rights on forestland, new forest policies more properly define the economic rights, e.g. the owner's ability to make a profit from the assets he owns. The conclusions argue that the combination of property and liability rules, applied to ensure the procurement of environmental services, can efficiently allocate forest resources. However, the rules on forest utilisation are formulated collectively in public policy-driven decision making processes in which private forest owners are not yet able to adequately participate. Measures must be adopted to facilitate more effective participation of private land owners in political processes in order to balance the presently ongoing trends of considering forests, irrespective to the legal regime of ownership, as a common-pool resource.

Key words: property rights, land reform policies, public forest policies, forest management rights, Central and Eastern Europe

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1 INTRODUCTION

The restitution and privatisation of land in Central and Eastern European (CEE) countries aimed at creating a private based economy in rural areas and at re-establishing private land rights as a corrective to post-Second World War nationalisations. Changes in forest and agricultural land ownership have been regulated within the same land reform laws and usually followed the same principles. An exception exists in Bulgaria and Albania, which adopted separate laws for forestland and agricultural land ownership reforms. Problems such as over cutting, timber theft, lack of forest regeneration, lack of forest investment, appeared early in "newly" privatized forest estates. In some cases, the ongoing privatisation processes led to a high share of area with unclear ownership and significantly contributed to an increase in the volume of illegal logging in the country (Bouriaud, forthcoming). In the early political discourse, these problems were identified as being a consequence of the lack of tradition in forestry among the new owners, of their profit oriented behaviour, of the short time running investment perspective, and of the lack of awareness and expertise. In the middle of the 90's, the political discourse changed and began to consider the institutional and informational context as an important factor in determining private owners' attitudes towards forestry. At the same time, institutional reforms emerged in most of CEE countries to lay the bases for public extension services, and for training and education of forest owners.

In the context of regional and international policies in support of sustainable forest management it is essential to understand the complexity of property rights systems in European forestry, and in particular, in the countries of the CEE region. Although significant contributions attempted to clarify the issue (Bass and Hearne, 1997; Ostrom, 1998; Aizpurua and Galilea, 2000; Kissling-Näf and Bisang, 2001; Glück, 2002; Kissling-Näf et al., 2002; Baland and François, 2004; Schmithuesen, 2004), there is still not enough knowledge on how the property relationship on forests effectively works and what structure of rights over forest utilisation exists in the European context. In fact, the actual research on forest property rights is largely characterized by the intent to clarify the legal possibility of transforming secondary forest products and services in marketable goods as an answer to decreasing financial returns from traditional forestry (Cesaro et al., 1998; Merlo et al., 2000; Mantau et al., 2001; Rekola, 2004). Yet, the lack of research on property rights structure is not specific to only forests or forestland property. In general, the economic analysis of the relationship between the property on land and the actual management of the resource is substantially less developed than the economic analysis of contract law or tort law (Lueck and Miceli, 2005).

The following analysis uses some central concepts of the economic theory of property rights with application to the ongoing forest ownership changes in CEE countries. After presenting the classification of forest assets according to their economic characteristics and the analytical framework developed by Schlager and Ostrom (1992), the analysis shows how reform policies have dealt with the formal definition of land rights, and how public policies defined the economic rights over the forest resource. The study argues that both the property and the liability rules have to be applied in an effective manner in order to ensure an efficient procurement of environmental services from forest resources.

2 THE THEORETICAL FRAMEWORK

2.1 State intervention in allocating forest resources

External effects appear when the actions of some firms are profitable for other producers which do not have to pay for the provided advantages (Picard, 1987:458). This is the case with those forest products that are consumable, but not exclusive. Benefits resulting from the forest scenery practice of recreational activities, the contribution of forest to the carbon cycle, water cycle, soil protection, wildlife conservation, and protection against natural hazards represent in many cases positive external effects of timber production in as much as the land owners do not receive payments or other compensation in providing them. The classical economic analysis mentions several ways to internalise externalities. One is the change of rights on the market, which should lead, in a zero transaction costs world, to a more efficient allocation of resources. High transaction costs related to the identification of beneficiaries, to the estimation of the value of services, to the negotiation between the "producer" and the beneficiaries, and to the reinforcement of settled agreements make it difficult and sometimes impossible to establish markets for most of environmental forest services. Another possibility is to let judges choose the solution that would maximise the social welfare.

