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Forest Land Ownership Change in Czech Republic

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 Czech Republic

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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.

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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.

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Acronyms and abbreviations

CEPF	Confederation of European Forest Owners
CPR	Common-pool resources regime
CSU	Czech Statistical Office
CULS	Czech University of Life Sciences Prague
CZ	Czech Republic
EAGGF	European Agricultural Guidance and Guarantee Fund
ELO	European Landowners Organisation
EU	European Union
FACEMAP	Forest Land Ownership Changes in Europe: Significance for Management and Policy
FAO	Food and Agriculture Organisation of the United Nations
FECOF	European Federation of Municipal Forest Owners
FJSC	Forest joint-stock company
FMI	Forest Management Institute
FMP	Forest Management Plan
FMS	Forest Management Schemes
FRI	Forestry and Game Management Research Institute
LČR	Forests of the Czech Republic, state enterprise
LDO	Forestry Municipal Cooperatives
MUAF	Mendel University of Agriculture and Forestry in Brno
MA	Ministry of Agriculture
NCC	New Civil Code – Act 89/2012 Coll.
NFP	National Forest Program
NGO	Non-governmental Organisation
OPRL	Regional Plans for Forest Development
PEFC	Programme for the Endorsement of Forest Certification
PUPFL	Forest land
SIS	Sectoral innovation system
SUSI-CEE	Innovation and sustainability of forestry in Central-Eastern Europe: challenges and perspectives
SVOL	Association of municipal and private forest owners
UHUL	Forest Management Institute
ÚZSVM	Institute for Representing the State in Property Issues
VÚLHM	Forestry and Game Management Research Institute

1. Introduction

1.1. Forests, forest ownership and forest management in the Czech Republic

In the Czech Republic (CZ) forests cover approximately 34% of country territory and its area slightly grows each year. Under the Act on Forests (1995) forest is regarded as national wealth, creating an indisputable component of the environment. Conceptually "forest" means forest stands with their environment and estates designated to perform forest functions. The forest functions are benefits conditioned by forest existence, which the law divides as production and non-production functions. Based on the prevailing functions, the forests in the CZ are classified into three categories: protection forests (2.5%), special purpose forests (22.9%) and production forests (74.6%). In a longer-term framework, there is a slight increase in the category of special purpose forests at the expense of production forests.

Gradual reduction of pollution load in the last decades has had a positive impact on the health conditions of forest stands where positive environmental changes are manifested with a certain time lag. However, forest stands still show a high level of defoliation which is amongst the highest in comparison with other European countries and, despite certain deflections, it shows a slightly rising trend in a long-term observation.

In terms of the tree species representation, coniferous trees (74%) significantly exceed deciduous trees (26%). The most frequently represented tree is the Norway spruce (51%), pine (17%), beech (8%), and oak (7%), larch (4%), birch (3%) and fir (1%). The area of the coniferous trees continues to decline, e.g. the area of spruce declined about 62,000 ha as opposed to the year 2000. The age structure of our forests is uneven. In the last years there has been a significant increase of superannuated stand areas (over 120 years), which might result in an economic loss in the future. It may be caused by the regime of forest management especially in protected

landscapes and protection forests and by postponing the renewal of economically unattractive, less accessible or less quality forests. The area of forests below 60 years of age continues to be below standard. Approaching the standard continues in a very slow pace. The average rotation period is 115 years.

The ownership structure of forests underwent many changes in the 20th century caused by several revolutionary social-political episodes (the formation of Czechoslovakia, the 2nd World War, the government of the Communist Party and the return to democratic principles). The last substantial change occurred in relation to the process of returning property to former owners, restitution process, which was in progress in the 90s of the 20th century. On its basis an ownership structure was established which has not altered much since 2000. There has only been a slight fall in the area of state-owned forests. In 2012, the ownership structure was as follows: state forests 59.8%, forests owned by individuals 19.3%, communal and municipal forests 16.8%, legal persons 2.9%, forests cooperatives 1.2%. Probably, by 2016, the share of state-owned forests will drop about 6-7% as a result of the last round of the restitution process, the return of the properties to church (at present registered as an individual category).

Despite great social significance of the forests, the importance of the forest management for the national economy is small. The share of forestry in GDP in basic prices is less than 1%, in 2012 the share was 0.73% (0.59% in constant prices of 2005). In the last 10 years the amount of felling has ranged from 15 to 17 m³, which presents approximately 6 m³/ha of forest. Of the total amount of felling coniferous trees represent 85-90%. Growing stock volume continues to grow; in 2012 it amounted to 686 mil. m³.

An important milestone for forestry is also the membership of the CZ in the EU and the related possibility of obtaining European financial aid, especially in the context of rural development support.

1.2. Overview of the country report

The Czech national report consists of four parts: literature review, the description of forest ownership and its changes during last 25 years, the characterisation of forest management approaches utilised for new forest owners and the analysis of policy instruments for such owners.

From the presented literature overview can be learned that the issue of the forest ownership and its changes was discussed mainly in the professional literature and web sites while scientific approaches and analyses are scarce; comprehensive research on different groups of forest owners has not yet been conducted. In the Czech Republic a wide range of areas has been studied so far, although not addressing ownership categories explicitly, but approaching the issue of ownership from different points of view.

Concerning the ownership structure, the current one formed in the 20th century as a result of many socio-political changes. The return to democracy re-established private and municipal forest ownership; the process of restitution lasted about 20 years and is completed with the return of forest property to churches. However, the state still owns more than one-half of all Czech forests. The main trends in the forest ownership change were as follows: a restitution process, the establishment of the Forest of the Czech Republic, state enterprise, and the

restructuring of Czech forestry and significant changes in lifestyle.

From a size structure point of view, the Czech situation is not sufficient. There are more than 100 thousand private small-scale forest owners, with the average size 3 ha but the medium size smaller than 0.5 ha. In such small forest assets it is difficult to secure a sustainable forest management. For those owners there is a support available for association establishment (provided by the state administration) as well as other financial incentives for sustainable forest management.

Besides financial support, there are other different policy instruments. The most important are legislation measures. They differ according to the structure of ownership and, in particular, the size of assets.

The improvement of forest owners' situation should be assured by a functional sectoral innovation system (SIS) although the essential functions of such system are in the Czech Republic fulfilled only partially. Based on the analysis by Jarský (2014) it can be stated that out of the three essential functions of the innovation system it is the function of support granting that is fulfilled the most followed by an information function and the function of conflict restriction management is fulfilled the least (which is reflected in the relation between forest management and landscape protection where different tools that should eliminate potential conflicts are in reality often their sources).

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

A qualitative data collection relied on a literature review from scientific papers and reports and professional journals on a restitution and transformation process in the Czech Republic, forest ownership structure changes, forest management approaches and policy instruments related to forest ownership.

Quantitative data were collected as well. Statistical data were gathered from the statistical database and Yearbooks of the Czech Statistical Office (CSU) and from the Reports on the Status of Forestry in the Czech Republic (Green reports), as well as from different international and national scientific studies on forest ownership.

For illustration and better understanding of the issues of new forest owners types, case examples as well as own expert knowledge was used and the specialists from the Czech University of Life Sciences Prague, Mendel University of Agriculture and Forestry in Brno and Forestry Research Institute were questioned.

The research period lasted from November 2013 till September 2014.

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 defined as relevant, detailed description of 7 most relevant publications, and a 1-3 page 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 7 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? Which 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

In the Czech Republic, comprehensive research on different groups of forest owners has not yet been conducted. Large number of literary sources in the Czech Republic cover wide range of forestry issues and address ownership implicitly, but still they are taken as relevant (and presented in Literature section) since they approach the issue of ownership

from different points of view. Most comprehensive overview so far has been done in the national report of an international project Innovation and sustainability of forestry in Central-Eastern Europe: challenges and perspectives (SUSI-CEE) focused on various changes in the forestry sector after the political changes in Central and Eastern Europe (Pudvítrová et al. 2010).

