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COST Action FP1201 FACESMAP Country Report



COST Action FP1201

Forest Land Ownership Change in Europe: Significance for Management and Policy (FACESMAP)

Forest Land Ownership Change in Romania

COST Action FP1201 FACESMAP Country Report

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COST (European Cooperation in Science and Technology) is a pan-European intergovernmental organisation allowing scientists, engineers and scholars to jointly develop their ideas and initiatives across all scientific disciplines. It does so by funding science and technology networks called COST Actions, which give impetus to research, careers and innovation.

Overall, COST Actions help coordinate nationally funded research activities throughout Europe. COST ensures that less research-intensive countries gain better access to European knowledge hubs, which also allows for their integration in the European Research Area.

By promoting trans-disciplinary, original approaches and topics, addressing societal questions, COST enables breakthrough scientific and technological developments leading to new concepts and products. It thereby contributes to strengthening Europe's research and innovation capacities.

COST is implemented through the COST Association, an international not-for-profit association under Belgian law, whose members are the COST Member Countries.

"The views expressed in the report belong solely to the Action and should not in any way be attributed to COST".

Background of the project

Forest ownership is changing across Europe. In some areas a growing number of so-called "new" forest owners hold only small parcels, have no agricultural or forestry knowledge and no capacity or interest to manage their forests, while in others new community and private owners are bringing fresh interest and new objectives to woodland management. This is the outcome of various societal and political developments, including structural changes to agriculture, changes in lifestyles, as well as restitution, privatization and decentralization policies. The interactions between ownership type, actual or appropriate forest management approaches, and policy, are of fundamental importance in understanding and shaping forestry, but represent an often neglected research area.

The European COST Action FP1201 FOREST LAND OWNERSHIP CHANGES IN EUROPE: SIGNIFICANCE FOR MANAGEMENT AND POLICY (FACESMAP) aims to bring together the state-of-knowledge in this field across Europe and can build on expertise from 30 participating countries. Drawing on an evidence review across these countries, the objectives of the Action are as follows:

- (1) To analyse attitudes and constraints of different forest owner types in Europe and the ongoing changes (outputs: literature survey, meta-analyses and maps).
- (2) To explore innovative management approaches for new forest owner types (outputs: case studies, critical assessment).
- (3) To study effective policy instruments with a comparative analysis approach (outputs: literature survey, case studies, policy analyses).
- (4) To draw conclusions and recommendations for forest-related policies, forest management practice, further education and future research.

Part of the work of the COST Action is the collection of data into country reports. These are written following prepared guidelines and to a common structure in order to allow comparisons across the countries. They also stand by themselves, giving a comprehensive account on the state of knowledge on forest ownership changes in each country.

The common work in all countries comprises of a collection of quantitative data as well as qualitative description of relevant issues. The COUNTRY REPORTS of the COST Action serve the following purposes:

- Give an overview of forest ownership structures and respective changes in each country and insight on specific issues in the countries;
- Provide data for some of the central outputs that are planned in the Action, including the literature reviews:
- Provide information for further work in the Action, including sub-groups on specific topics.

A specific focus of the COST Action is on new forest owner types. It is not so much about "new forest owners" in the sense of owners who have only recently acquired their forest, but the interest is rather on new types of ownership – owners with non-traditional goals of ownership and methods of management. For the purpose of the Action, a broad definition of "new forest owner types" was chosen. In a broad understanding of new or non-traditional forest ownership we include several characteristics as possible determinants of new forest owners. The following groups may all be determined to be new forest owners:

- (1) individuals or organizations that previously have not owned forest land,
- (2) traditional forest owner categories who have changed motives, or introduced new goals and/or management practices for their forests,
- (3) transformed public ownership categories (e.g., through privatisation, contracting out forest management, transfer to municipalities, etc.), and
- (4) new legal forms of ownership in the countries (e.g. new common property regimes, community ownership), both for private and state land.

This embraces all relevant phenomena of changing forest ownership, including urban, absentee, and non-traditional or non-farm owners as well as investments of forest funds or ownership by new community initiatives, etc. Although the COST Action wants to grasp all kinds of ownership changes it has to be noted that the special interest lies on non-state forms of ownership.

Contents

1. Introduction	1
1.1. Forests, forest ownership and forest management in Romania	1
1.2. Overview of the country report	1
2. Methods	
2.1. General approach	
2.2. Methods used	3
3. Literature review on forest ownership in change	4
3.1. Research framework and research approaches	4
3.2. New forest ownership types	6
3.3. Forest management approaches	
3.4. Policy change / policy instruments	7
4. Forest ownership	8
4.1. Forest ownership structure	
4.1.1. National data set	
4.1.2. Critical comparison with national data in FRA reporting	
4.2. Unclear or disputed forest ownership	
4.3. Legal provisions on buying or inheriting forests	
4.3.1. Legal restrictions for buying or selling forests	
4.3.2. Specific inheritance (or marriage) rules applied to forests	
4.4. Changes of the forest ownership structure in last three decades	
4.4.1. Changes between public and private ownership	
4.4.2. Changes within public ownership categories	
4.4.3. Changes within private forest ownership	
4.4.4. Main trends of forest ownership change	
4.5. Gender issues in relation to forest ownership	
4.7. Common pool resources regimes	
·	
5. Forest management approaches for new forest owner types	
5.1. Forest management in Romania	
5.2. New of innovative lorest management approaches relevant for new lorest owner types 5.3. Main opportunities for innovative forest management	
5.4. Obstacles for innovative forest management approaches	
5.4.1. Laws and regulations	
5.4.2. Logistics and access to resource	
5.4.3. Education and training of forest owners	
5.4.4. Biodiversity conservation designation	
6. Policies influencing ownership development / Policy instruments for new forest	10
owners	20
6.1. Influences of policies on the development of forest ownership	
6.2. Influences of policies in forest management	
6.2.1. Legislative and administrative frame of forest management in Romania	
6.2.2. Forest management planning in private forests	
6.2.3. Timber harvesting and transportation	
6.3. Policy instruments specifically addressing different ownership categories	
6.4. Factors affecting innovation in policies	23

7. Literatu	ıre	25
8. Annexe	es	29
	s with detailed description of 11 most important publications	
Figure	S	
Figure 1:	The evolution of forest restitution in Romania	11
J		
Tables		
Table 1:	Forest Ownership in Romania (2012)	8
Table 2:	Ownership data according to FRA categories (2012)	
Table 3:	Status of forest restitution at the end of 2010	
Table 4:	Main trends of forest ownership changes	
Table 5:	Forests owned by not-for-profit organisations	13

Acronyms and abbreviations

APAPET Association of the forest owners and managers from the East of Transylvania

CEPF Confederation of European Forest Owners

COST European Cooperation in Science and Technology Program

CPR Common pool resource regimes

EU European Union

FAO Food and Agriculture Organization of the United Nations

FBO Orthodox Churches from Northern Romania (Fondul Bisericesc Orthodox al

Bucovinei)

FCC Foundation Conservation Carpathia

FEADR European Agricultural Fond for Rural Development

FME Forest Management Enterprises

FMP Forest Management Plan
FOA Forest Owners Association

FRA Global Forest Resources Assessment

FSC Forest Stewardship Council
NFA National Forest Administration

NFI National Forest Inventory
NFP National Forest Programme

NGO Non-Governmental Organization

OED Oxford English Dictionary

PES Payment for ecosystem services

PEFC Programme for the Endorsement of Forest Certification

PFO Private forest owner

PFOA Private forest owners' association

SME Small and Medium Enterprises

WWF World Wide Fund for Nature

1. Introduction

1.1. Forests, forest ownership and forest management in Romania

Romania has entered into communism shortly after the World War II and in 1948 a nationalisation process had started, merging all private properties on lands into collective farms. Compared with other ex-socialist countries. where small private forests survived to the nationalisation process, the Romanian State fully abolished the private ownership on forests. Therefore, during five decades, Romanian forestland was in public ownership, managed by a national forest administration.

After the political changes brought by December 1989 the Romanian forest sector has also entered in a tumultuous process of institutional changes. Three areas are still undergoing institutional transition: restitution ownership; reorganization and consolidation of forest authorities: and opening the sector to foreign competition and investments. Moreover, the economic and political "shocks" that have affected the country since 1990 have also had substantial impact on the forest sector, giving incentives for corrupt practices while diminishing the resources available control for enforcement (IRIS, 2003).

Romania, the private property on forestlands is related to property rights restitution. In the overall context of the transition to the market economy and the EU adhesion, land restitution has been a sensitive issue for the Romanian politicians. The result is a piecemeal approach to restitution, characterised by a gradually increase of the private ownership on forestlands, based on three main restitution laws (1991, 2000 and 2005) although the initial pattern of forest ownership before 1948 has not been retrieved.

According to the latest results of the National Forest Inventory (IFN, 2012) the total area of Romanian forests is 7.8 million hectares, out of which 6.4 million hectares are still referred as the forest fund according to the old criteria used to define a forest before 2008, when the latest Forest Act has defined the forest in a

more flexible manner. The forests distribution by age classes presents a disequilibrium due to historical felling patterns. Especially the age classes higher than 100 years are small (7 %). Nevertheless Romania is still reach in uneven aged forests (21 %) some of them being not managed given their low accessibility. Forest roads density is 6.5 m/ha which represents a major constraint to manage the forest properly (Austropojekt, 2008).

In spite of low effectiveness, the forestry sector is still a significant contributor to the Romanian economy: the forestry sector (including processing) contribution to the GDP ranged between 3,5 and 4.5% in the last 10 years (Abrudan et al, 2009). The total volume of the growing stock was estimated by IFN (2012) at 2,286 M m³, of which 39% beech, 14% oak species, and 30% resinous. The annual growth is estimated at about 34.6 M m³ corresponding to an average growth of 5.6 m³/year/ha. Between 13 and 15 M m³ are harvested annually from the country's forests (which is less than the annual allowable cut, estimated at 18 M m³). The volume of logs available on the market represents 4.2 M m³ softwood logs and 3.5 M m³ hardwood logs.

Romanian forests are also important for their protection, environmental and social value, the percentage of "forests with primary protective functions" increasing from 42% to 52% between 1990 and 2003 even though only 160,429 hectares of forests are strictly protected (2,5%). The existence of primary, undisturbed forests is demonstrated by the presence of the large carnivores, including 40 percent and respectively 60 percent of all European brown bears and wolves. About 10.4% of the national forest area is included in the network of national and natural parks.

1.2. Overview of the country report

The Romanian country report presents the particular situation of the evolution of private forestry in the context of a post-communist country. Private property on forests in Romania is related to the process of forest restitution started in 1991— meaning the

attempt to restore the ownership patterns on forest lands existing before the land nationalisation in 1948. The available scientific studies and official reports integrated in the literature review present the governance of the forest restitution process in Romania as being very problematic, resulting in large areas of disputed and mismanaged forestlands.

Consequently, the land restitution has opened important discussion regarding sustainability use of the private forest resources. The private forestry has been generally perceived in a negative way ("they should be killed" - Dorondel, 2009) given the fact that effects of deforestation and lack of forest management were more visible on private forests. The country report underlines that in spite of highly relevant changes in the ownership patterns, little has changed in the management rights of private owners. The main policy changes favouring private forest management are related to the establishment of private forests administrative units which has offered an alternative to the state administration since 2002, when the first private forest districts have been created.

In the current context of a highly restrictive regulatory framework, new management approaches in private forestry are difficult to implement. Examples exist in the area of private forest administrators established by large scale forest owners, some of them belonging to foreign investors, which have established connections with academia and consultancy companies to adapt their management to different challenges and to innovate in the context of the existing regulatory framework. The report identifies several opportunities for changing the policy framework of private forest management, opportunities enhanced within the frame of the 2013-2015 ongoing debate on the elaboration of a new forest code and the increased lobby power of the private forest owners associations.

2. Methods

2.1. General approach

According to the aims of the country report which is to give a comprehensive overview of forest ownership issues in the country, a mix of methods is applied. They include a literature review, secondary data, expert interviews as well as the expert knowledge of the authors.