With regards to forest externalities, the common solution is usually the intervention of the State deciding who has to provide the externalities and who can benefit. In this case, the decision on who is entitled to use forest resources is an outcome of policy processes, expressed through laws and other normative regulations. The entitlements concern *defined rights*, which need to be distinguished from *mere uses* and from *privileges*. Mere doing does not signify an ownership right (Alchian and Demsetz, 1973; Sjaastad and Bromley, 2000). The fact that no one prevented a factory from polluting does not mean that the factory was entitled with a right to pollute (Cole and Grossman, 2002:323). The internalisation of externalities through the creation of new private rights is viewed as a process of rights specification. In that sense, Sjaastad and Bromley (2000:369) asserted: "to expand the bundle of rights that the farmer possesses over his land or to assign rights to a previously unclaimed resource is certain to specify rights. [...] More specific rights represent a removal of the resource from the public domain into the hands of specific rights owner." Eggertsson (1990) suggests a more narrow interpretation of the rights specification process when he asserts that "specificity may also refer to the degree of precision with which the existing rights are defined."

In this study, privatisation and restitution of forests are considered to be an initial entitlement deciding on fundamental ownership forms, as well as on the proportion of these forms in relation to the total forest area within a country. The initial entitlements are then further specified through the provisions of public forest policies which contribute to define "forest property regimes" as institutions evolving through time as circumstances change (Barzel, 1997; Kissling-Näf and Bisang, 2001; Gluck, 2002). Together, the initial entitlement and the specification of rights characterize the allocation of rights referring to the utilisation of forest resources. The regulation of private forestry expresses certain options of the political decision-makers regarding forest values, e.g. they indicate who has to provide the environmental services and who should pay for them. This is the reason why some scholars of property rights have stressed that understanding the restrictions of ownership rights requires an analysis of the role of the State and its bureaucracy (Furubotn and Pejovich, 1972; Bromley, 2001; Lueck and Miceli, 2005). Especially in countries in transition, where the allocation of property rights has been a matter of politics and law setting, and not an outcome of market transfers, the whole reform of ownership is dependent on State institutions and public regulation.

2.2 Formal definition of rights and forest property rights regimes

In countries of continental Europe with law traditions derived largely from Roman law, for instance, in the French law system, property rights regimes can be characterised by an embedment of three basic rights (“démembrements du droit de propriété” in French) which are *usus*, *fructus* and *ab usus*. The owner has the right to use and harvest the property fruits (or benefits) and he is solely entitled to decide on the alienation of the full right. The proprietor cumulates *usus* and *fructus*. The authorised user possesses also *usus* and *fructus*, but he is only entitled to a limited consummation of property’s fruits. Whereas the proprietor has the right towards all the property’s fruits, the user can only consume the fruits as authorized by the owner or as necessary to himself and his family.

The general law (Constitutional, Civil) in European countries mainly distinguishes two forms of ownership, the public and the private ownership, sometimes with a particular regard for the common (indivisible) ownership. In the real world, however, the diversity and complexity of assets associated with the forests and forestlands lead to different and flexible combinations of use and management rights and therefore to an impressive diversity and complexity of property rights regimes. Indeed, in the real world, a public forest may be used for public interests of the State or of public communities, but it may also be exclusively used for private interests, for instance, under different types of licence and concession regimes. Similarly, the private forests may be entirely at the disposition of their owners or may provide free access to all and some free services. Common-property regimes on forest land may cover different forms of internal relationships, from the depleting “might makes rights” to stable corporate associations. Under these circumstances, we consider with Cole (1999:278) that distinctions between individual, group, and State property “tend to be more informative and less ideologically loaded than the conventional distinction between private and common property.” It is, thus, appropriate to use an analytical frame based on a combination of the holders’ identity, be it individuals, community groups, or the State, and the alienation of land tenure rights. This framework leads to the distinction of the following five categories of legal property rights regimes: *res privatae*, *res communis*, *res communalis*, *res publicae*, and *res nullius*. We voluntarily use these Latin terms in order to avoid confusion with the economic meaning of the currently employed terms “common” and “public” (Table 1).