Forest ownership issue was very lively debated in the past 20 years and more, especially in professional networks (including professional journals, such as "Lesnická práce" – "Forestry Work"), but has not been evaluated by scientific methods, which is the basis for publishing in scientific journals. In the journal *Lesnická práce* and professional web site www.silvarium.cz there were hundreds of different opinion published (among others Jiráček 2011, Lasák 2012, Oliva 2004, Řezáč 1999, Slavinger 2013, Šimová 2006, Zahradník 2000). However, these opinions are individual and very often contradictory, from which as sole sources it is almost impossible possible to deduce any conclusions.

Moreover it can be mentioned that several studies were commissioned in relation to the process of re-privatization, these were made available to contracting authorities only (state enterprise Forests of the Czech Republic, Ministry of Agriculture, etc.) and could not be further published (based on the contract).

One fundamental area that is related to the topic of FACEMAP Cost Action is the issue of restructuring of forest sector, which occurred after social transitions in the Czech Republic in 1990s. This core area can also be diversified into three groups:

- 1) restitution (return of nationalized property, see Bartůšková and Homola 2009, Bičík and Jančák 2003),
- 2) privatization of forestry technologies, including some forestry operations (creation of business entities in forestry, see Kupčák 1998, 2003, 2007),
- 3) the creation of state enterprises managing state-owned forests (see Kupčák 2005).

Organizations that deal with such problems (all three categories) are on one hand state

organisations, e.g. - especially the Ministry of Agriculture of the Czech Republic (MA) and organisations under the Ministry of Agriculture competency (Forestry and Game Management Research Institute, Forest Management Institute), and also Forests of the Czech Republic, state enterprise (LČR, s.p.) and on the other hand research institutions, e.g. universities, which include the Forestry Faculty (CULS and Mendel University in Brno). Topics that are marginally related to all three areas have been financed from the state budget (Grant Agency of the Czech Republic, Ministry of Agriculture, Ministry of Education) or private grant agency of the LČR, which funds projects for their own needs (financial analysis related to the area 2 and 3).

So far research was focused on national or regional level; a comparison among other European states was made only rarely. The most commonly used methods are: economic (i.e. financial) analysis, comparative analysis, sociological research, analysis of policy documents (e.g. Jarský, 2014; Šišák 2006, 2011).

It is very difficult to characterize the main results of existing research, because results are highly fragmented, and refer to separate areas, where different groups of forest owners are assessed just as one of the analysed features. A clear result can be determined only in relation to the analysis of legal documents and policy instruments, where it can be stated that the general rules for different forms of ownership are the same. There are cases where public ownership of forests is limited by some additional responsibilities (compared to private owners), and within the possibilities of obtaining financial support private owners are favoured (Flora 1997).

Currently, the last phase of the restitution process is running dealing with the return of properties to church. Throughout the process of restitution not any major problems occurred (Bičík and Jančák 2003). A more detailed analysis related to each category of property and possible implications for the management of restituted forests is missing. A major deficiency is the lack of public forest owners' databases, which could serve as a basis for more detailed analysis (Oliva 2005). All research activities (particularly related to the

analysis of motives and motivation of forest owners) within FACESMAP are suitable for the Czech Republic to perform as they could significantly extend knowledge and be a base for further research.

3.2. New forest ownership types

In the Czech Republic all forest owners who received their forests in restitution (the property was released after at least 40 years) can be considered as new forest owners (i.e. in the period of restitution they were the new forest owners). There are around 150,000 private forest owners and 4,700 municipal forest owners after the restitution (MA 1999). From 2013 until now 17 churches requested the return of 150,000 real estates (of which 95% are Roman Catholic Church).

The available national literature does not deal with detailed breakdown of new forest owners (Kubačák and Jacko 2012), but it is possible to assume that among so many restituted urban owners are going to be counted, absentee owners and very often non-farm owners. Therefore, it is understandable that no analyses on the motives of forest owners groups were performed. An attempt was made only in the evaluation of the implementation of innovations in forestry, where goals and personal views of selected groups of owners were evaluated (Jarský 2002, Jarský et al. 2007, Pudivítrová and Jarský 2011).

3.3. Forest management approaches

In the current scientific literature there are no direct recommendations for specific types of new forest owners regarding the forest management. There are, however, articles and recommendations concerning the income diversification (Kupčák 2010, 2011, Pulkrab 2006, Pulkrab et al. 2006, Šišák et al. 2012, Vlkánova 2011), forest visitors, their opinions and importance of non-wood forest products (Pejcha and Šišák 2010, Riedl 2010, Riedl and Šišák 2012, Riedl and Šišák 2013, Šišák 2006, 2011), which are applicable for new owners also.

Within the support of the management of small forest owners there is relatively much attention paid to the association of forest

owners (Flora 2003, Flora et al 2003, Matějček and Lišková 2010, 2011, Matějček and Skoblík 1997, Pacovský 2006, UHUL 2007, Weiss et al 2012), to the reimbursement of cost due to restrictions in forest management (Kocourek 2012) or to promoting afforestation (Jarský and Pulkrab 2013).

3.4. Policy change / policy instruments

All existing forest owners (except state) lost their property after 1949 and 40 year later after social and political changes in 1989 they got it back. The entire socio-legal system has been changed and has been transformed in terms of the equality of all forms of ownership. The same applies for legal changes in forestry, which arose on the basis of political change (Flora 1997). The specific relationship of state-forest owners is characterized by Oliva (2006a, 2006b) where especially the question whether public (state)

forests should fulfil the same functions as the forests owned by private owners is evaluated.

If we evaluate the **policy instruments** related to forest management used in the last 20 years then we could say that this area is in literature analysed most often. These include the assessment of funding (financial aid) of forest management from different perspectives and different forms of support (Jarský 2004, 2005, 2007, Kupčák and Šmída 2012, Šišák 2013, Šišák and Chytrý 2004, Špičková and Jarský 2013), evaluation of illegal logging (Ventrubová and Jarský 2010), and evaluation of policy documents related to innovation (Jarský et al 2010).

The basis for most of the current mentioned analysis is the National Forest Program (NFP), effective since 2008 (MA 2008). The NFP II (the first was valid until 2008) is the only official document that deals with various categories of forest properties, specifically focuses on small owners, their associations and the role of state forests.

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 a 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 still comparable, 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 to international definitions is, however, not always easy. This report therefore critically assesses how far the national categories and definitions may be transformed into the international FRA data structure or how far there are inconsistencies between them.

4.1. Forest ownership structure

4.1.1. National data set

Who owns the forest?

The main source of the data for forest ownership structure is the Annual Report on the State of Forests and Forestry published by the Ministry of Agriculture of the Czech Republic. The principal share of forests in the Czech Republic is owned by the state (59.8 %). Municipalities, their forestry commissions and communities (registered within one category) have a 16.79 % share in woodland ownership and private owners a 19.31 % share. Of the total area of woodland owned by the Czech Republic (1,553 thousand hectares) 1,306 thousand hectares is administered by “Lesy České republiky s.p.” (Forests of the Czech Republic, state enterprise), 124 thousand hectares by “Vojenské lesy a statky ČR s.p.” (Army Forests and Estates of the Czech Republic), 6 thousand by the Office of the President of the Republic (in the Table 1 within State forests – other) and 94.9 thousand hectares are administered by Správy národních parků (National Parks Administrations).

Table 1: Ownership structure in the Czech Republic in 2012 (MA 2013)

Ownership		Area of forest stands	
		ha	%
State forests		1,553,086	59.80
of which	Forests of the Czech Republic, State Enterprise	1,305,591	50.27
	Military Forests and Farms, State Enterprise	124,164	4.78
	Ministry of the Environment (National Parks)	94,893	3.65
	Regional forests (secondary schools and other)	2,823	0.11
	Other	22,311	0.86
	Ministry of the Environment (National Conservation Agency)	1,195	0.05
	Originally state forests ¹	2,110	0.08
Legal persons		74,654	2.87
Communal and municipal forests		435,951	16.79
Forests owned by church and other religious entities		1,476	0.06
Forest cooperatives		30,502	1.17
Forests owned by individuals		501,514	19.31
Other forests(not listed elsewhere)		4	0.00
Total		2,597,186	100.00

¹ Original large FMPs owned by state – validity from 1981–1996, partly from 1997; private owners and municipalities manage their forests under an abstract from FMP and will have new FMPs upon their renewal

In Table 1 national classification is applied that is used in all national official reports. The definition is as follows:

National class + definition

State Forest

= owned by the State (national, state or government-owned institutions or corporations)

Municipalities

= forest owned by cities, towns, municipalities, communities and villages.