Data include quantitative data (from official statistics and scientific studies) as well as qualitative data (own expert knowledge, expert interviews and results from studies). A literature review explicates the state-of-knowledge in the countries and contributes to a European scale state-of-art report. Case examples are used for illustration and to gain a better understanding of mechanisms of change and of new forest owner types. Detailed analyses of the collected data and case study analyses are done in subsequent work steps in the COST Action.

2.2. Methods used

The report has used available information

from literature (academic publications) to answers qualitative data and from official (Ministries, National Institute of sources Statistics, National Forest Inventory, World Bank reports) to answer quantitative questions on forest ownership situation. The literature review, done in the period October 2013- January 2014 concerned more than 40 published articles which represent the quasitotality of the available scientific information published on the topic of private forest management in Romania. The literature review presented in the next chapter summarises the main research approaches relevant to characterise the changes in the ownership structures. attitudes and management approaches.

The experience of the authors in conducting regional studies in the latest 15 years (some of them being based on field work – enquiries with forest owners, forest managers and other categories of stakeholders from forest sector) was useful to deal with case-study examples and overview assessments. However, most of the information is based on existing published works.

3. Literature review on forest ownership in change

The COST Action national representatives aimed to review and compile information on changes in forest ownership in their countries based on scientific and grey scientific literature, including reports and articles in national languages and official statistics, formal guidance or advisory notes from official websites, etc.

The scope of the literature review is as follows:

 Forest ownership change (with a specific focus on new forest ownership types), private forest owners' motives and behaviour, management approaches for new forest owner types, and related policies and policy instruments.

The literature review consists of the following three steps: collection of all literature as defined relevant, detailed description of 10 most relevant publications, and a 1-3 pages summary according to the structure given in the guidelines. The full list of literature includes grey literature, i.e. literature not easily accessible by regular literature search methods (unpublished study reports, articles in national languages, etc.). These references are listed at the end of the report. The 10 detailed descriptions of publications are found in the Annex. The literature review contains the following questions: Which research frameworks and research approaches are used by research? What forms of new forest ownership types are identified? specific forest management approaches exist or are discussed? Which policies possibly influence ownership changes in the country and which policy instruments answer to the growing share of new forest owner types?

3.1. Research framework and research approaches

The evolution of the forest ownership patterns in Romania is strongly influenced by the 1989 from political changes an autocratic dictatorship to a multi-parties system, from a command and control economy to an integrated in the European economy structures. Therefore Romania offers a relevant "natural experiment" to study a dynamic process, characterised by multi-level institutional changes. Despite its huge potential, research regarding forest ownership in Romania can be clustered in few directions.

Several studies focused. using mainly statistical data and ministerial reports, on forest restitution facts and the link between the significant change in forest ownership and the development of the Romanian forestry sector in the transition period (Abrudan et al, 2009, Nichiforel, 2007, Ioras and Abrudan, 2006, Bouriaud et al, 2005). A recent report done by the National Auditing Court (2012) regarding the changing patrimonial situation of forests from 1991-2012 characterises the restitution process as "chaotic and without long-term vision". generating (Mantescu and Vasile, 2009) and opening the room for rent-seeking activities (Nichiforel and Schanz, 2011).

The poor capacity to enforce the forest legislation and to raise forest owners' awareness on sustainable forest significant management resulted in environmental damages in private forests (Abrudan et. al, 2009). While blaming their poor socio-economic conditions, individual private owners engaged in illegal logging activities, due to a slowly administrative reaction to the on-going changes in the property structure (Dorondel, 2009; Bouriaud, 2005). Almost half of the first privatized forest land was clear felled or over harvested (120,000 ha), in a short period of time 2007). The (Nichiforel. Ministry Environment and Climate change estimated that in the period 2000-2012 the illegal logging represented the equivalent of 1000 ha clear cut each year (Varga, 2013). The effects of forest restitution on land use change (Griffiths et al, 2012; Kuemmerle et al, 2009) and on protected areas effectiveness (Knorn et al, 2012) have been also analysed by using remote sensing tools. Another research approach grounded in the

property rights theory and neo-institutional economics looks at the distribution of property rights in private forestry and the link with private forest management (Nichiforel and Schanz, 2011; Bouriaud and

Nichiforel, 2010; Nichiforel 2010; Irimie and Essmann, 2009; Bouriaud, 2006; Bouriaud, 2001). The core idea of the Romanian forest policy system is that forestry activities are strongly regulated, promoting the same rules of forest management in public and in private forests. Withdrawal and management rights in private forestry are restricted and are an outcome of decisions made on the base of academic based technical norms. adapted to the reality of private forestry (Bouriaud and Nichiforel, 2010). Irimie & Essmann (2009) have made an analysis of reciprocal relationship between the evolving forest property rights and the conduct of policy and economic actors. The property rights analysis has been also used to examine the impact of ownership reforms and policy changes on forest utilisation in the CEE region (Bouriaud and Schmitzusen, 2005; Bouriaud, 2005). Based on a comparative study in 6 post-socialist countries it was also concluded that, with few exceptions, the forest owners' have little influence in the forest management planning and harvesting (Bouriaud et. al, 2013)

Based on sociological research approaches several studies have addressed the issue of motives, attitudes and behaviours of new owners as members of forest communities (Mantescu, 2012; Dorondel, 2009; Mantescu and Vasile, 2009; Vasile, 2009; Lawrence and Szabo, 2005) or as individuals (Nichiforel and Schanz, 2011; Nichiforel, 2010). Based on two case studies of community forests from Bukovina region Mantescu and Vasile (2009) reveal the conflicts around the restitution process from an actor-oriented perspective concluding that the property restitution destroyed the social relations not only at the community level, but also at the family level. A similar approach has been taken by Lawrence and Szabo (2005), focusing on attitudes of foresters affected by forest restitutions and the effects by the communities involved. subsequent paper provides an approach to understanding the relations between expertise in forestry science and cultural dependent practices (Lawrence, 2009). Due to failures in managing their forests, after the first restitution law, private forest owners have been generally perceived as "bad guys" in a forestry system in which, for a long period of time, the state was the only one being able to

ensure sustainable forest management (Lawrence, 2009). They have been blamed for natural crises such as the floods in 2004, with the president in power saying that private forest owners cannot be trusted with the restituted forests (Dorondel, 2009). Irimie & Essmann (2009) stressed also the role of incentives and rationales for human actions in the reciprocal relationship between forest property rights and the attitude and conduct of policy actors. The exploration of the intrinsic motivations expressed by Romanian forest owners (Nichiforel, 2010) shows that the values one assigns to the forest, the perception of his/her social status, the understandings of forest related phenomena and the entrepreneurial ability are prevailing elements in taking a certain path of behaviour. All of these studies are based on qualitative research approaches.

The main forest organizations conducting research in the field of forest ownership are the research groups of University Transilvania of Brasov and University Stefan cel Mare of Suceava. The National Forest Research Institute is quasi-absent in this field of research. Social studies have been conducted also by the Francisc I Rainer Institute for Anthropology Bucharest. An important string of research has been conducted in foreign research institutes most notable in the Research Group Postsocialist Land Relations of Humboldt University, Berlin (Stefan Dorondel), the Max Plank Institute for the Studies of Societies, Koln (Liviu Măntescu), ENGREF Nancy (Laura Bouriaud) and the University of Freiburg (Doru Leonard Irimie and Liviu Nichiforel).

Three relevant consultancy projects have been financed in the framework of the World Bank Forest Development Project (2003-2009), which provided a loan of US\$25 million to improve the sustainable management of state and private forests. In 2003, World Bank commissioned a report targeting problems related to Romanian Forest Governance among which corruption and the inefficient selling of timber by NFA have been for the first time directly addressed (IRIS, 2003). In 2007, INDUFOR Oy has launched the report on the "Support to the Establishment and Development of Associations for Local Forest Owners (ALFOs)". The project has proved that both ALFOs established within the

project and ALFOs already existing will need support in the development of their services businesses, especially during the organizing phase of the associations. In 2007, Ministry of Agriculture and Rural The Development of Romania has charged AUSTROPROJEKT Agency for Technical Cooperation, Ltd. to elaborate a nation-wide study on Forest Industry in Romania, aiming to encourage investment in forestry and primary processing industry by identifying current specific problems and future trends and opportunities.

In 2014, the World Bank has financed a rapid assessment of the readiness of Romanian forest sector to adapt to climate change that stresses out the urgent need of financing the sector. The report insists as well on the need to give more freedom to the private sector, in the form of Government interventions for "i) offering guidance for sustainable forest management rather than prescriptive legal and technical requirements, (ii) simplifying rules for administering forests, (iii) providing technical support for innovating in forest management, harvesting and value addition, (iv) offering incentives and opportunities for smallholders to associate and benefit from economies of scale, and (v) improving and extending road access in production forest areas" (World Bank, 2014).

3.2. New forest ownership types

In Romania private forest ownership is related only to property rights restitution which took place starting 1991 and subsequent transactions between landowners. The state has not privatised forestlands by selling it or by means of vouchers. The forestland did not have a spectacular trajectory of land transaction in the first decade of transition because small owners saw the forest as a stable source of income (loras and Abrudan, 2006). In the last decade, given the increase share of private forestry, new forest owners appeared by purchasing restituted forestlands (Curtea de Conturi, 2012) It is perceived that the strongly regulative legislative framework had as consequence a decrease in the value of private forestlands, opening opportunities for companies and individuals to invest in forests acquisitions (Nichiforel and Schanz, 2011).

Research has been done in respect to the changing forestry culture especially in the area of community forestry by comparing the current situation with the pre-nationalisation times. The experience of restitution and privatisation of the administration itself largely influence the values assigned to the forests by the members of the community (Dorondel, 2009; Mantescu and Vasile, 2009; Vasile, 2009; Lawrence and Szabo, 2005).

Authors are not aware of any research conducted/data available on the issue of urban or absentee owners.

3.3. Forest management approaches

New forest management approaches are seldom analysed in Romania even though most of the studies point the need to adapt the management principles to the reality of private forestry (Bouriaud et al 2013: Nichiforel and Schanz, 2011; Bouriaud and Nichiforel, 2010; Nichiforel, 2010; Bouriaud, 2001). Strimbu et al (2005) revealed that while many forest stand attributes were significantly affected by the forest ownership change most of the forest management attributes were not. Therefore, integrating management goals in the forest production system requires first that owners spend efforts in changing the institutional setting of property rights as to gain the right to set new management goals (Nichiforel and Schanz, 2011).

However a new attitude to the former hegemony of forest science is emerging. The 'rightness' of the management norms is being challenged in numerous ways by foresters who can be described as 'negotiating' their way through the new challenges of private forest management (Drăgoi et al, 2013). In other words, they are no longer obedient members of hierarchy, uncritically а implementing the silvicultural regime (Sandulescu et al, 2007).

According to the study done by Austroprojekt (2008), even though the general objectives of the technical norms are considered as being acceptable as they correspond to international standards, the specific objectives are not much operationalised; there are no benchmarks, indicators, time

tables, activity planning, and budgets. Sandulescu et al (2007) examine the potential economic net benefits from timber harvests that could result from changes to the existing sustained-yield policy by comparing the state-approved management plan of a community forest with three alternative forest management plans.

Alternative management opportunities have been assessed also from the perspective of (Nichiforel and individual forest owners Schanz, 2011). Given the extent of deforestation in private forestry (Varga 2013, release), alternative forest press management approaches may be equally or successful than the current more management policies (Griffiths et al, 2012; Knorn et al, 2012; Nichiforel 2010).

3.4. Policy change / policy instruments

The main critique regarding the governance of the restitution process is that it has been done gradually and in the absence of a proper legislative framework (Bouriaud, 2001; Bouriaud et al. 2005). The graduate restitution of forest estates was an important competition between individuals and interest groups: foresters, 'former owners': rural communities, politicians and those concerned with its conservation (Lawrence and Szabo, 2005:1). The land privatization was viewed as an important element in getting the political support of the rural population in the political elections of 2000 and 2004 (Bouriaud 1996, Marzano, 2014).

Despite the relevant changes in the forest tenure and the changes in the organisational framework of the forestry sector, the policy framework is still represented mainly by regulatory means, among which the forest code (Law 48/2008) and additional governmental regulations take a central place (Bouriaud and Nichiforel 2010). Financial instruments apply only in few special cases while informational instruments rely mainly on the involvement of NGOs and development agencies (IRIS, 2003).