Table 1 Legal regimes of goods

Legal regimes of goods	Form of ownership	Legal holder	The right to alienate resource
<i>Res privatae</i>	Private	The owner (individual or juridical entity)	Yes
<i>Res communis</i>	Private	The forest community	Yes, within the community
<i>Res communalis</i>	Private	The commune	Yes
	Public	The commune	No
<i>Res publicae</i>	Public	The State, on the behalf of the society	No
	Semi-private	The licensee, lessee or concessionaire	No
<i>Res nullius</i>		No one	No

Source: Bouriaud, 2004

Special considerations refer to the property rights regime defined as *res nullius*. “Nobody’s land” is rare today, and by that also “nobody’s goods” are attached to the land. The category *res nullius* is different from the category *res publica* in as much as a nobody’s land situation is a temporary one. The *res nullius* are susceptible to be appropriated by someone interested in them, while *res publicae* are not. Abandoned forest lands, for instance, are not *res nullius*, because nobody, either the State or the local community, can appropriate them. The only way to access the ownership right in this case is to take-over the forestland by expropriation which implicitly recognises the existence of a previous, although unknown owner. Under certain circumstances, these forests might be used as a common good e.g. for grazing activities, wild berries picking, and hunting.

The legal regime of goods is to be determined in reference to the ownership situation. Within each regime, with the exception of *res nullius*, the three fundamental ownership rights of each land tenure category can be placed solely on one holder. Also, the *usus* and *fructus* may be attributed in various combinations to separate holders. In the case of the natural resources, the analytical frame proposed by Schlager and Ostrom (1992) offers the possibility of replacing the legal terms of *usus* and *fructus* by more tangible significations such as access, withdrawal, management, exclusion, and alienation (Table 2).

Ownership of natural resources is thus composed by five clearly distinct rights: the right to access the resource, to withdraw respectively to harvest the resource, to manage the resource, to exclude the others from the use of the resource, and to alienate part or all feasible uses to third parties. The first two rights, access and withdrawal, are operational-level property rights. The other three rights, management, exclusion, and alienation, are collective-choice level property rights. The collective choices determine what the operational rules of forest management are and who may participate in changing these rules (Schlager and Ostrom, 1992:250). In the context of European legal systems addressing forests, collective choices are subject to the constitutional rights of ownership. They are the result of political processes and are determined mainly in the forest laws and regulations.

Table 2 Bundles of rights associated with different holders of *usus* and *fructus*

	Owner	Proprietor	Claimant	Authorised user	Unauthorised user
Access	X	X	X	X	X
Withdrawal	X	X	X	X	
Management	X	X	X		
Exclusion	X	X			
Alienation	X				

Source: Schlager and Ostrom (1992:252).

2.3 Economic classification of forest goods

Environmental economics and natural resource economics provide the tools for economic analysis of property rights. Basically, the goods are classified according to the public good theory (Table 3). A good is non-excludable when it is not feasible, due to technical, economic, legal, religious, cultural, or other reasons, to establish mechanisms to exclude determined people from access to their use (Mendes, 2002). Rivalry expresses the possibility that the use of some good by one individual would reduce the amount of utility available to other users. Non-rivalry consumption distinguishes between public goods and common-pool resources. The use of a common-pool resource is non-excludable but usually rival.

Most of forest attributes present the characteristics of common property or common-pool resources, and this is irrespective of the prevailing regime of the goods and of the legal form of ownership. In this context, we refer to the leading contributions of Ciriacy-Wantrup and Bishop (1975), Berkes (1989) and Ostrom (1990; 2000) to define and characterise a common-pool resource.

Table 3 Economic classification of goods and services

	Rivalrous	Non-rivalrous
Excludable	Pure private goods and services Ex. Timber	Network services (club goods or impure public goods) Ecotourism and recreation
Non-excludable	Goods and services subject to congestion or depletion, yet accessible to all (open access) Common-pool resource, or impure private goods Ex. Medicinal plants, wild berries when open access	Pure public goods Ex. global climate, protection of soil, protection of biodiversity

Source: Mendes, 2002; Kölliker, 2004; Tientenberg, 1996; with additions

Table 4 provides a classification of different categories of forest assets according to various outputs, exclusivity and rivalry, and the resulting possible ownership attributes. The character of the ownership attribute is somewhat “theoretical.” Indeed, considerable differences in the national forest legislations, as well as diversity of local conditions, make the consumption of the attribute more or less exclusive, or more or less rivalrous. In other words, the distinction is country or region specific (Mantau et al., 2001). Therefore the use of property rights to resolve the resource problems is context-dependant (Steelman and Wallace, 2001).