Regions

= forest owned by regional government

Church

= forest owned by churches

Forest cooperatives

= forest owned by forest cooperatives, which consist of individuals that joined co-operatives or similar organisations

Individual Private

= forest owned by individuals

Corporate bodies

= forest owned by corporations, legal persons

For the international comparison the forest owned by state, municipalities and regions is considered public ownership, while forests owned by individual owners, legal persons, church and forest cooperatives are regarded as private.

4.1.2. Critical comparison with national data in FRA reporting

There is no specific approach or methodology for FRA reporting used in the Czech Republic. Data for FRA report are resulting from general monitoring of forests at the national level based on a legal definition of forest. It would be extremely difficult to have two different approaches in spite of different purposes for using the data; therefore the national data for FRA are based on the definition of forest in the Forest Act.

The definition of forest according the Forest Act is as follows: Land registered in cadastre as forest = that land must be in accordance with forest act reforested in 2 years after

deforestation, tree density must be higher than 70 % (if less, it is obligatory to cut it down and reforest it). Size in area is not limited. Incl. roads, cleared tracks etc.

Another reason for such reporting is inexistence of continual monitoring and updating data according to FRA methodology. The Czech Republic (resp. Forest Management Institute) uses the data from forest management plans that are updated on a regular basis. However the Czech and the FRA definitions of the forest (lesni puda, PUPFL) are very similar.

Differences:

- FRA size limits (0.5 ha), in the CZ, a “forest” could be smaller depending on how the individual land plot is registered in the cadastre; no information on this is available. The main reason for unavailability of the data is a co-ownership of smaller forest owners; total area of such isolated plots smaller than 0.5 ha could be approx. from hundreds to 2 thousand (max.) hectares. It is obligatory to reforest any forest stand in 2 years after felling; it is also obligatory to maintain a density of a forest stand higher than 70 %. In some cases the regeneration time could be prolonged by state forest authority.
- An unknown part of the approx. 6,000 ha of dwarf pine is not a regular forest according to the FRA definition (it mostly does not reach a height of 5 m in situ): these dwarf pine groups (“spots”), mostly mixed with spruce, form parts – larger or smaller than 0.5 ha - of regular forest stands mainly in high mountains. Here, these (roughly 0.2 % of total forest area) are included into “forest” because they are used and protected like regular forest stands having more non-wood producing functions than a regular forest has. It is also better to keep them within “forest” than to introduce absolutely groundless subjective assessments into reporting tables. The height and area size limits are not fully useful for a forest definition in Central Europe.

Table 2: Comparison of national data (MA 2011) and data in FRA reporting relating to 2010

FRA reporting					
Forest		Other wooded land		Other land in 1 000 ha	
1,000 ha	%	1,000 ha	%	Total	of which with tree cover
2,657	34	0	0	5,069	92
Annual report on the state of forests and forestry					
2,657	34	0	0	5,069	92

Essential differences between official statistics and FRA report are that FRA displays forest estate areas whereas official statistics of the Ministry of Agriculture are presented as the area of wooded land (i.e. estates really covered by woods), see the above mentioned differences. From this point of view the two statistics are not entirely comparable. FRA data show higher values

than MA (2014) for individual categories. Table 3 compares the FRA data with the data of the Czech Statistical Office (CSU 2013) which present areas of forest estates. However, the data are observed in 4 categories only: state (1,591,000 ha), municipalities and communities (418,000 ha), private (557,000 ha), other types of ownership (97,000 ha).

Table 3: Comparison FRA 2005 and CSU 2013

FRA 2010 Categories	Forest area (1000 hectares)	
	(FRA) 2005	(CSU) 2013
Public ownership	1,999	2,015
Private ownership	648	654
...of which owned by individuals	555	557
...of which owned by private business entities and institutions	93	97
...of which owned by local communities	0	0
...of which owned by indigenous/tribal communities	0	0
Other types of ownership	0	0
TOTAL	2,647	2,664

Source: CSU 2014

4.2. Unclear or disputed forest ownership

In the CZ the owners of property are registered in the so-called Cadastre of Real Estate, which is a database (register) open to public and substituting former real estate cadastres comprising data on ownership, rights and duties (servitudes or easements) related to the property in question. After 1989, a period of significant social changes characterized by restitution processes and state estates privatization, forest ownership relations existing before the 25th February 1948 were renewed. This date presents a day on which the communist upheaval occurred in 1948 followed by a gradual takeover of forests in the CZ and their inclusion among the property of the state. The so-called "unknown owner" is a great obstacle not only for handling the property but also for administrative procedures concerning for instance neighbouring estates. Property in the Cadastre of Real Estate is often registered as an unknown owner, i.e. as title No. 11000, or

it concerns an owner registered in the cadastre without a proper identifier (e.g. surname and former domicile only), or property not registered as any title. In the CZ a total amount of such cases (all types of land) reaches to several hundred thousand. However, it is difficult to quantify a share or amount of the property that is in the regime of forest estates (estimated on several ten thousand). The causes of the most current ambiguities in the issue of ownership fall back to 1948 – 1989, when the duty to register property ownership in the public cadastre was totally cancelled for a certain time period and later partially substituted by records that were insufficient for present needs (the so-called simplified records). This was acceded by administrative mess in which a number of legal tasks of the previous state administration was not duly supported by titles, or was not both legally and formally accomplished.

Frequent formal mistakes could be found also in property changes among the property administrators (e.g. national enterprises).

A part of properties with an unknown owner accounts for unsettled inheritance from persons that emigrated.

Record deficiencies concern the whole area of the CZ. However, they are especially frequent in borderline areas uprooted by former German inhabitants. An unsatisfactory state of archives is often an obstacle for tracing back the development of legal relations. Situation varies from one place to another. Moreover, today's cadastres register the so-called "unknown owners" even in such cases where they have not sufficient and plausible background data. However, the New Civil Code (NCC) (new Act from 2013) introduces a change determining that an estate can be regarded as abandoned for ten-years, after which the estate is transferred to the ownership of the state. With respect to the NCC and its force from the 1st January 2014 it can be assumed that from the 1st January 2014 some property belonging to "unknown owners" could be registered as state ownership.

During the 1st half of 2012, the staff of the ÚZSVM (Institute for Representing the State in Property Issues) newly looked up 1,564 estates of unknown owners and found the owners of 1,525 estates out of which 711 registered during the 1st half of 2012 under the state. Since 2006, the ÚZSVM has altogether found as many as 30,711 estates of unknown owners. They managed to find concrete owners in 16,383 cases while 7,903 estates belong to the state, i.e. 48% of the elicited.

The Cadastre of Real Estate must be informed about the transfer of the title by entities in due course, or by court (submitting the proposal for title must be supported by legal record). It is necessary to emphasise that Real Estate Cadastres are recording offices only. They are not entitled to decide who the owner is or who is legitimate in terms of legal relation in the real estate cadastre, nor are they endowed with legal measures to solve situations where legal relation in the real estate cadastre is not filed in agreement with true legal relation.

The main problematic issues in relation to Real Estate Cadastre can be divided into three basic categories:

I. Property registered in the Cadastre of Real Estate with its unknown owner;

II. Property whose owners are registered in the Cadastre of Real Estate albeit they are probably deceased;

III. Property with the owner, registered as an entity that cannot be identified.

I. THE OWNER IS UNKNOWN

There are about 24,000 plots with the total area of 10,000 ha whose owner is unknown. However, a large share of these plots amounts to farmland. In such cases the issue of the unknown owner is amended by § 15 of Act No. 95/1999 Coll., on Transfer Conditions of Agricultural and Forest Property from State Ownership to other Entities.