The development of the forest policy has

faced a transition from hierarchical top-down processes to more integrated processes. Yet, the formulation of the first forest code (1996) was still based on a limited integration of the newly formed interest groups (private owners, private market actors, environmental NGOs etc) and consequently was influenced by the same actors (loras and Abrudan, 2006). In recent years, increase processes of public participation and transparency can be seen in the formulation of policy and development planning. Yet, opinions vary regarding the influence of different stakeholders in the decision-making process. Abrudan et al (2009) consider that the National Forest Policy and Strategy was developed through open, transparent and participatory processes, coordinated by the public authority responsible for forests. The Austroprojekt (2008)nevertheless study sees participation of stakeholders in policy formulation and review as rather weak: in the past mainly experts have done the job; the establishment of a large sectoral and regional dialogue platform is recommended.

An important institutional milestone in the implementation of new management approaches in Romania after the fall of communism was considered the establishment of the first private forest districts (Abrudan et al. 2009). In 2011, the 132 authorized private forest districts had under administration 1.529 million ha of nonstate forests (23 percent of the total forest area of Romania) - and today situation seems to be similar. Based on a national survey of private forest district managers, Abrudan (2012) explores the main challenges such entities are facing, as an evolving administrative alternative for private forests.

The fostering of forest association has also been related to regulatory means by imposing a minimum area for elaborating a forest management plan (Bouriaud and Nichiforel, 2010). The INDUFOR study shows that especially the small ALFOs are really starting from scratch when it comes to organizational skills (management and administration) and the un-readiness to rush into comprehensive and financially risky interventions when it comes both to services and business.

4. Forest ownership

The aim of this chapter is to give a detailed overview of forest ownership in the country. The most detailed information on national level is often structured in different ways in different countries. In order to show the most accurate information, it was decided to use the national data sets in the country reports. In order to make this information comparable still, the information is also collected in an international format which is used in the Forest Resources Assessments by FAO. The transfer from national data sets international definitions is, however, always easy. This report therefore critically assesses in how far the national categories and definitions may be transformed into the international FRA data structure or in how far there are inconsistencies between them.

4.1. Forest ownership structure

4.1.1. National data set

Forests and other wooded land classified as "publicly owned" comprise land that belongs to the State, either at the central or provincial level (counties), as well as communal forest land owned by communes, cities and municipalities.

"Privately owned" forests comprise areas owned by persons and families either individually or under some form cooperative arrangement, by forest industries or by private organizations, i.e. private corporations, co- operatives or institutions (religious, educational, pension or investment funds. nature conservation societies) (Schmithüsen and Hirsh, 2010).

According to the Romanian Forestry Code from 2008, the following classification applies when characterising forest ownership in Romania:

- A. Public ownership (see also definitions above by Schmithüsen and Hirsh, 2010)
 - A1. State owned forests, managed by National Forest Administration Romsilva (NFA)
 - A2. Municipal forest forests owned by administrative units (communes, municipalities, cities, towns), managed by the private forest districts or by NFA
- B. Private ownership
 - B1. Individual owners- forest owned by individuals and families
 - B2. Community forests: composesorates (obsti) and other community forests. Composesorate is an undivided group ownership association within which owners could not physically locate their individual forestland, however they can demonstrate with documents that they own the forest in common. Owners receive every year dividends according to land enclosed in the association.
 - B3. Other institutions: Churches and monasteries; associations and foundations; other moral entities.

Providing exact figures on the forest ownership structure in Romania is difficult as the restitution process is still not finished and consequently slightly different figures are presented in latest official reports.

Table 1: Forest Ownership in Romania (2012)

Ownership forms	Area (1000 ha)	% Area
A1. Public property of the state	3350	51
A2. Public property of administrative units	980	15
B1. Private property of individuals	1274	20
B2. Private property of communes – indivisible	744	11
B3. Private property of legal entities	172	3
Total	6520	100

Sources: INF (2012); WB (2014)

4.1.2. Critical comparison with national data in FRA reporting

The FRA national report presents data at the level of 2005. Given the fact that in Romania

the latest restitution law if from 2005 the data reported differs substantially from the current situation. The ownership categories in the FRA template can nevertheless be completed with the latest official data. It has also to be noticed that the results of the National Forest Inventory (IFN, 2012) present nevertheless a different figure for the forest area (6.73 mil ha) compared with the official

figure of what it is considered forest fund and which is also presented in the FRA report (6.39 mil ha).

Table 2: Ownership data according to FRA categories (2012)

FRA 2010 Categories	Forest area (1000 hectares)	Forest area (1000 hectares)	
	2005	2012	
Public ownership	5090	4330	
Private ownership	1301	2190	
of which owned by individuals	688	1274	
of which owned by private business entities and institutions	613	172	
of which owned by local communities	0	744	
of which owned by indigenous / tribal communities	0	0	
Other types of ownership	0	0	
TOTAL	6391	6520	

4.2. Unclear or disputed forest ownership

The report done by the National Auditing Court (Curtea de conturi, 2012) regarding the changing patrimonial situation of forests from 1991-2012 identifies that 0.56 mil hectares of forest have been illegitimately restituted (representing 10% of the privatised forests). At the end of 2010, 1983 law suits were still undergoing to clarify the ownership status of another 0.66 mil hectares (which represents almost 10% of the national forest area). The report presents multiple cases where the

juridical system has granted unlawfully land title by restituting forest to alleged heirs of previous owners based on outdated/fake documents, to associations which in 1948 were given administrative rights and not property rights, to owners who before 1948 have lost the property rights in favour of the state (as guarantee for credits from financial state institutions) or by giving a larger areas than the one owned in 1948 (e.g. applying for the same area in two different counties). There are also reported cases where the same area has been restituted to 2-3 different persons.

Table 3: Status of forest restitution at the end of 2010

		Forest fund (ha)							
Ownership form		Requested for restitution between 1991-	Validated through administrative	Restituted	Restituted I	Not-restituted	according to the law:		
		2010	procedures			18/1991	1/2000	247/2005	
State forest, managed by the NFA	1.879.000								
Privat forests of individuals	1.516.000	1.906.000	1.352.000	1.213.000	139.000	9.000	44.000	86.000	
Commune forests (composesorate, obsti)	1.330.000	1.515.000	801.000	736.000	65.000		26.000	39.000	
Forests of municipalities and institutions	1.761.000	1.503.000	1.142.000	1.111.000	31.000		10.000	21.000	
out of which:									
Religious and educational institutions		428.000	154.000	144.000	11.000		1.000	10.000	
Municipal forest of administrative units		1.075.000	988.000	967.000	20.000		9.000	11.000	
TOTAL	6.486.000	4.924.000	3.295.000	3.060.000	235.000	9.000	80.000	146.000	

Source: Curtea de conturi (2012)

The most epic and long lasting ownership dispute is on the forestland that belonged to the Orthodox Churches from Northern Romania (Fondul Bisericesc Orthodox al Bucovinei- FBO). A group of individuals and organizations has been recognised as representing the former FBO. They claimed 350 thousand ha of forests mostly in Suceava

county, currently managed by NFA. The dispute is related to the status of the former FBO as "owner" as alleged by the actual foundation or as "administrator" as claimed by the state representatives. The litigation is in the Courts procedures from more than 15 years now, with several decisions done at different jurisdiction levels.

4.3. Legal provisions on buying or inheriting forests

4.3.1. Legal restrictions for buying or selling forests

The legal restrictions for selling the forestlands varies based on the type of ownership. The public property cannot be sold. In the early stages of the restitution processes, many abuses have been reported regarding the selling of community forests (composesorate, obsti). Therefore, a law established after 2001 that the community forests cannot be sold (they are unalienable).

For the private forests a pre-emption right (in favour of, in order: the renter, the neighbour, the local inhabitants, the family, the State) applies, meaning that the owner is obliged to send an official notice about his/her intension to sell. If no reply is received in 30 days the owner can find another buyer. Nevertheless National Forest Administration has seldom used this right, blaming the lack of financial resources or the lack of official procedures. The case of University of Harvard, owner of 32000 hectares of forest in Romania, is largely presented in the media as the investors decided to sell the entire forest since more than 600 ha of the area are disputed in court. NFA did not used its preemption rights in this case.

Since January 2014, the 7 years moratorium prohibiting the right of non-Romanian citizens to buy land has ended (as established when Romania entered the European Union in 2007). Since 1st of January 2014, any foreign citizen can acquire land on the free market in Romania, after the pre-emption right rule is observed. However, the law establishing the procedures for such transition is still disputed between the Parliament and the president.

4.3.2. Specific inheritance (or marriage) rules applied to forests

Specific inheritance rules apply only in community forests. According to the legal statute of the community forests, there are two distinct situations:

 the right to own forests belongs to the persons as long as the person is living in the village (community). When the

- persons establish his residence in other places, he loses the right to own forests. Further, this right is transmitted to new comers in the village, or, more often, the right will be shared amongst the remaining commoners;
- 2) the right to own forest in community forests cannot be loss, and cannot be transmitted besides to the inheritors. In this case, when a person dies without inheritors, the inheritance passes normally to the state.

Different situations may exists, however, as far as the restitution law states that the functioning of the community forest is regulated by the statute in force in the year 1948.

There are now other specific inheritance rules for the forests belonging to individuals.

4.4. Changes of the forest ownership structure in last three decades

4.4.1. Changes between public and private ownership

In 1948 a nationalisation process has started, replacing the private property on lands with collective farms. The process has resulted in forced "collectivization", since wealthier peasants generally did not want to hand voluntarily over their land (Kilgman and Verdery, 2011). In the last two decades, the transformations in the property rights system led to important changes in the Romanian forestry sector. The forestland restitution took place gradually, based on three main restitution laws that resulted from important political debates:

- 1) According to the first restitution regulation (Law 18/1991), only individual private pre-1948 owners of forests received one hectare of forest per person. Approximately 353000 hectares of forest (5,5%) were returned to more than 400.000 individual owners (Nichiforel, 2007); about 9000 hectares are validated under this law but not restituted given ongoing court disputes.
- The second restitution law (Law no. 1/2000) sets restitution limits at: 10 hectares for individuals, all areas for

previously owned forest in case of towns and villages, all area for forest in case of communities (or maximum 20 hectares per community member) and at maximum 30 hectares for churches and schools. Protected forests were exempted from restitution. More than 2 million hectares have been claimed under this law, thus increasing the share of non-state forest to 35%. About 80000 hectares are validated under this law but not restituted given ongoing court disputes.

3) The last restitution law (Law no.

247/2005) aims to re-establish the prenationalisation ownership structure and according to its provisions all forest (including protected areas) should be restituted to the former owners irrespective of size. location and ownership type. At the end of 2010, 47% of the Romanian forests were in non-state ownership and it is foreseen that, at the end of the restitution process, approximately 60% of the country's forests will be owned by other owners than the state (Abrudan et. al, 2009).

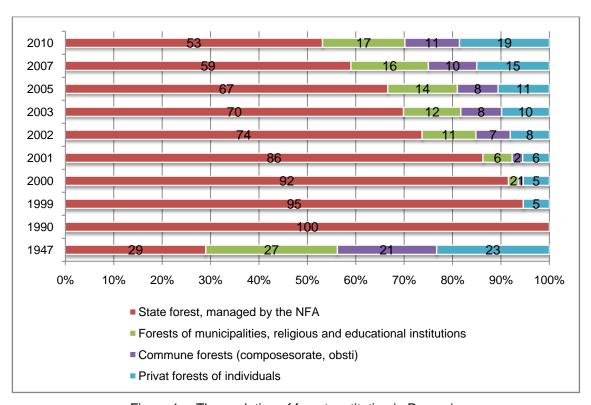


Figure 1: The evolution of forest restitution in Romania

4.4.2. Changes within public ownership categories

public ownership categories are represented by the state owned forests managed by National Forest Administration Romsilva (NFA) and by municipal forest (15%) - forests owned by administrative units (communes, municipalities, cities, towns), managed by the private forest districts or by NFA.