3 PRIVATISATION AND THE RESTITUTION POLICY

3.1 Allocation of forest rights in countries with a transitional economy

With the noticeable exception of Poland, the reform of the forest property rights structure has affected all European countries with an economy in transition. Despite the common term referring to this process as “privatisation of forests,” the change of property structures in the CEE area occurred mainly through the restitution of forest to the former owners. This is the case in Slovenia, Romania, Bulgaria, the Czech Republic, and Slovakia. Restitution of forests in this context means the end of measures of the State to take over private properties during the communist regime. The restitution acknowledges the continuity of private ownership rights on forestland in rendering them to the former owners or their heirs and/or to local communities and institutions. The term privatisation refers to a completely different process as new private property rights are created. The privatisation of forest land has occurred comparatively seldom and has almost exclusively concerned forests that have been created by afforestation of marginal agricultural land. In fact, only the following four countries in CEE have truly privatised certain forest areas:

- Lithuania considered restitution and privatisation in a common approach and decided to privatise land and forests which were not claimed by former owners and by persons with ancestral rights to use them (Valetta, 2000). The area in clarification of ownership, privatisation and restitution procedures combined, represented 38% of the total forest in 1998, 22% in 2003, and 19% at the beginning of the year 2004 (State Forest Survey Service Lithuania, 2004).

- Estonia decided that only forest areas belonging to the State prior to 1940 would not be subject to privatisation (Estonian Forest Act, 2004). Privatisation could thus be undertaken for the newly forested areas which appeared after the Second World War. The forested area of Estonia has increased substantially since that time through afforestation of lands abandoned by agriculture.
- In Hungary and Latvia the possibility to purchase forestland in exchange of vouchers within the national privatisation processes has been offered.

Table 4 Classification of different attributes from forests as public and private goods

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

Source: Bouriaud, 2004; Bass and Hearne, 1997

In some cases, entitlement with private rights on forests was the result of the restitution or privatisation of lands from former agricultural co-operatives. For instance, 30% of the Hungarian forests (535 000 ha) and 5% of the Albanian forests have been transferred to private persons in the dissolution process of agricultural co-operatives. On the other hand, the countries in the Community of Independent States (CIS) accepted only after long hesitations the existence of the private land property. Until 2001, Russia, Armenia, Moldavia, and the Kyrgyz Republic recognized only private forest property from newly created plantations on agricultural lands. In the Ukraine or Tajikistan forestland, forest plantations are still exclusively considered to be public property (Bouriaud, 2002). Georgia is an exception, as the possibility of privatisation of forestland appeared with the enactment of the Forest Code in 1999.

CIS national forest legislations claim all forests as "common property of the people." However, this formulation has nothing to do with the classical admitted definition of "common property" in scholarly literature on property rights. The CIS term clearly means that forestland and standing timber on it are managed as State property. Use rights, e.g. for cutting timber, are granted by leasing procedures or by reserving certain forest areas for the exclusive use of communes, agricultural co-operatives, or farms. The forest law may grant private rights on public forest estates for haymaking, grazing of cattle, resin production, accommodation of beehives and apiaries, gathering of forest fruits, mushrooms, and medicinal plants. Depending

on the case, felling and forest permits may be issued to private and collective holders as an entitlement for specific forest uses either on a long term basis (concession) or on a short term basis.

Altogether, the fundamental difference which opposes the CIS countries to the CEE countries are the following: The former have so far preferred to maintain the principle of public ownership combined with the utilisation entitlements from the category of personal rights. The latter have clearly preferred the establishment of real rights through the transfer of ownership entitlements on forestland.

3.2 Common features of forest ownership reforms

The law is the main source of reform in forest ownership structure. In some cases, it is even the Constitutional law establishing public rights over forestlands, such as the principle of forest ownership in the Constitution of Moldova, the Russian Federation, Ukraine, and the Kyrgyz Republic. This entails a powerful influence of political lobbies in adopting solutions for property rights structure.

Generally speaking, one may observe that the *status quo* in maintaining the prevailing ownership pattern has often been preferred to radical changes (Bouriaud, 2002). Even if introducing private ownership on forest lands, after five decades of State ownership, can be viewed as a revolutionary measure in itself, one should remark the following points:

- The proportion of the public forest estate today is higher in most countries than before the nationalisation process (*Figure 1*).
- Privatisation was rarely carried out, and affected rather marginal agricultural lands.
- The change of the form of ownership did not really involve important changes in forest management, at least from a formal viewpoint. With some exceptions, private forestry in the CEE region is still largely regulated through the same rules as applicable in public forestry (Cirelli, 1999; Bouriaud, 2002).