The Institute for Representing the State in Property Issues records a large number of applications for solving legal relations of these estates. Territorial branches are then solving the above mentioned applications by assigning screening the set of descriptive and geodetic information at a particular real estate cadastre. Based on the experience of the Czech Office for Land Surveying, Mapping and Cadastre, the probability of finding the owner or title of most properties, which would enable the estate to be registered, is negligible.

II. THE OWNER IS PROBABLY DECEASED

Based on the investigation performed by the Czech Office for Land Surveying, Mapping and Cadastre, the 2nd category incorporates about 10 thousand plots (how many of these are forests is not specified), 444 buildings and 95 flats. The office has also included in the list properties where the owner registered in the real estate cadastre was born in the 19th century. With regard to the mentioned facts it is probable that this category of property will be even more extended. If it is possible to look up the date of death and, if during the inheritance proceedings the property in question was not dealt with, it is necessary for the inheritance to be resolved additionally. However, if it is impossible to determine the date of death, in line with valid legal adjustment it is possible to propose the initiation of procedure to declare the owner dead. In this case, though, inheritance procedure must follow. The Institute for Representing the State in Property Issues does not accept such proposals due to the

length of such process and the fact that not always in a follow-up inheritance process is the property accrued to the ownership of the state.

III. THE OWNER CANNOT BE IDENTIFIED

The third category comprises 3% of properties registered in the real estate cadastre. It includes approximately 640 plots, 13,000 buildings and more than 100 flats. The owners of these estates are registered in the real estate cadastre by their names and surnames only. They cannot be properly identified. Therefore they cannot be found in the population register or declared dead.

4.3. Legal provisions on buying or inheriting forests

4.3.1. Legal restrictions for buying or selling forests

After accessing the European Union (as of 1st May 2004), the Czech Republic, according to the EU Law, had to accept the fact that even other countries nationals can acquire country's property. In the CZ this law had been suppressed by the Foreign Exchange Act § 17 and since it was an interest of the CZ to maintain such arrangements even upon the accession to the EU, a transient period was negotiated during which the Czech Republic maintained the restriction in the area of acquiring property by foreign nationals.

For objects intended for housing a five-year transient period was negotiated which ended

on the 1st May 2009. For other estates (farm and forest estates) a seven-year transient period was negotiated ending in April 2011. The expiry of the transient period has also transmitted into the foreign exchange law by adopting an amendment to the act which with effect as of the 18th July 2011 completely abolished § 17.

At present (as of 1st May 2011), restrictions for foreign entities acquiring property in the CZ do not exist. This will inter alia lead to the abolishment of setting up CZ trading companies by foreign nationals for the purpose of the companies purchasing property with foreign nationals being its owners.

There are no restrictions when buying or selling forest estates for CZ citizens. In conditions of sale or purchase there is no difference between state or private forests. The sale of forests owned by state entities, e.g. Forests of the Czech Republic, state enterprise, is conditioned by the approval of the founder of the company, in case of the Forests of the Czech Republic, the Ministry of Agriculture of the Czech Republic.

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

There are no special measures or restrictions for inheritance (regarding both the size and number of ownership shares). For instance, fideicommissum and allodial² titles were abolished in our countries as soon as in 1924.

² Both refer to historical forms of ownership, which developed from mediaeval feudal law. Allodium was a form of real estate ownership, which the owner could independently dispose of, while fideicommissum is form of real estate ownership, which the owner cannot freely dispose of, as it is a successive right to the property.

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

Table 4: Changes in ownership of forest property 1850 – 2012

Ownership (%)	1880	1910	1920	1930	1945	1947	1950	1960	1970	1980	1990	2000	2012
state forests	0.3	0.2	3.6	12.4	18.3	60.1	70.1	74.2	91.6	94.4	95.8	63.1	59.80
communal and municipal forests	10.2	9.4	10	11.3	14.9	17.4	16.6	14.2	0	0	0	13.9	16.79
church and other religious entities	7.2	6.6	7.9	7.1	6.1	7.1	0	0	0	0	0	0	0.06
forest cooperatives and associations	0	1.2	1.9	1.8	1.7	3.2	3.2	0	0	0	0	0.9	1.17
foundation forests	1.3	1.3	0.8	1.2	0.9	0	0	0	0	0	0	0	0
nobility forests	25.7	29.5	0	0	0	0	0	0	0	0	0	0	0
other private forests	55.3	51.8	75.8	66.2	58.1	12.2	10.1	3	1.2	0.4	0.1	22.1	22.18
farm cooperatives	0	0	0	0	0	0	0	8.6	7.2	5.2	4.1	0	0.00

Source: MA 1999, MA 2001, MA 2013

From the data in the table follows:

- In the beginning of the 20th century the state did not own almost any forests (0.3% of forest area in 1900)
- State ownership was increased after 1945 by confiscating properties belonging to Germans, collaborators and traitors, the so-called Benes decrees
- Before 1989 state ownership extended to 95.8% of total forest area in the CZ
- Currently (data from 2012), the largest share, 59.8%, belongs to the state (The Forests of the Czech Republic, state enterprise, Military Forests and Estates, national parks, regional forests and others)
- At present there are 23.4 % privately owned forests (Forests owned by individuals + Legal persons + Forest cooperatives and associations) and 16.8% municipally owned forests
- After 1989, ownership structure from the 25th February 1948 has been renewed
- Restitution was initiated by the Act on Ownership Relations to Land and other Farm Property (No. 229/1991 Coll.) - forest estates were returned to private owners
- Following the same Law, state forests were returned to municipalities and
- The issue of church restitutions had remained unsolved for a long time (till 2012), and only after the adoption of Act No. 228/2012 Coll. the churches are to be returned approximately 175,000 ha forest estates (approximately 6% total forest area in the CZ)
- Regarding church ownership, after 1989 in 1990 Act No. 298/1990 Coll., on property relations amendments of monastic orders, congregations and Olomouc archbishopric, in amendments of Act No. 338/1991 Coll. was adopted returning almost 200 buildings, mainly cloisters, monastic houses and several other estates to the churches

Restitution process – returning property to its former owners after 1989

The renewal of proprietary rights to forest property was carried out in accordance with the Act No. 229/1991 Coll., on the adjustment of proprietary relations to land and other farm

property, as amended. The purpose of the restitution process was to return to the ownership structure existing prior to February 1948 (see Table 1.) Since the law came into effect in 1991, there have been received more than 50,000 applications for 359,000 ha of forest property. Following legally effective decisions of land offices or courts, almost 49,000 cases were completed and 350,000 ha of forest property was issued.

Challenging legal disputes are still expected to be heard.

A part of property disputes is between the state and potential forest restitutions dealing with the issue of ownership and legal state dating back to the 25 February 1948. The most problematic is proving the ownership which was many times influenced by the regime of Nazi occupation (1939 – 1945), aryanisation of Jewish property and, consequently, confiscations after 1945 (the so-called Benes' decrees).

At present the restitution process is to a great extent accomplished. According to the Annual Report for 2012 (LCR, 2013) of the state-owned company Forest of the Czech Republic, State Enterprise, a legal entity required to issue forest property following restitution claims, from 1993 till the end of 2012 altogether 550,000 ha forests were claimed and 484,000 ha forests so far were issued to private and legal entities under the Act No. 229/1991 Coll. 66,000 ha forests which have been claimed for and are pending (2.5% total forest area) have not been returned yet (except for church forests). Since 2012 altogether 415,121 ha forests have been returned to municipalities (in total 7,108 cases solved). However, as long as 2012 no general legal measures were taken regarding the restitution of church property.

Restitution of forest property of towns and municipalities were in progress from 1991 under the Act No. 172/1991 Coll., on the transfer of some assets from the property of the Czech Republic to municipalities, and forests formerly owned by forest cooperatives were returned to these entities under the Act No. 229/1991 Coll., on transfer of some assets of the Czech Republic to the ownership of municipalities, carried out following the Government Resolution No. 169/1995 Coll.