As described above all areas for previously owned forest in case of towns and villages have been restituted based on the Law 1/2000 which makes that currently 0,98

million hectares (15% of the total forest area) are currently in the property of 1399 municipalities (IFN, 2012). Some of the municipalities with significant forest areas have established private administrative forest units (e.g. the forest of the municipalities of Baia Mare and Sighisoara which also got the FSC ® certification).

4.4.3. Changes within private forest ownership

Besides the changes in private forestry occurring as a result of the three restitution laws previously described (4.4.1) relevant

changes in the structure of private ownership occurred as part of subsequent transactions between private forest owners. Especially large forest estate have been of interest for private investors and financial funds. In 2010 seven large private forest owners from Romania (especially with private foreign investors) established their own association -Proforest - The Association of the Large Forest Owners from Romania. Association intends to play an important lobbying and commercial role in the Romanian forestry sector (World Bank, 2014).

4.4.4. Main trends of forest ownership change

Across Europe, the following drivers for ownership changes had been identified in the COST Action:

 Privatization, or restitution, of forest land (giving or selling state forest land to private people or bodies)

- Privatization of public forest management (introduction of private forms of management, e.g. state owned company)
- New private forest owners who have bought forests
- New forest ownership through afforestation of formerly agricultural or waste lands
- Changing life style, motivations and attitudes of forest owners (e.g. when farms are given up or heirs are not farmers any more)

As described above (4.4.1) the main trends related to ownership changes refers to the restitution of forest lands which resulted in the fact that in the last 20 years half of the forest land has changed its ownership status (table 4).

Table 4: Main trends of forest ownership changes

Trends in forest ownership: New forest ownership through		
 Privatization, or restitution, of forest land (giving or selling state forest land to private people or bodies) 	3	
 Privatization of public forest management (introduction of private forms of management, e.g. state owned company) 	3	
New private forest owners who have bought forests	2	
New forest ownership through afforestation of formerly agricultural or waste lands	0	
Changing life style, motivations and attitudes of forest owners (e.g. when farms are given up or heirs are not farmers any more)	1	
Other trend, namely:		

^{* 0 (}not relevant); 1 (to some extent); 2 (rather important); 3 (highly important)

An important changes in the private forest management was the privatisation of forest administration with the establishment, in 2002, of the first private administrative district. According to Abrudan (2012), 132 private forest districts were authorized by the public authority responsible for forestry at the level of 2011. They have under administration 1.529 million hectares of forests which are not public (23 percent of the total forest area). A more detailed description of the forest administration is described in subchapter 5.1.

The increase share of private property resulted in the fact that large forest owners appeared. Some of the large estates have been purchased by foreign investors who brought the know-how in private forest management and established connections

with academia and consultancy companies to adapt their management in the context of the existing regulatory framework.

4.5. Gender issues in relation to forest ownership

Desegregate ownership data based on gender do not exist in the official reports nor in the literature review.

4.6. Charitable, NGO or not-forprofit ownership of the forests

This section is concerned with forests owned by organisations such as conservation and heritage NGOs, self-organised communitybased institutions and other philanthropic ("Characterized or motivated by philanthropy; benevolent; humane" OED) organisations. The management objective for these forests is usually to deliver social or environmental aims with maximisation of financial or timber returns as a secondary concern. Most owners are corporate and may invoke at least an element of group or participatory decisionmaking on management objectives and high ethical standards. It is possible for such ownership to be entirely private. However, the provision of public benefits (services (e.g. biodiversity, amenity, recreation etc.) which are free for everyone to enjoy or provide benefits to local communities (employment for disadvantaged people etc.) are sometimes recognised in the form of charitable registration. This in turn puts restrictions on the rights of the owners to use profits and to dispose of assets in exchange for tax exemptions and access to charitable funding.

The not-for-profit ownership of the forests in Romania is a new concept which provides only disparate examples (table 5). The main organisation which has claimed forest given their charitable status is the church. They have been successful in getting 30 hectares of forest for each parochial community given by the law 1/2000 which makes that today the churches and monasteries own around 140,000 hectares of forest in Romania.

Table 5: Forests owned by not-for-profit organisations

Forests owned by	Yes	No	Uncertain
Foundations or trusts	X		
NGO with environmental or social objectives	X		
Self-organised local community groups		Х	
Co-operatives/forest owner associations			X
Social enterprises		X	
Recognized charitable status for land-owners	X		

The Foundation Conservation Carpathia provides a first example on the interest to acquire private land with the aim of protecting their biodiversity or restoring their natural ecosystem (see below the case study box).

The first forest planted by an NGO was established in 2010 by the Association ViitorulPlus. They have planted 37 ha of forests on public degraded land.

In July 2014 the NGO has reported that 8 ha have reached the canopy closure and have

been declared as forests (www.viitorplus.ro/inaugurarepadureviitorplus).

Some examples of Payment for ecosystem services (PES) can also be identified when the NGOs get involved in the acquisition of the rights to restrict the harvesting of forest stands. For example, WWF has offered the municipality of Sinca Noua an annual payment in order to keep the pristine forest untouched from forest operations.

CASE STUDY 1: FOUNDATION CONSERVATION CARPATHIA (FCC)

The Foundation Conservation Carpathia (FCC) implements a project which aims to buy approximately 200 hectares of forests that have never been cut and where the natural tree composition and age structure is still intact. The aim is to make sure that these forests obtain complete protection by stipulating a non-intervention approach in the Management Plan for the Natura 2000 site Muntii Fagaras. Another focus is on purchasing approximately 400 hectares of clear-felled areas and 1,000 hectares of managed/planted forests which will allow FCC to take all the measurements necessary to restore the natural ecosystem.

The project is co-finananced via the EU's financial instrument supporting environmental, nature conservation and climate action projects - Programme LIFE+ namelly the EU LIFE11/NAT/RO/823 Ecological restoration of forest and aquatic habitats in the Upper Dimbovita Valley, Muntii Fagaras.

Source: http://www.conservationcarpathia.org/life en/index.php?lg=en

4.7. Common pool resources regimes

Commons - forest common property regimes (CPR) are resource regimes where property

is shared among users and management rules are derived and operated on selfmanagement, collective actions and selforganization (of rules and decisions). Examples of traditional CPR regime are pastures, forest land communities in Sweden, Slovakia, Romania Italy and other European countries or irrigation systems in Africa or Asia. The number of new common property regimes is growing and it is challenge of this Action to transfer knowledge and skills of traditional CPRs to new CPRs and vice versa. Example of new CPR regime is community woodlands in UK, established in last 20 years mainly in Scotland, Wales. Our interest in traditional and "new" common pool resources regimes (CPRs) in European forest, is based on the understanding that robust resource

regimes are critical for sustainable forest management regardless of the property rights. Ongoing practice shows that local land users (without ownership share) leased use agreement may also be CPR regime if they have the rights to determine management rules typical for commons (e.g. organisation and shared rights and responsibilities). Thus proper rules management (harvesting, decision making and conflict resolution mechanism. cost/benefit sharing, sanctioning etc) are key for sustainable use of CPR regimes.

CASE STUDY 2: OBSTEA TULNICI

Localisation: centre of Romania (middle of the Carpathian Mountains), county Vrancea, municipality Tulnici, village Tulnici.

Area: 13058.3 hectares

Number of members: around 2000

Obstea Tulnici is an ancient forest owner who appeared probably in the year 1450, when the provincial king granted forest, agricultural and pasture land to the villagers. In exchange, the villagers engaged themselves to provide defending services, e.g. provide soldiers in the local kingdom army, and provide a permanent watching of the province border. The ownership title given to villagers in 1450 by the king Stefan cel Mare was recognized and respected during five centuries, until the socialist land nationalization occurring in 1948.

Forest management in the past. Before 19th century, the lack of infrastructure (roads) preserved the forests that were managed in a close-to-nature way, with selective cuttings based on villagers' needs (fuelwood and rural buildings). In the period 1905-1928, when large companies occurred in Romania, a large part of the forests was clear cut, but only a small share was reforested. In the period 1930- 1948, the timber extraction was limited again to supply the villagers needs, the most beautiful individual trees being extracted, mostly silver fire and Norway spruce. At that time, the lack of afforestation work, the practice of oak branch cutting for husbandry, grazing into the forests and a forest fire in 1945 which destroyed 900 ha lead to a high degradation of Tulnici forests. After nationalisation, the implementation of forest management plans established since 1951 has improved forests, managed mostly as even-aged stands, naturally regenerated.

Management regime after the forest restitution. Obstea Tulnici has been re-created in the year 2000 after the enactment of the second law on land-ownership restitution (Law 1/2000 for recognizing the property rights on agricultural and forest lands). In December 2002 (ownership title 709/2002) Obstea Tulnici received back 13058.3 ha, all of the forestland being situated in the area of the Tulnici municipality.

Initially, the Obstea effort to get back the forests was leaded by a steering group "Initiative Committee" of 30 persons who elected a president acting in the period 2000-2002. In 2002 the Administration Council (five members and one president) is elected through secret voting for a period of two years. The General Assembly of Obste Members decides in 2002 that Obstea will create its own forest administration unit (private forest district) and each family member of Obstea Tulnici will receive per year 3 cubic meters of firewood and 1 cubic meter of coniferous wood. The private forest district Obstea Tunici is created in September 2004. The villagers started to be unsatisfied with the forest management regime that allow them a small quantity of wood, while intensive harvesting activities are undertaken in the Obstea forests, and the Tulnici mayor' sawmill seems to flourish while the rights to harvest timber are granted by the Council to various firms at a very low price. This is the first conflict brought by the management of common forest of Tulnici Obstea. The second one was opened when the forests of Obstea Tulnici where included in the Natural Park Putna-Vrancea created by the Governmental Decision 2151/2004. The new protected area came up with strict regulations and between 2004 and 2006 the villagers did not get their timber rights, while the sawmills were taking all the timber extracted from the forests. Therefore, in 2006 association members organised new elections. The town mayor (owner of sawmill) has his own appointed candidate, and supported him through the distribution for free of firewood from his sawmill. Surprisingly, at the election the villagers have chosen as president another candidate, a forest engineer who was the chief of the forest private district Obstea Tulnici. The new president invests in infrastructure, sells the timber at a higher value, and increases the local competition in bringing for harvesting new firms (up to then the harvesting was provided only by the Tulnici mayor's firm). As results, the private forest district was able to provide the quantity of 3 cubic meters firewood and 1 cubic meter coniferous timber for each member of the Obstea families (previously, each family received this quantity). The president was re-elected and led the Obstea Tulnici organisation and the private forest districts managing the Obstea forest until the elections from 2010. Unfortunately, the president elected in 2010 sells the timber at low prices again, the Obstea Tulnici borrow large quantities of wood from the local firms to pay the villagers rights, putting the Obstea in a very difficult financial situation again.

Opinions, attitudes and expectations of Obstea Tulnici members. A questionnaire was conceived and implemented in 2012 by the USV team with the idea to identify opinions and expectations of Obstea Tulnici members regarding the management of their forests. A number of 52 persons answered 15 questions.

At the moment when they received the forest back, in 2002, most of the members (57%) have not particular expectations from forests (income, timber), considering that owing forest is more related to community value than to monetary benefits. However, when asked "which are the advantages that owning forest brought to you", 67% of the expressed options make reference to firewood and to wood for buildings. Surprisingly, the answers to the next question, "in your opinion, why the forest is important" show a clear perception of villagers about the forest services and products, other than timber –related. Thus, the first two options, "forest is important for tourism" and "forest is important for people's health because it provide clean air", got each of them 33 answers from the total that means 22% for each. On the second place, the forest is important for mushrooms and berries (16%), but also for hunting and for climate change mitigation (7% of the preferences each). Overall, non-timber services cumulate 76% of the expressed options, while timber-related benefits 24%.

The answers given by 54 people to the question "Which were the problems you have had in managing your forests in the latest 5 years" (open-answer question) conveyed the villagers concerns about the forest management applied by the representatives of their organization. Thus, the answers received are classified as follow:

"massive deforestation, illegal deforestation, massive cuttings, timber robbery, excessive cuttings, illegal cuttings and massive cuttings, the non-respect of the forest legislation" cumulate 26 options, e.g. 47%;

"too much timber business, exaggerate importance of timber production, involvement of politics in the Obstea problems, political influence in forest management, lack of communication between the Obstea representatives, and Obstea members" cumulate 10 options, e.g. 18%;

"I do not know, the problems were not made public, I did not have problems" cumulate 19 options, e.g. 35%.