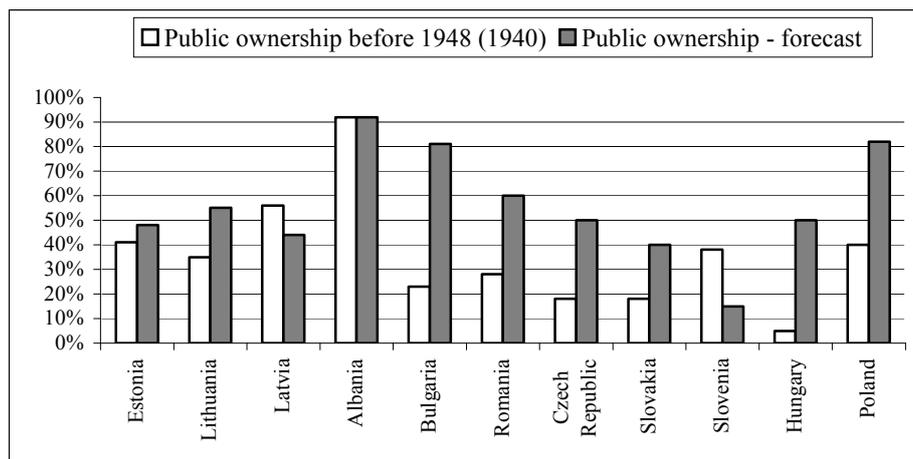


Figure 1 Share of public forests, at the end of restitution and privatisation processes

Source: Bouriaud, 2002

Moreover, the changes in ownership structure were decided in a top-down approach. At the time when the process of restitution was started, the former respectively new forest owners were not yet in a position to act as a forceful interest group defending their specific demands. They have participated in decisions related to restitution (Lithuania, Romania) and management of private forest only in exceptional instances. The implementation of the MCPFE commitments contributes, at present, to a movement of change towards more participatory and partnership-based approaches in forest policy formulation.

It appears that the process of granting new forestland ownership rights has been carried on much more slowly than in the case of agricultural ownership. One of the reasons for this difference may result from environmental considerations and restrictions, but it may also be attributed to the institutional inertia of the State administration. Several categories of forests have been excluded from the restitution process, such as national forest reserves in Romania or reserves within national and regional parks and protected forests in Lithuania. The Estonian Forest Act establishes that in order to ensure a stable state of environment and multiple use of forest, the area of state-owned forest should be at least 20% of the mainland area of the country. In Hungary, at the end of the ownership reform, the State will own at least 50% of the forests, mainly in the tourist regions. In Poland the proportion of protected forests is 4,4% in private estates, compared to 48,2% in public estates (Bouriaud, 2002). In Slovenia and Romania official forest policy statements stress out that the State should buy forestlands from private owners on a voluntary basis, especially in areas with protected forests and forests with an important protection role. For ensuring the same level of environmental, social, and ecological services, the property rule is generally applied. On those forests providing public services, public ownership is to be kept or to be acquired.

4 ALLOCATION OF RIGHTS THROUGH FOREST REGULATIONS

4.1 Ownership rights on forest assets

Since 1990, forest legislation has changed dynamically both in Western European countries as well as in the CEE countries (Schmithuesen, 2000). Important issues of such regulations are, for instance, the obligations of forest owners concerning reforestation and natural regeneration after wood harvesting, public access to forest areas and use of non-wood forest products (Bauer et al., 2004). New forest laws and supplementing regulations have been adopted in all countries of Central and Eastern Europe during the period 1992-2000 followed by a considerable number of partial revisions of the applicable texts (IUFRO RG 613). Looking at the reforms of forest ownership that have taken place in the CEE countries as they have affected the four categories of forest assets distinguished in Table 4, one can state that the ownership reforms have focused mainly on establishing the rights referring to real property that have been classified as category "R." Property rights concerning the three other categories of forest assets referring to wood production, non-wood forest products and forest services (categories "W", "B," and "E"), have been regulated mainly via forest policy decisions and forest legislation.

Category "W" – Wood: Most of the CEE country forest regulations are with regards to the entitlement to land and timber together. The owner of the land also has ownership of the timber. The property rights on timber then belong to the real rights and are attached to the real estate. The entitlement can also belong only to the standing timber, for instance, when a private right is granted to forest contractors. In this case, the right is a personal right, not a real estate one. The latter system is practised in former Soviet countries and usually concerns timber and non-wood forest products.

In principle, private ownership on forest in the CEE countries formally contains all the rights related to the use of forest goods from the categories classified as "R" and "W." Nevertheless, several restrictions on using timber from one's own property exist. The State usually establishes harvesting quota in a top-down manner (except in Estonia), marking of trees is carried out by an official forest representative, and timber must be harvested only according to the prevailing forest management plan provisions. If we also consider theft, which is higher in private forests than in public forests (Bouriaud, forthcoming), one may conclude that there are significant restrictions on ownership of timber with regards to the components "withdrawal," "management," and "exclusion." Alienation rights are also affected through regulations regarding the exchange of property on the land market. Forest legislation may thus provide for a pre-emption right of the State on sales of private forestlands, or may limit the transmission of properties through inheritance, e.g. by ruling that private forest property is to be transmitted undivided to only one of the potential inheritors.