The church restitution is an allocation of property which had been confiscated by the state, i.e. nationalised, to churches or religious institutions either back to the ownership of those entities from which it was confiscated or in line with a political agreement to another legal entity of the same church or other churches or religious institutions. In Czechoslovakia the church property had been confiscated in several waves; first by Joseph's decrees, then by the land reform in the period of the first Czechoslovak Republic and finally after the Second World War, especially after February 1948. Churches, to the greatest extent the Roman Catholic Church, supposedly lost 2,500 buildings, 175,000 ha forests and 25,000 ha arable land. As substitution for yields from these estates the state had committed itself by law to paying salaries, social insurance and pensions to the clerics and priests of several churches, running costs and maintenance of confiscated church property from the sources of the state budget (based on Act No. 218/1949 Coll., on economic security of churches and religious institutions). Despite reversible talks going on since the Velvet revolution in 1989, a legal separation of the state from the church in the CZ (which is, based on polls, desired by the majority of Czech Republic inhabitants, regions, municipalities and even 17 listed churches applying for their property restitution) has not yet taken place, while in other European countries the separation of the church from the state is in progress, if not already accomplished. The church in the CZ is not state-owned. However, registered churches have so far been financed by a significant share from the state budget of the CZ (there is no special church tax, for instance clergymen salaries are paid by the state etc.). It is therefore a complete separation of the church from the state. Churches will thus become private legal entities.

After several problems in the Parliament and the Senate and after the return of the act by the president, the church restitutions were finally accepted by the Parliament on the 8th November 2012. On the 22nd November 2012 president Vaclav Klaus neither signed nor vetoed the act No. 228/2012 Coll., which came into effect in 2013. To the churches are

to be returned the property in the value of approximately 75 billion Czech Crowns (3 billion EUR) and in another 30 years they are to be gradually paid approximately 59 billion Czech Crowns (2.3 billion EUR) as compensation for the property that cannot be or will not be returned due to various reasons. Approximately 175,000 ha forest estates are concerned (approximately 6% total forest area in the CZ). Within the restitution process churches receive both property and compensation. They will most likely not receive all 175,000 ha forests as about one third of claims is disputable, which will be decided in court. A 2.3 bill EUR compensation within 30 years is compensation legally determined following expert opinions which will probably decrease within those 30 years. Only after the 30 years have passed, church financing will be finally completely disengaged from the state.

4.4.1. Changes between public and private ownership

In 1990 (immediately after the political changes in 1989, following the fall of the communist regime) the state owned 95.8% of all forests in the Czech Republic. 4.1% accounted for farm cooperatives. The disposal of these forests was however limited and due to the deformation of the right of ownership during the communist era it de facto meant the same as state ownership. Only 0.1% remained in the ownership of private physical entities and other subjects. The adoption of restitution laws at the beginning of the 90s resulted in the restoration of the ownership to the state in 1948 (before the communist coup). Approximately 90% of required forests were returned already in the 90s of the 20th century. The issue of the adopted legislation for the restitution of church forests remained opened till 2012.

4.4.2. Changes within public ownership categories

Public forests include: forests owned by the state and forests owned by municipalities and communities and forests of public corporations (e.g. universities) and vocational school forests. The state-owned forests are managed by the Forest of the Czech

Republic, state enterprise, a company established in 1992 after the transformation of state forests. Military forest estates are managed by state-owned company Military State Forests and Estates. After 1990, 3 national parks were declared (Šumava, Podyjí, Bohemian Switzerland) whose forests together with the forests of Krkonoše National Park are under a direct administration of the Ministry of the Environment performed by National Parks Administrations. After 1998, the forests of schools for forests and farms were transferred to the ownership of Universities (Act No 111/1998 Coll.). The forests of vocational schools forest districts are owned by the state; however these organisations are established by regions (autonomous administrative units). At present the abolishment of one military estate (in Brdy) is discussed, however, with respect to specific ways of management (military exercise area) these forests will remain in the property of the state even with the right of the Military Forests and Estates to manage them. Public forests are also managed by the Presidential Office - Lány Forest Administration.

In the beginning of 1991, communal and municipal forests were returned from the state ownership to respective subjects. Most of the forests were returned in the 1990s. In the Czech Republic there are now 6,521 municipalities and townships (CSU 2014). Information on communal and municipal forests is provided by The Association of Municipal and Private Forest Owners in the Czech Republic (SVOL 2014).

4.4.3. Changes within private forest ownership

From 1990 until the end of 2012 the share of private forests increased from 2.1% to approximately 23.35% (1/4 of total forest area in the CZ). Forests were returned to both private physical (19.3%) and legal entities (2.9 legal persons + 1.2% forest cooperatives and associations). These entities perform the enforcement of property rights in different forms of trade companies (companies with limited liability, cooperatives, join-stock companies etc.) One of the largest private forest owners is Holzindustrie Schweighofer, Ltd, with approximately 20,000 ha (Schweighofer 2014), followed by Colloredo-

Mansfeld, Ltd. with approximately 12,500 ha (Colloredo-Mansfeld 2014) and Orlik nad Vltavou Forests, Ltd. with approximately 10,500 ha (Schwarzenberg 2014).

As regards the efficiency of forest management, a problem seems to be in restitutions to small-scale owners (in the 1990s there were approximately 236,000 owners whose forests estates were smaller than 1 ha, in 2012 there were about 198,000 such estates (interview with representatives of the Ministry of Agriculture of the Czech Republic, 2014). Changes are definitely occurring in private ownership; however, statistical surveys are still not available for the public.

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)

Restitution process

From the legislative perspective new forest owners, as specific category, were not recognized in restitution process. Members of those families who use to own the forest before socialist time moved into different business when their land was taken. Now, it is possible to characterize the majority of so called “restituents” of forest property as persons who do not have or have lost a relationship towards their forest property, they do not have any or just very little knowledge

in forestry and forest management. From this point of view such owners are considered as “new”. The structure of the individual forest owners is unfavourable, more than ¾ of all owners manage the property smaller than 1 ha. The average area of the forest property is about 3 ha. Until now only one monograph have been published that deals with the complex restitution process in agriculture and forestry (Kubačák and Jacko 2012). However, deeper analysis is needed regarding this issue.

Forest state enterprise

The issue of the status, organizational structure, and way of fulfilling economic activities and at the same time social/public requirements in the properties owned by the state is currently an important issue to tackle. In the CZ during the beginning of the 1990s an entity of the Forests of the Czech Republic emerged by transformation of socialist state forest enterprises. It has the form of a state enterprise, while the principle of its functioning is the property administration by means of professional forest personnel who is outsourced to private subjects to provide forest activities (afforestation, educative measures and harvesting). The concept and settings reflected the situation of the first half of the 1990s and in course of time had to adapt to several modifying external factors: e.g. a new model of state administration, the establishment of higher territorial aggregates (regions), accession of the CZ to the EU. The effectiveness of this new model of enterprise functioning was not assessed with respect to the situation on the timber market and impacts of the state-established entity to a processing sector.

However, analytical or comparative studies on these issues largely do not exist. There are available studies comparing the manner of timber trade at the roadside and standing sale only, and the proposal of new organizational structure of the Forest of the Czech Republic, state enterprise (Kupčák 1998, 2003).

Buying forests

Total liberalization of the property trade (including forests) since 2011 in the CZ and related consequences in the change of

ownership structure have not yet been analysed. In the CZ, there exist price maps of realties, legal regulations for property valuation (including forests and forest property). Changes in the property market regarding forests and forest property are best seen based on the data from public register (Real Estate Cadastre). For detail scientific research and assessment the problem is in the Law on Personal Data Protection with many data unable for publishing due to monitoring and or scientific research.

Afforestation

Afforestation of agricultural land is one of a few opportunities how to expand forest area in the CZ. This issue is tackled in forest-policy documents, in which support for afforestation is listed as one of the major goals. In practice this support has a historical tradition. Until 2003 there was support for afforestation only from national sources. Since 2004 there exists co-financing with EU funds. However, as the available analysis shows (Špičková and Jarský, 2013, Jarský and Pulkrab, 2013) political ambitions are not fulfilled and afforested area of agricultural land is still relatively small. What leads to this situation deserve a deeper analysis.