The high share of individuals who have chosen not to mention the problems is an indicator of the conflicting situation inside Obstea Tulnici. The problems mentioned by 46% of the respondents are the ones we have identified above: mismanagement, corruption-related issue, un-transparent management of Obstea forests, strong political influence (via Tulnici mayor) over the management of the timber resource and mostly over the timber selling.

Finally, the members were asked to evaluate the management of the forests inside the Obstea community (open-answer question). The answers received (53 in total) are classified as following:

- positive evaluation: acceptable, good, beneficial, satisfactory cumulate 11 options, e.g. 22%;
- negative evaluation: bad management, a lot of deficiencies, a disaster, very bad management, illegal management, not adequate, negative, bad organisation, the representatives of Obstea follow only their personal interests, cumulate 39 options, e.g. 72%
- not answered: 3 options, e.g. 6%.

Therefore, despite of their reluctance to nominate the Obstea management problems, a majority of respondents negatively evaluate the management of community forests.

Source: Laura Bouriaud, bouriaud@usv.ro

5. Forest management approaches for new forest owner types

The Action is interested if there are any new forest management approaches specifically address new forest owner types, or that could be particularly relevant for new forest owner types. We are aware that there is not much awareness for this and that there is not much literature available, however, we are convinced that this is an issue: if owners have different goals for their forests there must be new kinds of management, if they have not the skills any more to do it themselves then there must be new service offers, etc. There are assumingly implications in silviculture, technology, work organisation, business models, etc. Such new approaches may be discussed under the key word of new ownership types but often not.

5.1. Forest management in Romania

The forest owners are obliged to manage their forests within an authorised forest district. Three alternatives are possible:

- The owners can create their own forest district. The rule recently abolished has required a minimum surface area, e.g. the forest owners should hold, individually or in association, at least 3.000 hectares in plain area, 5.000 hectares in hilly area, and 7000 hectares in mountains. This was an important impediment for creating private forest districts.
- The owners can also conclude administration contracts. The territoriality principle applies: the administrator should be the forest district which is closer to the location of the forest owned.
- The owner can also conclude contracts for various forest services with a services provider for ensure the forest guarding, the forest regeneration, the forest management planning (principle of territoriality applies again: service provider is the forest district closer to the forest owned).

According to their legal status the forest districts are:

- public forest districts, which belong to the manager of the public forests Romsilva:
- public forest districts which manage the communal (municipalities') forests;
- private forest districts, which have the statute of associations or foundations.

The first private forest district has been established in 2002 as an administration entity responsible for the administration and management of a local community forest. Currently private the forest districts administrate about half of the private forests in Romania (Abrudan, 2012). The rest are administrated by public forest entities or they are not administrated. Especially the small parcels resulting from the first restitution law are not administrated. In total, 560 thousand ha of private forests are not under any form of administration (Raportul Curtii de Conturi, 2012).

Based on a survey conducted with 88 managers of private forest districts Abrudan (2012) identifies three most frequent problems in the relationship of PFD with the forest owners: the poor understanding of forestry by the new forest owners, the political and economic pressure on forests and management and not-fulfilling of the financial obligations of the administration contract.

5.2. New or innovative forest management approaches relevant for new forest owner types

There are no published results on new forest management approaches applied in private forestry. Considering the limited involvement of owners in deciding on the management objectives of their forests, the implementation of new management objectives often relies on processes of institutional changes at the bureaucratic or political level (Nichiforel and Schanz, 2011). In practice this is translated on the fact that in order to get financial benefits from their forests, owners adhere to bureaucratic procedures meant to legalise the harvesting. This has transformed for example

the use of sanitation cuttings as one of the main forest operations in small scale private forestry as long as the forest owner can convince a forest technician that the wood is getting dried even though in many cases it is not. Obviously that corruption plays a role in this context (Bouriaud and Marzano, 2013).

The national financed project INFORMA (Institutional entrepreneurship and impacts on sustainable forest management in Romania: www.silvic.usv.ro/informa) has identified three directions of entrepreneurial approaches in private forestry: productive, institutional and predatory entrepreneurship. The first two approaches have an important innovative component and take various forms of investments from investments in silvicultural works to lobby activities. The identified categories are in the process of being empirically validated.

Examples of good practices may exists, such as the marketing of timber based on single logs, introduction of forest certification or marketing of non-wood timber goods and services, however the forest management appears to be dominated by a bureaucratic decision-making system, with few connections to the market.

Attitudes towards the adaptation of forest management practices vary according to the type of property, its size and the unit providing forest administration. Thus, forest of communities are perceived to perform better in term of the responsible use of the resource with the notable example of some private forest units which got their forests FSC certified. The increased implementation of forest certification in private forests shows that voluntary instruments are accepted as a private solution to prove that management may be done in a responsible way. Certification has actively contributed to a better understanding of the role of safety environmental concerns issues. and community involvement in forest related decisions.

The private forests districts established by foreign investment funds to manage their forests provide also examples of modernization the technical of works conducted in their forests from more intense silvicultural practices to investments in forest roads and technical machineries. At the other extreme, individual forest owners, given the

small size of their property and the lack of associations, are less interested in a sustainable use of the resource, contributing with an important share in the private forests deforestation rate. This had an impact on the general perception of private forestry in the country, which for many years was highly negative image both from the foresters itself, the civil society and from some politicians (Bouriaud and Marzano, 2014; Dima, 2013; Muresan, 2011; Lawrence, 2009; Lawrence and Szabo, 2005).

5.3. Main opportunities for innovative forest management

The discussions regarding the elaboration of a new Forest Code: according to the Romanian law formulation rules, the process of producing a new forest law is characterised by multiple level negotiations amongst forest sector officials, politicians, and civil society representatives. In our experience, the negotiation for a new forest law are an effective way of participation and an opportunity for eventual substantial changes, while the other policy processes associated with decision—making in forest sector are not.

increased association of forest owners and of forest administrators and consequently of their lobby power. As reflected in many scientific articles published after 90's, Romanian forest policy is ignoring the specificities of private forestry. As concerned as they are to improve their daily operational legal environment, representatives of private forest owners and private forest administration units have along the time performed an intensive lobbying for changes in the legal frame. Two forest owners associations (Nostra Silva and Proforest) have been active in bringing on the political agenda measures supporting private forestry.

The discussions regarding EU financial schemes 2014-2020 supporting private forests resulted in the creation of the first lobby groups aiming to influence the inclusion of private forests as possible beneficiaries of the financial schemes. This has launched a discussion of possible means to finance forest owners for new management approaches which could be possible in the

current legal framework. At the moment the financial scheme approved by the government still excludes private forest owners from the possibility to access financial support for forest management, nevertheless active protests are currently ongoing. In May 2014, the forest owner association Nostra Silva has organized a five day protest in Strasbourg asking for the inclusion of private forests in the EU financial scheme 2014-2020.

The foreign investments in forest land acquisition: the investment requires clear, long-term rules about the forest management in order to do a profitable business. Forestland management business plans requires transparent and clear decision-making system, being less compatible with public bureaucracy and corruption. Managers of the acquired forestland have the obligation to produce profit, and often they are constrained to find innovative measures in order to obtain the expected results.

Training and capacity building projects implemented to support the management of private forests are a source of know-how transfer. Besides the projects implemented by the World Bank (see subchapter 3.1) capacity building projects targeting private forestry have been implemented by WWF and forest research organisations. Currently the Swiss Centre for Mountain Regions is implementing a project with a duration of tree years (2014-2016) which aims to strengthen the capacities of forest owners associations in order to 1) develop organizational strength, so that they become more efficient and gain higher internal cohesion 2) develop management skills that respect certification standards (PEFC and/or FSC) 3) create networks with other key players and 4) improve lobbying and policy-making in order to claim proper enforcement (e.g. proper establishment of management plans and implementation of them).

5.4. Obstacles for innovative forest management approaches

5.4.1. Laws and regulations

Forest owners' needs are not taken into consideration in forest policies: In practice,

the forest engineer's regular activities are based on 8 volumes of technical standards, covering all fieldworks needed in forest, from planning management and forest measurement to afforestation and forest harvesting. They were revised several times, but few changes occurred, compared with the changes in the general legislation. Although they are too detailed and too technical, in practice the control of law implementation is often based exactly on the "rule of technical standards". Therefore the forest engineer's flexibility of decision in the field is strongly limited/regulated (Bouriaud and Marzano, 2014; Bouriaud et al., 2013; Nichiforel and Schanz, 2011; Bouriaud and Nichiforel, 2010; Nichiforel, 2010; Lawrence, 2009).

Lacking the interest in forest policy the forest owners are also paying for their incapacity to address technical issues raised by the forest management. Yet the management plans which are the basis for all works carried out into the forests are produced according to a set of technical standards by specialized companies approved by the forest agency and forest owners have no word to say.

Lack of forest law enforcement leads to illegal logging: the main aspects of illegal logging are related to various means to avoid the highly restrictive legal framework which leads to not well-established or implemented management plans, involving: overestimating the age of trees (in order to cut them sooner). altering the stand density in order to apply to clear-cuttings, presumably followed afforestations works, which never took place, or salvage cuttings applied to healthy and vigorous trees (WWF 2005). Incorrect estimations of wood volume and quality, illegal harvesting, and illegal transport and export are also factors and means to promote illegal fellings.

5.4.2. Logistics and access to resource

The forest infrastructure is among the poorest in Europe which restricts the process of introducing modern forest technologies and practices in harvesting and silviculture. The road density is very low (6.2 – 6.5 m/ha) which results in the fact that many forests are still untouched or with limited management interventions due to high forestry operation

costs. While on the good side this turns in the fact that Romania still holds important area of pristine forests on the other side this limits the available harvesting quota in productive forests which are not accessible by the forest road network. It is to be mentioned that each year about 1.5- 2 M m³ are not harvested being located in remote areas (Austroproject, 2008).

5.4.3. Education and training of forest owners

Forestry high schools and the higher education institutions provide the technical staff employed by the sector and also carry out forestry research. The recent "inflation" of graduates of both medium and higher education institutions has impacted both positively and negatively on the development of the forest sector. The negative effect resulted from the lower level of knowledge of the graduates (Abrudan et. al. 2009) and the lack of entrepreneurial skills. There is need for technical training at all levels of forest agents, private forest owners, harvesting companies, private wood processing companies etc. Government forest agents are

not any more a kind of administration body, but are confronted with various duties of high responsibility in modern Romanian society. In addition to technical, financial and structural issues, the restitution process evokes complex social challenges with private forest owners. Forest Inspectors need specific qualifications to cope with this situation (Austroprojekt, 2008)

5.4.4. Biodiversity conservation designation

Forest owners organisations have been less involved in most of the processes, programs and activities related to nature conservation in the last decade. Consequently, there are examples of negative cumulative effects of harvesting on water quality, flora and fauna. However, in the last decade foresters have increasingly become more open to the dialogue with conservation organizations and the general public on nature conservation issues. Forest certification processes in private forestry will certainly improve the nature conservation skills as well as the cooperation with other stakeholders.

CASE STUDY 3: APAPET – THE ASSOCIATION OF FOREST OWNERS AND FOREST ADMINISTRATORS IN EAST TRANSILVANIA

The Association of the forest owners and managers from the East of Transylvania, APAPET, (Asociatia Proprietarilor si Administratorilor de Paduri din Estul Transilvaniei) is a private entity, established in 2012 to stand for the economic, technical, commercial and social interest of its members in relation to public authorities and other juridical persons at the national and international level. Under its umbrella seven independent forest management enterprises, FMEs (Ocolul Silvic) and 5 unions of forest owners are gathered. The contractual management of forests by either governmental or private FMEs is mandatory under the Romanian law (46/2008, art. 10). Each of the FMEs has contractual agreements with a certain number of forest owners (FMUs) which are split in private owners, communal owners and compossesorates, an undivided common ownership type. The FMEs are responsible for management and protection of the forest.