Category "B" – Non-wood forest products and activities in forests: Open access is generally provided to allow the large public to go into the forests and pick-up a specified quantity of non-wood forest products. The condition required is that the grabbing of forest fruits and mushrooms may only be done for personal consumption. If it is done for commercial purposes, the owner may intervene, regulate the conditions of collection, and ask for payment (Bauer et al., 2004). The owner may also have the right to ask for payment if he took specific measures in order to increase the forest's productivity with regard to this category of products (Estonian Forest Act, 2004). In the Polish forest legislation, the owner can refuse access of the public to collect non-wood forest products, while in Romania the national forest administration fixes harvesting rules in public forests. In Latvia, the use of forests is regulated by the forest manager. However, the law does not specify whether the owner has an exclusive right with the option of transfer it in exchange of a payment, or whether he has only the right to limit, at a certain level, the harvest of forest products by third parties. In the first case, he would have a private property right because he could alienate it; in the second case he would only have a management right.

Picking of non-wood forest products calls for a distinction between "productive" and "recreational" activities. When grabbing of non-wood forest products occurs for commercial purposes and is based on an agreement with the landowner, this activity has a similar regime as for wood and can be grouped as an asset that belongs to the category "W." When collecting non-wood forest products is practiced as recreational activity, consumption is non-exclusive, and the regime applicable is that of category "E."

Category "E" – Environmental and social services: Rights concerning landscape, soil protection, water regulation, climate regulation, wildlife protection, etc. are rarely granted to individuals through a property rule and remain, consequently, in the public domain. An exception is provided by a recent contract concluded between the National Forest Administration in Romania and the World Bank on selling the value of carbon sequestration of national forests. A ton of carbon stocked in forests was priced 3.6 USA dollars (Universul Pădurii, 2003). The contract consecrates a formal property right of the administration on the environmental service that results from carbon sequestration. The degree of the marketability of the goods from the "E" category depends on country-law opportunities and on the forest managers' willingness and ability to innovate (Mantau et al., 2001).

If attributes from the "E" category belong to private forest property, the owner has the obligation to maintain them at a certain level. Such obligations may be of different quality. The Estonian law, for instance, gives recommendations to owners for managing their forests in respecting the environment. For the protection of key biotopes, the State can conclude a

contract with the landowner (Estonian Forest Act, 2004). The Polish and Romanian laws oblige forest owners to carry out measures in order to maintain the right level of environmental effects. In exchange, the law proposes free assistance and financial support. In Slovenia, the State supports the costs of silvicultural operations up to 80% if they are undertaken in protected respectively in protection forest. In several CEE countries, forest owners have the right to ask for compensation if they are obliged to take special measures for environmental protection that would have negative financial effects on their income (Bouriaud, 2002; Schmithuesen, 2004).

The given examples demonstrate the application of the liability rule. Liability is voluntary based in the case of contracts for a key biotope, or *a posteriori* established in the other cases, once that law has been infringed upon by the owner. The compensation method belongs to the liability rule as well, but in this case the State "freely" assumes the obligation to pay if the land owners perform in accordance with the stipulated behaviour. This requires that the government commits sufficient budgetary funds in order to honour such obligations.

4.2 Right to manage the forest resource

The management of a resource signifies that the owner has the ability to regulate internal use patterns and transform the resource by making improvements. "Individuals who have the right of management have the authority to determine how, when, and where harvesting from a resource may occur, and whether and how the structure of the resource may be changed" (Schlager and Ostrom, 1992:251).

The lack of the land owners' participation in the process of establishing the forest management plan (*Table 5*) supports the idea that management rights do not belong, from an economical viewpoint, exclusively to the owner of forestlands. The owner can "capture" the benefit stream of producing timber, but he is not allowed to solely decide under which conditions he may exploit the resource, nor improve it. At present, the rules of harvesting timber are set up and adopted in a process of forest planning that forest owners are not able to initiate on their own, to carry out according to their objectives, and to implement according to their needs. As a consequence, forest owners share their management rights with the State, and the main instrument for this joint-decision making is the forest management plan. It is noticeable that, except the Latvian and Lithuanian cases, the establishment of forest management plans is not at the owners' expenses. The fact that forest management plans are supplied free of charge is coherent with the public function which it performs in the present regulative system.