Changing lifestyles

From a sociological point of view, it would be very beneficial to make a study on forest owners who no longer live in the country and are not even active in managing their forest property. Such a study is still non-existent in the CZ. From the perspective of the CZ, the institute of a “Forest Manager” guarantees the care of the forest.

According to Forest Act (1995) each forest owner (regardless of its size) shall be obliged to carry out forestry activities in co-operation with a forest manager. The forest manager shall offer special skills required in forestry activities. The forest manager may be an individual or a legal person holding a licence for such activities issued by a relevant state forest administration body.

Each forest owner can choose a forest manager and he/she should notify a relevant state forest administration body of the name of the selected forest manager.

A forest owner who carries out forestry activities according to a plan is obliged to conclude an agreement on the provision of services with the forest manager. If the forest owner meets the requirements for special forestry education and experience in forestry work, the forest owner may himself carry out the specialised activities of a forest manager in forests without a licence.

If the forest owner does not choose a forest manager himself, this is done by a legal entity which executes the forestry right in state-owned forests in the given area, unless the relevant state forest administration body decides to appoint another legal entity or individual.

Staff members of a relevant state forest administration body in the area of competence may carry out the activities of the forest manager. This shall not apply to forestry activities on their personal property. The costs of the activities of the forest manager shall be borne by the forest owner; the costs of the activities of the forest manager carried out by a legal person or individual shall be borne by the state.

The assessment of the change in the lifestyle and related needs for maintenance and gradual liberalization in the issue of “forest manager“ or possible impacts on other areas of forest-related policy (e.g. support of owners’ associations) have never been carried out.

Compensations for property right restriction due to public interest

The Charter of the CZ Constitution on the Rights and Freedom guarantees property right protection. To restrict the property right it is necessary to meet two conditions: law assigns the restriction and the owner is eligible for compensation. When declaring protected regimes of species or territorial protection in the CZ, forest owners are restricted in terms of management (as far as management exclusion) by the Law on Nature and Landscape Protection (Act No. 11/1992 Coll.) Interesting results could be obtained by a cross-country study or by an analysis of the judicature of the European Court for human rights in Strasbourg. A short analysis on this was performed by Kocourek (2012).

Table 5: Trends in forest ownership

Trends in forest ownership: New forest ownership through...	Significance*
• 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	1
• New forest ownership through afforestation of formerly agricultural or waste lands	1
• Changing life style, motivations and attitudes of forest owners (e.g. when farms are given up or heirs are not farmers any more)	2
• Other trends, namely: Compensations for property right restriction due to public interest	2

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

4.5. Gender issues in relation to forest ownership

The official statistical data do not deal with the gender issues in connection with forest ownership. Probably it is possible to obtain (based on contract, charged) some data from cadastres.

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

This section is concerned with forests owned by organisations such as conservation and heritage NGOs, self-organised community-based institutions and other philanthropic (characterized or motivated by philanthropy; benevolent) organisations. The management objective for these forests is usually to deliver

social or environmental services with maximisation of financial or timber returns as a secondary concern. Most owners corporate and may invoke at least an element of group or participatory decision-making 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.

There are several types of NGOs, the most important are cooperatives / association and environmental NGOs.

Table 6: Forests owned by different NGOs

Forests owned by ...	Yes	No	Uncertain
• Foundations or trusts	X		
• NGO with environmental or social objectives	X		
• Self-organised local community groups	X		
• Co-operatives/forest owner associations	X		
• Social enterprises		X	
• Recognized charitable status for land-owners		X	
• Other forms of charitable ownerships, namely:		X	

4.6.1. Foundations or trusts

In 1918 – 1938, after the birth of independent Czechoslovakia, foundation forests were usually administered by two institutions (a state and self-governing or church institution). This form of forest ownership was abolished before 1947, prior to the communist coup, by the Act No. 142/1947 Coll., on the Inspection of the First Land Reform. Current legislature does not tackle the problem of the restitution

of such property and, de facto, due to its legal non-existence before the 25th February 1948 it cannot even be a subject of restitution. A foundation fund first “appeared” in CZ legislature at the beginning of 1998 when the Act No. 227/1997 Coll., on Foundations and Foundation Funds came into effect. Current legislature of the CZ allows foundations as one form of ownership; however, up to now in CZ this form of ownership has been non-

existent. Statistical surveys of the CZ do not mention any data on forest estates that would be part of foundations.

4.6.2. NGO with environmental or social objectives

One of the examples of forest owned by NGO's is called land trust³. Land trust is not a form of a legal entity; it is a function or "title" of a non-profitable organization only. In essence, setting up and forming such an entity is feasible in two ways: as an association (within the meaning of the Civil Code – 89/2012 Coll., § 214 and further), or as a trust (in accordance with the same law, § 402 and further). The movement of land trusts in the CZ follows the tradition of pre-war beautification trusts and experience of many similar organisations abroad. NGO "Czech Union for Nature Conservation" stood at the birth of the movement of land trusts in the CZ and is a coordinator of land trusts activities in CZ and a long-term financial as well as methodical supporter. Land trust care about valuable plots or buildings in a long-term commitment with ecologically valuable areas being already protected and proclaimed in the regime of Nature and Landscape Protection Law (114/1992 Coll.). Sometimes the land trust is a direct owner of property, or it has various leasehold agreements signed with the owners, following certain duties arising from the leaseholds. At present, in the CZ there are approximately 60 such entities within the NGO "Czech Union for Nature Conservation". However, not all of them are the owners of forest property and the total forest area owned by the trusts has never been exempted to an inventory. The area is estimated to approximately several hundred

ha at most. These land trusts are spread quite evenly in all regions of the CZ.

4.6.3. Self-organised local community groups

This issue is described in chapter 4.7. - Common pool resources regimes (CPRs).

4.6.4. Co-operatives / forest owner associations

Co-operative form of ownership is a traditional and common form of the forest ownership in the CZ. The area of co-operative forests started to expand after 1900. During the period of independent Czechoslovakia (1918 – 1938) forest co-operatives were formed by forest allocation from the land reform. After 1945 they were formed either by the allocation from land reforms or to a greater extent by a voluntary association of communal forest property as the so-called communal forest co-operatives. Legally, the co-operative forests used to belong to private forests. They were nationalised by a Government Regulation No. 81/1958 Coll., by the administration of national property. After 1989 the former co-operative property was returned to its former owners and its legal form – a co-operative – was renewed. In 2012 there were 48 forest co-operatives in the CZ administering the total area of 30,502 ha (i.e. 1.2% total forest area in the CZ). Even though the issue of associating small-scale forest property is mentioned in strategic and concept materials (e.g. National Forest Programme 2007 – 2013) of forest-related policy, the number let alone the area of forest co-operatives is not growing and the support is rather at a declarative than factual level.

³ For illustration and directory go to www.csop.cz/psfront/.

CASE STUDY 1: COOPERATIVE - LDO Přebyslav

For case examples an analysis of the establishment of forest owners co-operatives in the region of the Czech and Moravian Highlands (e.g. LDO Přebyslav) in the 30s of the 20th century can be used. The description analyses prerequisites of its establishment and gives a socio-historical and legal study of the renewal process during restitutions in the 90s of the last century. This case can be compared with the course of restitutions of other property in the form of co-operatives due to the analysis of the relation renewed to administer the estate, although members of the forest cooperatives were in this case members of the municipal forest cooperative estates. The approach of municipalities to the forest property can also be analysed with municipal construction as a basic unit of civil society, which can again develop after democratic changes after 1989.