All forestry activities, e.g. planting, harvesting inventory etc. are planned and supervised and monitored by the FMEs in compliance with the Romanian Technical Norms for forestry which are obligatory. The actual work is then carried out mainly by private companies that need to be testified by the Romanian Ministry of environments and forest. The sale of the timber is done either on the stump or at the road side, after having the trees cut by FMEs or directly by the forest owner.

The association has successfully applied for group forest certification a peculiar form of certification which puts the associations as a monitoring association for the implementation of FSC ® principles and standards among its members. This can be considered as an organisational innovation as it has substantially reduced the cost of certification at the level of individual owners and has strengthen the relation between the administration and the owners

The FME Gheorgheni, part of APAPET has also become the first private administrator of a Natural Park braking the monopoly of National Forest Administration.

6. Policies influencing ownership development / Policy instruments for new forest owners

Policy and ownership are related in various ways: Policies directly or indirectly influence ownership development or even encourage or create new forms of ownership; and policy instruments are emerging that answer to ownership changes, including instruments addressed to support new types of owners e.g. through advisory services, cooperative or joint forest management, etc.

6.1. Influences of policies on the development of forest ownership

The main process influencing the of ownership is still development the implementation of the restitution of forests to their former owners. The audit undertaken by Romanian Court of Accounts (Curtea de conturi, 2012) pointed out a long list of law trespassing situations associated to the implementation of forest restitution laws. According to this report that there are more than 0.5 million hectares of forests (e.g. 7.8% of the national forest area) in different phases of litigation in the Courts for clarifying their ownership status. Currently, there are no other policy actions or initiatives to change the forest ownership structure.

The Forest Code from 2008, still in force, tried to impose an inheritance right in favour of one order inheritor, to avoid forest fragmentation. The rule was changed immediately, with the justification that the forest code (a sector-based, inferior law) can not regulate an issue that belong normally to Civil code (a basic law of the society). The Code Forest attempt to avoid forest fragmentation was the third one. The first two attempts were rejected in the same way. In other words, there is no means to avoid the fragmentation of forest parcels due to inheritance process.

Instead, the pre-emption right was instituted by the Forest Code from 1996 and it was maintained approximately the same in the Forest Code from 2008. In its formulation from 1996 and from 2008, the pre-emption right is maintained in the favour of the State who exercises it through the public forest

manager (NFA Romsilva). Romsilva should manifest in 30 days the intention to buy or not the forest holdings. The rule applies for forest holdings located inside or nearby the public forests. Ignoring this rule is sanctioned by declaring the selling void. In 2012 (Law 60/2012), this pre-emption right was modified. Now the right is constituted in the favour of co-owners and forest owners neighbourhood, irrespective if they are public or private entities. However, the Law states that when the forestland has the State of the municipality as neighbours, then their preemption right is "stronger" that the preemption right of the other neighbours.

Currently, for agricultural land new rules were imposed by the Law 17/2014 on the selling-buying agricultural land (*Legea nr. 17/2014 privind unele masuri de reglementare a vanzarii-cumpararii terenurilor agricole situate in extravilan*). The Law comes to regulate the transactions with the land, due to the fact that foreign citizens were excluded from buying land during the seven years after Romanian accession to EU in 2007. The pre-emption right is established in favour of co-owners, renters, neighbours, and State, in this order and in the same conditions of price.

Afforestation of former agricultural land (or marginal lands) was one of the strongest sustained policy targets in the latest two decades (Governmental ordinance in 1998, Law in 1999, Forest Code in 2008 in force, Law 100/2010 still in force, Ministerial Order 2353/2012 on the Fond for forestland improvement: Law 289/2002 still in force on Forest belts). A National Programme for Afforestation was drafted and approved in 2010. The Programme forecast an amount of 400000 thousand lei (around 95 million euro) for the afforestation of marginal lands on private properties. The financing should be provided bν the State budaet. Environmental Found, and the Found for forest improvement.

Until 2013, the first afforestation of agricultural land could be paid also through the FEADR (European Agricultural Fond for Rural Development – FEADR). For the period 2014-2020, the FEADR adopted by

Romanian Government drastically reduced the part of money available for afforestation or other kind of payments in forest sector. Only 100 million euro were granted to the afforestation of agricultural or non-agricultural land for the period 2014-2020, while in 2011 only, for example, 50 million euro were spent in the same purposes. The civil society (owners and WWF) has organised a street protest in end of March against the forecast sub-financing of forest sector.

Despite of strong policy statements about the need of afforestation, practically there are no new forest owners due to artificial afforestation of lands. In fact the forest area is increasing mostly due to the natural extension of forests on abandoned agricultural lands, for example pastures or land not used anymore for hay-making.

In a press release, the executive director of Romsilva, main forest manager of State forests, acknowledged that, for the first time, 400 hectares of private owners forestlands (subject of clear-cut after the forest restitution) will be re-afforested in 2014 (http://ape-paduri.ro/doina-pana-avem-prevazute-29-741-hectare-pe-care-se-vor-derula-lucrari-de-regenerare-a-padurilor-in-2014).

6.2. Influences of policies in forest management

6.2.1. Legislative and administrative frame of forest management in Romania

The regime of the private ownership. The private ownership is granted by Romanian Constitution. However, the Forest Act states that the forests, irrespective to the form of ownership, represents "an asset of national interest". The restrictions of forest ownership, e.g. the prohibition to harvest, were attacked several times at the Constitutional Court, but each time the Court reinforced the obligation to comply with the forest legislation (there were 20 Decisions of the Constitutional Court between 2000 and 2008 regarding mostly the penalties against the forest owners).

Despite the strong State intervention in forest use, the title on the forestland is secured. Yet the Romanian State was sued in international Courts for violation of property rights in the context of the privatisation/restitution of lands, there are practically no taking over of land while the title is acquired via ordinary market transactions.

Principles of law. The private forests, irrespective to the form of ownership (individuals, corporative, common) is subject of forest regime. The forest regime applies equally in public and private owned forests, with few differences. Therefore, the Romanian forestry is based on the principle of unitary, compulsory, and ecological-sound forest management system:

- the forest regime applies to all national forest estate (forest fund). Forest estate includes all land covered by forests, e.g. minimum 0.25 ha covered by trees which should be at least 5 m tall at the maturity. The concept is used to design the territorial competences of forest laws:
- the ecological objectives of forests are prevailing over all other objectives;
- the forest ownership is subject of the regulation of Forest Code. The main obligations are:
 - to ensure the administration of forests;
 - to have a forest management plan;
 - to ask for approval of harvesting operation, that can be done only within the provisions of a forest management plan;
 - to ask for the marking of the trees before harvesting;
 - to comply with the rules regarding the control of legality of timber harvested and transported.

Therefore:

- economic principles (obtain a reasonable profit by using the forestland) has little if any consideration in the forest policies;
- the specificities of private investment in forests (shorter time horizon, return, market oriented strategies) are not recognised;
- 3. the principles of voluntary, partnershipbased or incentive based mechanisms for forest management are not considered in the legislation.

The forest legislative system. The elements of the forest legislative system are the Forest Code, the implementing acts, and the forest technical norms. The new Forest Code. adopted 19.03.2008, and entered in force on 30.03.2008 contains the main rules of forest management regarding administration, forest management planning, forest regeneration, forest harvesting, forest protection, legality of timber harvested and transported. The new forest code does not bring essential changes; it does not represent a disruptive change of forest legislation as far as the Code is on line with the main principles of forest law governing the sector since 1996. The Forest Code is implemented via Governmental Ordinances, Governmental Decisions and Ministerial Orders. That means approximately 150 different legal acts in force that can be grouped in the following fields of regulation:

- administration of forests;
- control of law implementation, forest law infringements;
- timber marking, forest harvesting and transportation;
- · forest reproductive material;
- · statute of forest staff;
- hunting regulations;
- rules of selling timber from public forests;
- organisation of public forest manager;
- forest roads.

Forest sector is mainly regulated by forest law, which tends to cover all the activities in forests, and all forests. However, the environmental protection law started to influence the forest managers decisions, particularly in the case of protected areas and of forest areas included in Natura 2000 network. In the latter case, the forest management plans should be correlated with the Natura 2000 management plans. The incidence of environmental regulation is stronger in the forest harvesting activities.

While the Forest Code represents rather a simple, synthetic legal act, the subsequent regulation is overdeveloped, with sometime contradictory rules, bureaucratic procedures, and characterises a rigid frame of forest management. The main problem in the control of law compliance is that the legality of forest management practices s assessed

according to this very bureaucratic frame.

6.2.2. Forest management planning in private forests

Having a forest management planning is compulsory in all forests. Without a FMP, the owner cannot harvest any product from his/her forests. For forest areas under 100 ha, the costs of forest management planning (some 3 to 5 euro per ha, each 10 years) are supported The by the State. forest established management is for each production unit inside a forest district, with little attention paid to the structure of the ownership.

The forest owner is not consulted in the process of forest management planning, which is established by specialised firms, using specific technical norms and software. Once elaborated, the forest management plans are approved by the Ministry and become compulsory rules of forest management for the respective forests.

Clear cutting is allowed only for some species, eq. Norway spruce, pine, on restricted areas (maximum 3 ha at once); they are prohibited in national parks. Forest regeneration should be done in two seasons after the final cutting. 15 to 25% of the income from final cutting should be directed to the forest regeneration and conservation fund. The harvesting age results from the process of establishing target grade for each stand, and it is usually higher than 100 - 110 for Norway spruce or 120 for Beech. In stands with protection functions, the harvesting age is even longer by 20 to 40 years. Therefore some oak-based or Beech based stands can be harvested only when they reach 140-160 years.

At the beginning of each year, the forest district should report about the realisation of the forest works planned in the forest management plans.

Despite the imposed regulation there are approximately 1 million ha of forests (approximately 15% of total forest area) without management plans (World Bank, 2014). It is assumed that the majority of these are smallholders' forests because of the expense of complying with policy for requirements forest management planning. Most of these areas are lacking any investments in the forest regeneration phase being subject to natural succession of species.

6.2.3. Timber harvesting and transportation

The volume harvested cannot be higher than the volume established in the forest management plan, and it cannot be harvested in other stands than in those forecast in forest management plans;

The harvesting can be done only with authorised forest harvesting provider; the private owner can harvest by himself up to 20 cm per year only. The trees to be harvested should be marked with special hammer by the forest staff.

Timber transported need special papers as provenience proof. The origin of timber can be checked any moment on public roads or at the sawmill gate or inside by mixed teams formed by policemen and forest officials.

Starting October 2014 Romania has implemented a new legislation meant to combat illegal logging elaborated in the framework of the "due diligence system". The legal act aims to assure the traceability of timber by means of an on-line system where every transport of timber has to be registered in real time. Every citizen can now call the emergency number and check if a certain truck with timber is legal (registered in the system) or not.

6.3. Policy instruments specifically addressing different ownership categories

The private administration of private forests has increased the efficiency of advisory systems. In some of the large private forest administrative units the management of private forest was increasingly based on more contacts with consultancy companies. financial funds, certification bodies, academia etc. Despite these changes the current advisory system in Romania can still be considered limited to the poor extension services provided by the state agencies and some successful examples in large scale private forestry.

The existing policy instruments do not differentiate the traditional forest owner from the non-traditional ones. At the moment there is no official or empirical criteria to differentiate various types of forest owners other than the size of the property.

Few of the measures integrated in the current version of the Forest Act (2008) stimulates association of small scale forest owners. This is mainly done by the requirements to have a management plan elaborated only at a minimum size of 100 hectares. In practice it means that forest owners get associated only with the purpose to be able to have a forest management plan and harvest the timber legally. It is also true that the side effect of these measure is that about 0.5 million hectares of forest have no management plans so timber harvesting is done illegally. A new version of the Forest Code has been brought into the public discussion in autumn of 2014. Among other measures targeting private forest owners it came with the proposal that forests with an area of less than 10 hectares should be excluded from the need to have a plan. Many management professional associations and NGOs are against this measure. Another proposed measure in the new version of the forest code tries to stimulate forest certification as certified private forest owners will be exempt from the payment of the tax land.

6.4. Factors affecting innovation in policies

As introduced along the report the Romanian case present the conditions of a highly regulated political framework which direct the management of private and public forests. The forest legislation and especially the technical norms are considered obsolete being largely set during the times when all the forests were public ownership in (Austroproject, 2008). Therefore it is based on prescriptive type of forest management regime, with an over-reliance on technical norms as opposed to general guidance regulations which may allow for flexibility and innovation (World Bank, 2014).