5 MAIN PROBLEMS RELATED TO PRIVATE FOREST PROPERTY RIGHTS

The transfer of forest property rights to private land holders as an important part of restitution and privatisation processes that have occurred and still occur in the CEE countries in transition to market economy has led to a number of problems. These problems will have to be addressed and appropriate solutions need to be found in order to ensure a balanced development of the forestry sector in a second reform step. Appropriate solutions based on further changes in forest legislation are also a prerequisite to implementing the principles of sustainable development in managing private and public forest.

Most important is the acknowledgement that an effective transfer of forest property rights depends on a well structured process of establishing implementable rules, from the constitutional level down to the normative behavioural codes. The characteristics of rights

(exclusivity, transferability, alienability, enforcement) depend on the wide range of institutional arrangements and mechanisms in evolution, and there is a potential for lack of congruence among them (Feder and Feeny, 1993). The gap existing on the level of the market is already obvious in as much as the policy of buying forestland from private owners does not stimulate such transactions. In countries such as Romania, despite the willingness of owners to sell forests and the willingness of the national forest administration to buy such forests, commercial transactions can not be concluded. The major reason preventing new private owners from enjoying their full ownership rights is the lack of institutional arrangements needed for organising an open market for forestland, e.g. the necessary agency for land transfer has not been created and there are not adequate regulations for estimating land values in order to effectuate the sales with the public administration.

Table 5 Owners' participation in forest management planning

Formulation of forest management plans (FMP)			LI	EE	LA	SK	CZ*			SL	PL	RO
							1	2	3			
Who establish the FMP	The private owner, through legal advisors		X						X			
	A public structure	Owner contrib		X ²						X		
		His proposal is just added				X	X	X	X			
	No contribution											X
A public debate		Is possible					X	X	X	X	X	
		Nothing specified		X	X	X	X					X
Compulsory force	Not compulsory to have a FMP						X					
	It is compulsory to have:	a FMP	X ¹		X	X ³			X	X		
		a simplified FMP					X	X			X	X
Recommendations on FM			X									
Financed by the State	In each case			X		X	X	X		X	X	X
	Partially or under condition		X									
	Not financed				X				X			

* the cases 1,2,3 represent forests having less than a certain area, respectively less than 3 ha, for which the SFMP is not required, but once established, it is compulsory; between 3 and 50 ha; and more than 50 ha. ¹ more than 3 ha; ² only in commercial forest, but owners have the right to participate and the obligation to make proposals (sec. 7, (6), Forest Act, Estonia); ³ a SFMP for forest less than 50 ha
Source: Bouriaud, 2002

In the countries of the CEE region, as well as in other European countries, the forest owners share, to a considerable extent, their management rights with the State, whether it is with regard to the production and utilization of wood or with regard to other uses of forest land. Plans for forest management are formulated collectively in policy-driven decision making processes which largely involve the public forest administrations. A large proportion of the obligations from the past have been retained or merged into the new forest regulations, which have existed since the 1990s, irrespective of the legal regimes of the various categories of forest ownership. However, the changes in the political framework for forest management nowadays call for a critical review of the ways and means of public action in forests. If the forests are referred to as a common-pool resource, shared management rights should involve joint management responsibilities and consensus building among stakeholders involved in forest resource utilisation.

An essential element in joint forest management systems aimed at combining economic benefits for private land owners with the provision of environmental and social benefits in the public interest are appropriate financing mechanisms which make it possible to share the costs and benefits between private land owners in an equitable manner (North, 1990; Schmithuesen,

2004). This implies, foremost, the application of the principle that the goods and services, which forest owners provide for the public have to be financed from a concrete market, proceeds through an internalization of the accruing external benefits, through financial contribution from third parties benefiting directly, and/or from public investments of the State or of local public communities.

Most immediate, however, are the concerns on the weak enforcement mechanisms of property rights, particularly on private forest estates which exist at present in the CEE countries. When the restitution process was started, the most common rule was that the private owners should ensure by their own means the protection of the forestland against timber theft. However, quite often, private forest owners are not in a position to assume such a task for a number of reasons. It is thus difficult for them to ensure forest guarding if they have little or no knowledge of the location of their land parcel, if their forest is small and does not yield immediate benefits to them, if the area is far from their homes, or if they do not have the means to pay someone to ensure the necessary supervision.