The forest Cooperative of Municipalities in Přebyslav was established in 1930 and subsequently abolished by the communist regime in 1959. In 1995, it was restored after 36 years, and currently it administers 5,700 ha forest land. The administered estates are owned by 44 municipalities in Žďársko and Přebyslavsko regions in central part of the Czech-Moravian highlands. The estates are administered through three forest administrations: Ransko, Račín and Nové Veselí. The forest Cooperative of Municipalities in Přebyslav also incorporates the department of forestry services based in Sklené. In 2013 the cooperative had 36 employees – 19 in the forest administrations, 7 in the headquarters and 10 in the department of forestry services. The basic activity of the Forest cooperative of Municipalities consists in work connected with managing entrusted forest estates, acting as forest manager of private estates, purchasing and transporting timber and providing complex services for small-scale forest owners in the regions. Additional activities consist in providing fee hunting in their own hunting grounds, (in total 4,300 ha), sale of timber and sheet material, book keeping, lease of a recreational building near Pond Řeka, fish breeding etc.

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 self-management, collective actions and self-organization (of rules and decisions). Examples of a traditional CPR regime are pastures, forest land communities in Sweden, Slovakia, and 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 a challenge of this Action to transfer knowledge and skills of traditional CPRs to new CPRs and vice versa. An 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. self-organisation and shared rights and responsibilities). Thus proper rules on management (harvesting, decision making and conflict resolution mechanism, cost/benefit sharing, sanctioning etc.) are a key for sustainable use of CPR regimes.

In the Czech part of Czechoslovakia common pool resources⁴ forests were always administered jointly. Common pool property is a residue and historical product of a former family (hereditary) ownership organisation of farm land, in particular forests, pastures and exceptionally other land. The transfer of former family ownership, which had been done for centuries, did not affect all land, and particularly forests and pastures remained in further common use by farm owners in certain communities of the so-called ruralists. This common property pool has been transferred to the present in various forms of existence:

- As a general farm – this form was abolished by Act No. 421/1919
- As a singular property (urbarian property in Slovakia)
- As a komposesorat property (similar to singular property, however, based on Hungarian Law – exist also in Slovakia and to a small extent in Southeast Moravia).

⁴ For illustration see for instance:

Singular forests in Jemnice:

<http://www.lesycr.cz/o-nas/casopis-lesu-zdar/Stranky/singularni-lesy-v-jemnici.aspx?retUrl=%2Fonas%2Fcasopis-lesu-zdar%2FStranky%2FArticlelist.aspx%3Frubic%3DZpr%25C3%25A1vy%26Page%3D6>

The property has a legal form of a co-operative.

Singular co-operative Seninka:

<http://beskydyvalassko.cz/encyklopedie/objekty1.phtml?id=100905> These forests have a legal form of a company with a limited liability.

Trust of singular co-owners Komňa:

<http://www.singular-komna.cz/>, this entity has a legal form of a trust.

Besides this property that emerged following the Customary Law, other singular forest properties emerged in accordance with the Act No. 130/1883 Austrian Collection of Law, on binding and purchase of easements. Based on this law, forests were given as a compensation for previous abolished servitudes either to the ownership of the municipality or to the common ownership of "all eligible", however, never to individual ownership of persons up to that time entitled

to use the servitudes. At the end of the 19th century in Moravia (eastern part of the CZ) emerged 188 singular estates with the total areal of 16,336 ha. The singular forests were abolished after 1948 and the property was then returned to eligible entities after 1989.

Today these formerly singular estates bear various legal forms – legal entities, e.g. private companies with limited liability (Ltd. – in Czech legislation "s.r.o."), co-operatives, trusts and others.

5. Forest management approaches for new forest owner types

The Action is interested if there are any new forest management approaches that 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 the Czech Republic

5.1.1. Who typically manages forests in your country?

The institutional framework of ownership of forest land is created by the state forest administration, private forest owners, communal forest owners, state forestland managers, private forest companies, and by their associations. State Forest administration consists of two levels. The Forestry Division of the Ministry of Agriculture supervises regional authorities and authorities of responsible municipalities. These authorities exercise the state administration duties imposed by the state forest administration, prescribed in the Forest Act, on the property they are managing. Regional offices are especially responsible for implementation of financial support programmes by the Ministry of Agriculture into practice.

In general, forest ownership structure has been substantially diversified mainly by the process of restitution. A great change occurred in area and number of private forest owners (about 145,000 new private forest owners). Small owners reassumed their property rights to about 750,000 ha of forests, but nearly 90% of these owners own on

average less than 2 ha of forest land, which is not favourable for forest management.

Practical activities in the state forests have been carried out by private forest joint-stock companies (FJSC) and other entrepreneurial entities registered at the market. The relationship between FJSC and Forests of the Czech Republic, state enterprise, is established by a contract based on procedures developed and approved for each particular territorial unit (type).

The important non-state forest owners have established a voluntary professional organisation - the Association of Municipal and Private Forest Owners in the Czech Republic (SVOL) just after restitution law approval. This is a very important partner of the Ministry of Agriculture, Ministry of Environment and other partners in the development of forestry policy documents in the CZ. SVOL organises expert seminars for its members and excursion, disseminates regularly expert forest information and organizes common wood-sale.

The Forest Management Institute (FMI) is a government organization established by the Ministry of Agriculture of the Czech Republic. FMI is responsible for executing forest inventory in the Czech Republic and elaborating and administration of regional plans of forest development based on the principles of sustainable forest management. Those plans serve as information resources for executing forest management plans, forest management guidelines, as well as the support for government administration decision making.

To have the Forest Management plan (FMP) is an obligation for all forest owners with forest property over 50 ha. FMP contains instructions of what it is necessary to carry out in which stand (afforestation, tending, felling) and it is elaborated for a 10-year period.

Small forest owners are obliged to manage forest in accordance with the Forest Act. They may receive forest management schemes (guidelines) free of charge.

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

New approaches in forest management are mentioned in the National Forest Programme (NFP) which is part of the national forest policy and is viewed as concept designed for the implementation of sustainable forest management and long-term enhancement of forestry competitiveness. There are particularly highlighted:

- On the basis of the principle of precaution, to enhance the species and spatial composition of the forest. (MA 2008)
- In suitable localities, to utilize the timber

potential (forest biomass) for energy purposes (solution of population's energetic needs, substitution of fossil fuels). (MA 2008)

- Strengthening the multifunctional role of forests, particularly of state forests. (MA 2008)
- Increased use of timber and wood-based products, and their recycling as renewable ecological raw material with a view to contribute to the mitigation of climate change. (MA 2008)

5.2.1. Increase natural regeneration

One of the long-term objectives of the state forest policy is to increase natural regeneration.

Table 7: Increase in natural regeneration

Way of forest regeneration	1990	2000	2010
Artificial regeneration (ha)	33,615	21,867	21,859
Of which replanting	9,635	4,371	3,087
Natural regeneration (ha)	908	3,422	5,127

Unsuitable silviculture and neglecting thinning operations by small forest owners are quite ordinary, partly because of high costs of these operations and small yields from them. These operations cannot be mechanized as easily as harvest cutting. Their costs could be decreased, for example by using the natural regeneration of forests (Skoupý et al. 2004). The target is to make natural regeneration contribute to the overall regeneration by 1/3.

5.2.2. Change of tree species composition

One of the goals of forest management supported by the state forest policy is to

increase diversity of forest tree species and to approximate it to natural composition of forests with adequate use of tree species suitable for production. The recommended tree species composition is an optimized compromise between natural composition and composition reflecting contemporary economic terms. Even the approximation to the recommended tree species composition is a long-term process because the average rotation period in Czech Republic is about 115 years. It means that every year new species composition can influence on average about 0.87% of the total forest area (1/115). Deciduous species (especially oak, beech) and fir are supported.

Table 8: Current, recommended and natural tree species composition in %

	Natural	Current			Recommended
		1990	2000	2010	
Conifers	34.7	77.6	76.5	73.9	64.4
Broadleaves	65.3	20.8	22.3	25.1	35.6
Total without unstocked areas	100	98.4	98.8	98.9	100

5.2.3. New technologies

New owners are usually not adequately equipped with technical machines, knowledge on the use of these machines, new technologies, or working procedures. Modern

and more efficient equipment and technologies in forestry, e.g. mini forwarders, help to cheapen the work in the forest, allow convenient operation of machines. For forest owners it is necessary to establish machine

co-operatives or other forms of co-operation which make it possible to reduce costs of logging operations.