Modernizing the forest legislation is currently a frequent statement of the existing associations of forest owners. Unfortunately

the forest owners associations as well as their umbrella associations (Nostra Silva and Proforest) have important organizational weaknesses such as non-defined sense of purpose and strategies. missing administrative and organizational structures, non-active members etc. In general this leads to a forest policy not taking into account the interest of private owners and does not recognize their potential to contribute to a sustainable management of forests. Despite these constraints Nostra Silva has become very active in influencing the discussions for the elaboration of a new forest code, being successfully to introduce measures to support a more efficient administration of forest, compensations for private forests with high protective status or the exemption from the payment of the tax land for certified private forests. Nevertheless the frequent political changes at the level of government and ministerial agency responsible for managing the national forest's fund led to a reduction of efficiency in the process of forest policies elaboration. As a result, in spring 2015 the Forest Code went back to the elaboration phase and the measures proposed by private owners associations have to be integrated again on the political agenda.

The lack of advisory systems for forest

owners as well as the lack of skilled work-labour, particularly for harvesting sector are also important barriers for adapting the management practices even in the context of the current regulatory framework. The examples of foreign investment funds who bought forest in Romania and brought the know-how in private forest management establishing connections with universities, research institutes and consultancy companies may be soon followed by other private administrative units.

High competition and unsecured access to the raw material limits the firms role as drivers of innovation in forest management: Due to the strong competition on timber market and high cost of information about the quantity and quality of available raw material, the firms from sector spent much more effort in securing the wood procurement that in finding markets or new products. cooperation between the firms and the owners is weak, partly because the system of selling timber is opposing to any form of long term partnership. For the owners perspective the short terms benefits are prevailing having no inventive for long term value adding. The concept of "niche" products is barely developed, the business culture being still dominated by routine exporting of saw-mills products.

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8. Annexes

8.1. Tables with detailed description of 11 most important publications

SELECTED REPORTS/PUBLICATIONS	
Full reference of study/publication	Abrudan, I. V. (2012,). A Decade of Non-State Administration of Forests in Romania: Achievements and Challenges, <i>International Forestry Review</i> , pg(s) 275-284
English language summary/abstract	The purpose of this study was to assess the evolution of private forest districts during the last decade and to explore the main challenges such entities are facing, based on the existing statistics and a nationwide survey of private forest district managers. In 2011, the 132 authorized private forest districts had under administration 1.529 million ha of non-state forests (23 percent of the total forest area of Romania), whilst in 2010 the harvested volume exceeded 5.89 million m3 and the cumulated annual turnover of the private forest districts was 107 million Euro. The managers of private forest districts face various challenges in their relationship with owners and state authorities. The significant structural transformation of the forestry sector had an important impact on the evolution of private forest districts and considering that more than 1 million ha of non-state forests are still administrated by the state, the number of private forest districts and their role in the Romanian forestry sector could increase significantly in the future.
Language of the study/publication	English
Type of organization conducting the study (in case of multi-institutional studies multiple answers allowed)	 ✓ University ☐ Public Research Institute ☐ Private Research Institute ☐ Other (please name below)
Type of funding used (multiple answers allowed)	 □ Private Industry □ Private other ☑ National □ Public Sub-National □ Public EU/cross-national Europe □ Public International beyond Europe □ Public other
Regional scope	 ☐ Sub-national ☑ National ☐ Cross-national Europe ☐ International beyond Europe
Theoretical approach	Political sciences
Methodical approach	Nationwide survey of private forest district managers (88)

Thematic focus	ownership change (incl. on changes in ✓ quantitative terms, emerging new ownership types, etc.)
	motives and behaviour of ownership types
	✓ new management approaches
Weblink	http://www.bioone.org/doi/full/10.1505/146554812802646684

SELECTED REPORTS/PUBLICATIONS	
Full reference of study/publication	Bouriaud, L., Nichiforel, L., G. Weiss, A. Bajaktari, M. Curovic, Z. Dobsinska, P. Glavonjic, V. Jarský, Z. Sarvasova, M. Teder, Z. Zalite, (2013). Governance of private forests in Eastern and Central Europe: An analysis of forest harvesting and management rights. <i>Ann. For. Res.</i> 56(1): 199-215.
English language summary/abstract	A property rights-based approach is proposed in the paper to underline the common characteristics of the forest property rights specification in ten ECE countries, the specific patterns governing the harvesting of timber in private forestry and the role of the forest management planning in determining the content of the property rights. The analysis deals with the private forests of the individuals (non industrial ownership) from ten countries, covering 7.3 million ha and producing yearly some 25 million m3 timber. The study shows that the forest management rights in private forests belong to the State and that the withdrawal rights on timber, yet recognised in the forest management plans, are in reality strongly restricted from an economic viewpoint. The forest management planning is the key instrument of the current forest governance system, based on top-down, hierarchically imposed and enforced set of compulsory rules on timber harvesting. With few exceptions, the forest owners' have little influence in the forest planning and harvesting. The rational and State-lead approach of the private forest management has serious implications not only on the economic content of the property rights, but also on the learning and adaptive capacity of private forestry to cope with current challenges such the climate change, the increased industry needs for wood as raw material, or the marketing of innovative non wood forest products and services. The study highlights that understanding and comparing the regime of the forest ownership require a special analysis of the economic rights attached to each forest attribute; and that the evolution towards more participatory decision-making in the local forest governance can not be accurately assessed in ECE region without a proper understanding of the forest management planning process.
Language of the study/publication	English
Type of organization	✓ University
conducting the study (in case of multi-	☐ Public Research Insitiute
institutional studies multiple answers	☐ Private Research Institute
allowed)	☐ Other (please name below)
	☐ Private Industry
	☐ Private other
Type of funding used	□ National
(multiple answers	☐ Public Sub-National
allowed)	✓ Public EU/cross-national Europe
	☐ Public International beyond Europe
	☐ Public other
	☐ Sub-national
Degional sees	□ National
Regional scope	
	☐ International beyond Europe

Theoretical approach	Property rights
Methodical approach	Expert based survey
Thematic focus	ownership change (incl. on changes in ✓ quantitative terms, emerging new ownership types, etc.)
	motives and behaviour of ownership types
	✓ new management approaches
	policy instruments addressing ownership
Weblink	http://www.editurasilvica.ro/afr/56/1/bouriaud.pdf

SELECTED REPORTS	S/PUBLICATIONS
	Bouriaud, L., and Schmithüsen, F. (2005). Allocation of Property Rights
Full reference of study/publication	on Forests through Ownership Reform and Forest Policies in Central and Eastern European Countries. Swiss Forestry Journal, 156(8), 297-
, ,	305. The study applies some concepts of the economics of property rights to the
English language summary/abstract	allocation ofrights on forests in Central and Eastern European countries. The classification of forest assets, according to their economic characteristics and the analytical framework proposed bySchlager and Ostrom (1992), are used to examine the impact of ownership reforms and policychanges on forest utilisation in the CEE region. It is shown that while reform ownershipreforms deal with the formal definition ofrights on forestland, new forest policies moreproperly define the economic rights, e.g. the owner's ability tomake a profit from the assetshe 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-drivendecision making processes in which private forest owners are not yetable to adequatelyparticipate. Measures must be adopted to facilitate more effective participation of private landowners in political processes in order to balance the presently ongoing trends of consideringforests, irrespective to thelegal regime of ownership, as a common-pool resource.
Language of the study/publication	English
	✓ University
Type of organization conducting the study	☐ Public Research Insitiute
(in case of multi- institutional studies	☐ Private Research Institute
multiple answers allowed)	☐ Other (please name below)
anowedy	
	☐ Private Industry
	☐ Private other
Type of funding used	☐ National
Type of funding used (multiple answers	☐ Public Sub-National
allowed)	✓ Public EU/cross-national Europe
	☐ Public International beyond Europe
	☐ Public other
	☐ Sub-national
Regional scope	■ National
	□ International beyond Europe
Theoretical approach	Property rights
Methodical approach	Case studies

Thematic focus	ownership change (incl. on changes in ✓ quantitative terms, emerging new ownership types, etc.)
	motives and behaviour of ownership types
	new management approaches
	policy instruments addressing ownership
Weblink	http://e-collection.library.ethz.ch/eserv/eth:631/eth-631-01.pdf

SELECTED REPORTS/PUBLICATIONS	
Full reference of study/publication	Dorondel, S. (2011). Tenure Rights, Environmental Interests, and the Politics of Local Government in Romania. <i>Forests and People: Property, Governance, and Human Rights</i> , 175-186.
English language summary/abstract	This paper discusses a case in which postsocialist forest restitution was instituted at the same time as the establishment of a national park in Romania. The conflict that arose from these two simultaneous acts was mediated by the local political elite who benefited from their positions in that they were able to obtain privileged access to forest. After a close analysis of this case, I have concluded that the park's practices intended to preserve forest and biodiversity are not necessarily negative, but the way in which the state treats forest owners proves their failure to accept responsibility for the needs of the local population. I argue that state officials should attempt to reconcile forest restitution with the interests of the wider public, as Sikor and Stahl have suggested in the introduction of this book. State officials should pay more attention to private forest owners' claims to forest land, and not dismiss villagers as mere subjects expected to obey state forest regulations. If the state treated private forest owners as equals, citizens would be more interested in the advantages of a healthy forest and of environmental and biodiversity protection.
Language of the study/publication	English
Type of organization conducting the study (in case of multi-institutional studies multiple answers allowed)	 ✓ University ☐ Public Research Institute ☐ Private Research Institute ☐ Other (please name below) ☐ Humbol dt Uhi versit v Berlin
Type of funding used (multiple answers allowed)	 □ Private Industry □ Private other ☑ National □ Public Sub-National □ Public EU/cross-national Europe □ Public International beyond Europe □ Public other
Regional scope	 □ Sub-national □ National ☑ Cross-national Europe ☑ International beyond Europe
Theoretical approach	Sociocultural anthropology
Methodical approach	Qualitative interviews, ethnography

Thematic focus	ownership change (incl. on changes in quantitative terms, emerging new ownership types, etc.)
	✓ motives and behaviour of ownership types
	✓ new management approaches
	policy instruments addressing ownership
Weblink	

SELECTED REPORTS/PUBLICATIONS	
Full reference of study/publication	Dorondel, S. (2009) 'They should be killed': forest restitution, ethnic groups, and patronage in postsocialist Romania. In: D. Fay, D. James (eds.): 'Restoring what was ours': the rights and wrongs of land restitution, London, Routledge-Cavandish, pp. 43-66
English language summary/abstract	It is claimed by some development experts that private property both brings economic benefits for the owners, and enables the sustainable exploitation of a natural resource. This paper explores a contrasting case where the private ownership of forest led to deforestation. Engaging the concepts of property rights, access, and patronage, the paper shows how a historically-deprived ethnic group in postsocialist Romania has been engaged in a patron client relationship by those who have access to the postsocialist state. Here, land restitution has re-created older forms of inequality and injustice.
Language of the study/publication	English
	✓ University
Type of organization conducting the study	☐ Public Research Insitiute
(in case of multi- institutional studies	☐ Private Research Institute
multiple answers allowed)	☐ Other (please name below)
anowedy	Humboldt University Berlin
	☐ Private Industry
	☐ Private other
Type of funding used	✓ National
(multiple answers	☐ Public Sub-National
allowed)	☐ Public EU/cross-national Europe
	☐ Public International beyond Europe
	☐ Public other
	☐ Sub-national
Pagional agona	□ National
Regional scope	
	✓ International beyond Europe
Theoretical approach	Sociocultural anthropology
Methodical approach	Qualitative interviews, ethnography
	ownership change (incl. on changes in ✓ quantitative terms, emerging new ownership types, etc.)
Thematic focus	
	new management approaches
	policy instruments addressing ownership