As a consequence, timber theft and unauthorised logging have significantly increased in private forestry estates. The jurisdictional process to prosecute such offences is cumbersome with the result that securing the exclusivity of private rights on timber are difficult to guarantee (Bouriaud, forthcoming). In Baltic countries and in Romania, proper structures for law enforcement in forestry, such as forest inspectorates and environmental guards, come into being a decade after the commencement of ownership reform. The association of forest owners is still in progress. One should also note that forest restitution in the CEE countries has delineated forest property rights concerning wood production but did not transfer, with a few exceptions, other rights that were formerly closely associated with private forest property, e.g. hunting rights. As a consequence, such private forest owners cannot realize the full economic potential of the forest resource, nor do they have the power to make decisions with regard to important management aspects, e.g. determination of hunting quota, or timber harvesting quota, age of harvesting, etc. (Indufor/Eco, 2001).

Altogether, one may say that a large portion of new forest owners, which have been attributed private property rights since 1990, are not, or are not yet, in a position to fully exercise their land use and land management rights. They cumulate these limitations with the specific problems of small-scale forestry and with the implied disadvantages. As the average area of the new private forest holdings in the CEE countries, excluding Slovenia and the Baltic States, is less than 3 ha (Bouriaud, 2002), from the beginning, private forestry has faced, problems, such as lack of scale economies and rent dissipation. In many cases, restitution and/or privatization of forests has thus induced a suboptimal utilisation of the forest's resources potential.

6 CONCLUSIONS

Forest policy decides public access to forests, sets up the institutions regulating the exclusivity of rights over forest utilisation, determines law enforcement and prosecution of timber theft, and decides who supports the costs for providing environmental and social services in the public interest. Forest policy regulates, to a considerable extent, the management practices of land owners with regards to the volumes to be cut and determines in this manner the range of activities for economic agents, for the rural population, and for public managers. Its provisions may influence external timber trade and internal consumption of wood and other forest products and often have important consequences for the repartition of economic benefits that result from forestry activities. Forest policy has thus considerable

distributional impacts on the use of forest resource, respectively on the concrete economic rights, which forest owners have in using and managing their property.

Through the allocation and/or transfer processes, the State can "delineate full property rights to the asset" or can restrict the rights of forest owners in order "to enhance the separation of the individual economic rights" (Barzel, 1997). The initial allocation of rights matters in a positive transaction costs world. The normative aspect of the Coasian theory is that the initial assignment of property rights should be awarded to the party that has the highest possibility of avoiding or abating the harm to such rights (Kirat, 1999; Cole and Grossman, 2002). From this point of view, the States within the CEE region have made great efforts, during the course of transition to a market economy, in order to ensure environmental and social services. On the whole, they have chosen to allocate forest resource in a way which proves to be effective to ensure the forest policy objective. One approach has been to retain a certain proportion of forests with high public interests under some form of public ownership as coherent while taking into account the public nature of many forest services. This approach is an application of the "property rule."

A second approach has been, under the "liability rule," to regulate the responsibility of private forest owners' in such a manner that they do not contribute in diminishing the environmental role of forests. Forest management should prevent negative and irreversible loss of forest ecological value, as the forest owner is thought to be in the best position to decide upon the necessary measures and limitations to implement forest policy objectives. If the initial entitlement by privatisation and restitution has been motivated by distributional or ethical principles, a strengthening of the liability rule can help to implement more forcefully the principle of economic efficiency (Calabresi and Melamed, 1972).

The conclusions support the conceptional position that property rights are what are socially and legally recognised and enforced. Ownership of forest properties is based on what the laws, the conventions, or the customs authorise us to do; rather "yes that is yours," than "that is mine" (Bromley, 1997). In continental Europe, the law is the main source of the prevailing rules on property. It is at the same time an outcome of complex and often conflicting political processes.

A comprehensive analysis of forest property rights has to go further than a mere review of the existing legal framework and should identify the referential of public action determining the framework for sustainable forest management (Muller, 2000). Two normative positions, both of which have political and ideological support, seem to nourish the political debate. The policy-decision makers can have for normative reference the fact that the whole bundle of property rights adherent to forest uses and management should be allocated as exclusively as possible to the forest owner. An alternative reference can be that the forests are common-pool resources that are to be used and managed for the whole society. In this case, a coherent policy-decision process will limit the exclusivity of rights to the economic benefits from wood production and other specified uses on forest land. In order to provide a balanced combination of private and public benefits, e.g. through multifunctional forest management practices, forest policies need to foster joint private and public responsibilities and financial investments from private and public sources on an equitable basis.

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