SELECTED REPORTS/PUBLICATIONS	
Full reference of study/publication	Irimie, D. L., and Essmann H. F. (2009). Forest property rights in the frame of public policies and societal change. Forest Policy and Economics, 11, 95-101.
English language summary/abstract	Property rights over natural resources became a distinct area of inquiry in environmental economics and policy in the last decades, but their role has not yet been investigated thoroughly. Transition countries represent an excellent material of analysis of various policies and institutional developments concerning the regime of use and management of natural resources. The processes of societal transformation had deep impacts on the forestry sector, entailing land reforms and subsequent changes to its institutional and organisational framework. This paper presents an analysis of the reciprocal relationship between the evolving forest property rights and the conduct of policy and economic actors, in connection with their outcomes. The theoretical framework consists of institutional economics, whose core concept is that patterns of interaction between institutions and actors produce physical outcomes, assessable by criteria such as equity and efficiency. The study concentrated on three distinct periods and the applicable property regimes. Within this framework, the impacts of the characteristics of property regimes and the general framework of socio-economic conditions on the exercise of property rights were analysed. The analysis of the conduct of forest owners in relation to the institutional design was completed by the analysis of the other actors influential for land reforms. Romanian forestry sector, in evolution from the period shortly before World War II to present, represents the case of the study. Research data were collected by interviewing/questioning, participant observation and literature review. They were analysed through an integrated method of content analysis and a matrix analysis. An important conclusion is that not only the regime of forest property is determinant for the outcomes of resource use and management, but also the general settings in which they are embedded. Another essential point is that land reforms driven by either efficiency or equity rationales are not mere diversions of the ben
Language of the study/publication	English
Type of organization	✓ University
conducting the study	☐ Public Research Insitiute
(in case of multi- institutional studies	☐ Private Research Institute
multiple answers allowed)	Other (please name below)
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	Private industry Private other
	□ National
Type of funding used (multiple answers	Public Sub-National
allowed)	☐ Public EU/cross-national Europe
	Public International beyond Europe
	Public other
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Regional scope	☐ Sub-national
	□ National
	☐ Cross-national Europe
	☐ International beyond Europe
Theoretical approach	Political sciences
Methodical approach	Qualitative interviews
Thematic focus	ownership change (incl. on changes in ✓ quantitative terms, emerging new ownership types, etc.)
	new management approaches
	policy instruments addressing ownership
Weblink	www.sciencedirect.com/science/article/pii/S138993410800083X?via=ihub

SELECTED REPORTS/PUBLICATIONS		
Full reference of	loras, F., & Abrudan, I. (2006). The Romanian forestry sector:	
English language summary/abstract	privatisation facts. <i>International Forestry Review</i> , 8(3), 361-367. 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 landowners 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. Major changes in the ownership and administration of forests in Romania have taken place since 1991. As well as restitution of properties nationalised in 1948, substantial privatisation of state forests has been undertaken and subsequently major policy and institutional changes are transforming forest ownership. This process of change has added pressure to forest resources which, although now facing new opportunities, also face increased threat to their continuation. This paper identifies the main changes to forest administration and ownership and the accompanying issues. It presents both the constraints which need to be worked around alongside the developmental priorities for the forest	
Language of the	manage forest resources irrespective of new ownership structures. English	
study/publication		
Type of organization	✓ University	
conducting the study (in case of multi-	Public Research Institute	
institutional studies multiple answers	☐ Private Research Institute	
allowed)	Other (please name below)	
	☐ Private Industry	
	☐ Private other	
Type of funding used	☐ National	
(multiple answers	☐ Public Sub-National	
allowed)	☐ Public EU/cross-national Europe	
	☐ Public International beyond Europe	
	☐ Public other	

Regional scope	☐ Sub-national		
	✓ National		
	☐ Cross-national Europe		
	☐ International beyond Europe		
Theoretical approach			
Methodical approach			
Thematic focus	ownership change (incl. on changes in ✓ quantitative terms, emerging new ownership types, etc.)		
	motives and behaviour of ownership types		
	new management approaches		
	policy instruments addressing ownership		
Weblink	http://www.bioone.org/doi/full/10.1505/ifor.8.3.361		

SELECTED REPORTS	S/PUBLICATIONS				
Full reference of study/publication	Lawrence, A., and Szabo, A. (2005). Forest restitution in Romania: challenging the value systems of foresters and farmers. Silva Carelica: special issue on Forest Ethics 49: 303–314.				
English language summary/abstract					
Language of the study/publication	English				
Type of organization	✓ University				
conducting the study (in case of multi- institutional studies multiple answers allowed)	☐ Public Research Insitiute				
	Private Research Institute				
	Other (please name below)				
Type of funding used (multiple answers allowed)	☐ Private Industry				
	Private other				
	☐ National				
	☐ Public Sub-National				
	☐ Public EU/cross-national Europe				
	□ Public International beyond Europe				
	☐ Public other				

	☐ Sub-national			
	✓ National			
Regional scope	☐ Cross-national Europe			
	☐ International beyond Europe			
Theoretical approach	Sociology			
Methodical approach	qualitative interviews			
Thematic focus	ownership change (incl. on changes in ✓ quantitative terms, emerging new ownership types, etc.)			
	✓ motives and behaviour of ownership types			
	new management approaches			
	policy instruments addressing ownership			
Weblink	http://www.eci.ox.ac.uk/research/humaneco/downloads/forestrestitution-romania.pdf			

SELECTED REPORTS					
Full reference of study/publication	Mantescu, L. (2009). When Globalization Meets Postsocialism-Community-based Institutions for Managing Forest Commons and the Internationalization of Timber Market in Romania. In: Seminar at the Faculty of Economics, University of Navarra.				
English language summary/abstract	This paper explores the integration of regional timber markets in global flows of goods and capital and approaches the manifest consequences for rural development in postsocialist Romania. In the past two years, multinational timber companies opened industrial platforms in nearby Carpathian Mountains. They contract timber with community-based institutions for managing forest village commons. The small local companies are on the threat of bankruptcy and so is the large majority of local population involved in the local timber market. The research ties to capture how local actors and institutions perceive, link up with, and respond to new challenges in the context of the internationalization of timber market. The paper describes the variety of the community-based institutions (CBIs) for managing forests and pastures in Romania. Historical and statistical insights are given for a better understanding of the importance of the common-pool natural resources in this country. A brief description of the local timber market follows, together with the role of the CBIs on this market. The ethnographic part consists of two case studies of interaction between CBIs and international timber companies. Following Kingfisher and Maskovsky (2008) the concluding part informs about the indigenization of neoliberalism in postsocialist Romania.				
Language of the study/publication	English				
Type of organization conducting the study (in case of multi-institutional studies multiple answers allowed)	☐ University ☐ Public Research Institute ☐ Private Research Institute ☐ Other (please name below)				
Type of funding used (multiple answers allowed)	 □ Private Industry □ Private other ☑ National □ Public Sub-National □ Public EU/cross-national Europe □ Public International beyond Europe □ Public other 				
Regional scope	 ☐ Sub-national ☐ National ☑ Cross-national Europe ☐ International beyond Europe 				
Theoretical approach	Economic anthropology				
Methodical approach	Case studies				

	ownership change (incl. on changes in quantitative terms, emerging new ownership types, etc.)	
Thematic focus	motives and behaviour of ownership types	
	new management approaches	
Weblink	http://www.econ.unavarra.es/seminarios/Seminarios%20antiguo/Papers0809/Mantescu.pdf	

SELECTED REPORTS					
Full reference of study/publication	Mantescu, L. (2009) 'Héritage et représentation sociale des ressources naturelles en propriété commune en Vrancea (Roumanie)'. In Jouve AM. (ed.) Transitions foncières dans les Balkans : Roumanie, Albanie, Grèce. Montpellier: CIHEAM-IAMM, 2009, p. 77-92.				
English language summary/abstract	This paper discusses the conflict between property seen as a constituent of local identity and property as a source of welfare for individuals. The air the paper is also to focus on the definition of local identity. The first illustrates the micro-research that takes place in two rural communities order to verify constitutive elements for defining local identity by apply projective tests (mental maps). The importance of common property in sustaining of local identity is then examined. Empirical examples gener the following questions: how does social representation of the communinteract with the representation of common property? What does proper mean today and what is its role in forming / preserving local identity? How these representations influence collective actions involved in the formanagement? In addition to institutional analysis approach on community his mainly focused on advocating the viability of Common Resources systems confronting the 'tragedy of the commons' (see Ostron 1990), or, the anthropological point of view, stressing on the embedded concept within social, economic and political context (see Hann, C., 1990), or, the anthropological point of view, stressing on the embedded concept within social, economic and political context (see Hann, C., 1990), or, the anthropological point of view, stressing on the embedded concept within social, economic and political context (see Hann, C., 1990), or, the anthropological point of view, stressing on the embedded concept within social, economic and political context (see Hann, C., 1990), or, the anthropological point of view, stressing on the embedded concept within social, economic and political context (see Hann, C., 1990), or, the anthropological point of view, stressing on the embedded concept within social, economic and political context (see Hann, C., 1990), or, the anthropological point of view, stressing on the embedded concept within social, economic and political context (see Hann, C., 1990), or, the anthropological point of view, stressing on				
Language of the study/publication	French				
Type of organization conducting the study (in case of multi-institutional studies multiple answers allowed)	 ✓ University ☐ Public Research Institute ☐ Private Research Institute ☐ Other (please name below) 				
Type of funding used (multiple answers allowed)	☐ Private Industry ☐ Private other ☐ National ☐ Public Sub-National ☐ Public EU/cross-national Europe ☐ Public International beyond Europe ☐ Public other				
Regional scope	 ✓ Sub-national ☐ National ☐ Cross-national Europe ☐ International beyond Europe 				
Theoretical approach	Sociology Projective tests				
Methodical approach	Projective tests				

Thematic focus	ownership change (incl. on changes in quantitative terms, emerging new ownership types, etc.)	
	▼ motives and behaviour of ownership types	
	☐ new management approaches	
	policy instruments addressing ownership	
Weblink	http://www.ciheam.org/images/CIHEAM/PDFs/Publications/OM/om_a_82.pdf	

SELECTED REPORTS	S/PUBLICATIONS				
Full reference of study/publication	Nichiforel, L., and Schanz, H. (2011). Property rights distribution and entrepreneurial rent-seeking in Romanian forestry: a perspective of private forest owners. <i>European Journal of Forest Research</i> , 130(3), 369-381.				
English language summary/abstract	In the framework of a broader political economics approach, this paper intends to enhance the understanding of the role of rent-seeking practices in the delineation of clear property rights in forestry. The research background is provided by the institutional changes occurring in the Romanian forestry sector as a consequence of the transition period and the accession to the European Union. The entrepreneurial approach to rent-seeking requires clarifications of the perspective under which private forest owners are analysed in order to position this study within ongoing discussions regarding the role of rent-seeking and its social impact. The conceptual framework employed distinguishes between rents resulting from entrepreneurship in conventional production functions and rents resulting from institutional entrepreneurship. A typology of entrepreneurial rent-seeking is developed for further understanding of the effects resulting from changes in the institutional setting of property rights. Using a qualitative approach, in the form of a case study, the research reveals perspectives of Romanian forest owners regarding barriers to production inherent in the current distribution of rights. Despite the extent of perceived profit-seeking barriers, owners' entrepreneurial rent-seeking actions intended to change property rights in their favour appear limited and constrained. Hence, identified hypotheses regarding the institutional context dependency of entrepreneurial rent-seeking provide the basis for the future empirical identification of the role of institutional entrepreneurship within the forest production system.				
Language of the study/publication	English				
Type of organization conducting the study (in case of multi-institutional studies multiple answers allowed)	 ✓ University ☐ Public Research Institute ☐ Private Research Institute ☐ Other (please name below) 				
Type of funding used (multiple answers allowed)	 □ Private Industry □ Private other □ National ☑ Public Sub-National □ Public EU/cross-national Europe □ Public International beyond Europe □ Public other 				
Regional scope	□ Sub-national □ National □ Cross-national Europe □ International beyond Europe				
Theoretical approach	Institutional economics				
Methodical approach	Qualitative interviews				

Thematic focus	ownership change (incl. on changes in quantitative terms, emerging new ownership types, etc.)	
	▼ motives and behaviour of ownership types	
	✓ new management approaches	
Weblink	http://link.springer.com/article/10.1007/s10342-009-0337-8/fulltext.htmlâ	



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