5.3. Main opportunities for innovative forest management

5.3.1. Marketing potential of non-wood forest products

Non-productive functions of forest in the CZ are systematically monitored, e.g. the annual research of forest visits frequency and forest fruit collection performed since 1994 by the Czech University of Life Sciences Prague

(Šišák 2006). The results of this research confirm the long-term trends of population behaviour towards the visits to the forests and the volume of collected forest fruits.

Collecting mushroom and forest fruits is a very popular activity in the CZ. Almost 70% of households of the whole Czech Republic state they collect mushrooms. But depending on the region of household residence the percentage of households collecting mushrooms can vary from 50% to 80% (see Tab. 9).

The value of forest fruits and mushrooms collected in the CZ in 2012 is estimated on 4.6 billion CZK, i.e. 184 million Euro.

Table 9: Total volumes of forest fruits and mushrooms picked by visitors in 2012 (1 000 t)

Year	Mushrooms	Blueberries	Raspberries	Blackberries	Cranberries	Elderberries	Total
2012	32.8	6.8	3.4	3.2	0.3	2.2	48.8
Average 1994-2012	21.91	9.3	3.1	2.0	0.8	2.0	38.9

Source: Czech University of Life Sciences Prague, 2012

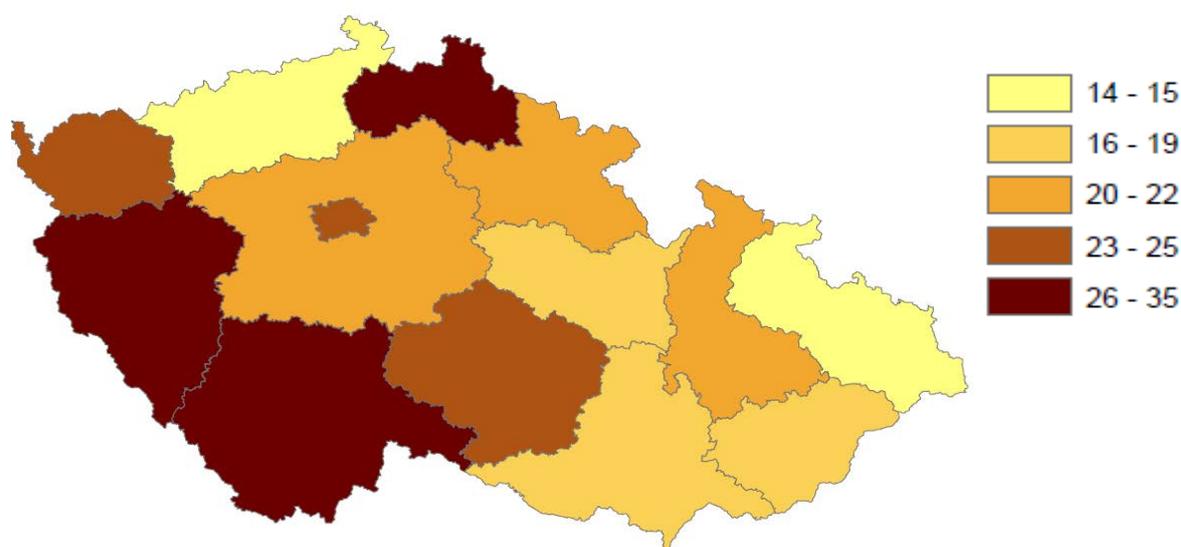


Figure 1: Average annual forest visits of inhabitants of different regions of the Czech Republic (Riedl and Šišák 2012)

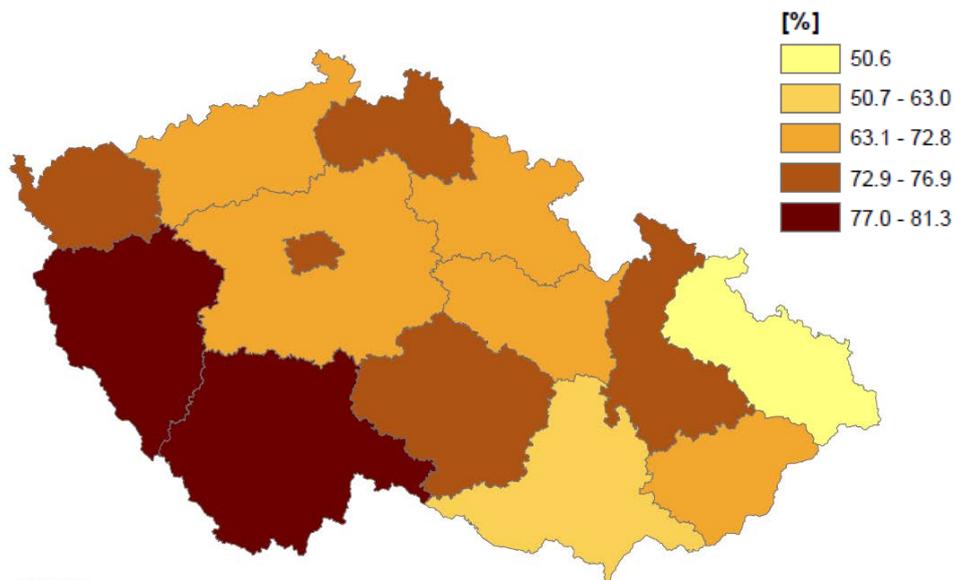


Figure 2: Percentage of households picking mushrooms in different regions of the Czech Republic (Riedl and Šišák 2012)

5.3.2. Marketing potential of forest certification

The chain of custody certification allows the use of other marketing methods and techniques, such as a differentiation strategy using Porter's value chain. Although Czech customers are not expected or willing to pay more for certified products, (Aguilar and Vlosky 2007) labelling products from certified wood and paper opens up new possibilities for differentiation at point of sale and allows to increase the perceived psychological value of certified products and increase their competitiveness in comparable prices with uncertified products (Riedl 2010).

5.3.3. The promotion of the use of energy from biomass

In 2010 the Czech Republic was one of the states of the European Union, which met the indicative target for the share of renewable energy sources in gross electricity consumption. The share of renewable sources in gross electricity consumption reached 8.24% in 2010. An increase to 13% in 2020 will require a great effort.

CZ Biom is a non-governmental non-profit organization and professional association supporting the development of phytoenergy in the CZ.

The Czech Biomass Association (CZ Biom) is the CZ's biggest professional organisation engaged in the issue of using biomass in all its forms as an energy source. Established in 1994, CZ Biom employs ten experts and currently represents roughly 160 firms and members.

The support scheme for electricity and heat production from biomass is done by following governmental acts and by decisions of the Energy Regulatory Office:

- Act No. 180/2005 Coll., on the promotion of electricity from renewable energy sources with amendments to other laws,
- 5/2007 Coll., Ordinance, which changes the ordinance 482/2005 on setting kinds and arts of their utilization and parameters of biomass by the support of the electricity production from biomass,
- 502/2005 Coll., Decree to establish the way of reporting the amount of electricity in the joint combustion of biomass and non-renewable resources.
- Price Decision No. 10 / 2008 - fixing the support for the production of electricity from renewable energy sources, combined electricity and heat and secondary energy sources.

Table 10: Potential of wood biomass in the CZ

Estimation of wood biomass potential	Coefficient	Total (thousand m ³ /year)
Timber lodging		17,678
Residues from timber logging	0.1	1,768
Wood residues from wood processing	0.25	4,420
Thinning	0.25	4,420
Cleaning	0.005	88
Sum Potential		10,695

Source: Sivek et al. (2012)

5.4. Obstacles in innovative forest management approaches

Main obstacles in innovative forest management approaches in the CZ are:

- Professional knowledge of small forest owners - private owners who own small properties generally have little professional knowledge in forestry. They also generally have a weak claim to the ownership of the land, a lack of financial means, and often live very far from their forestland and work in other sectors of industry (Šišák 2011). Forestry stakeholders need to be educated in forms of subsidies and relevant taxation. The state provides services free of charge to help forest owners improve the standards of forest management and ensure forest protection against damaging agents. Within its consulting services the state provides up-to-date information concerning preventing protection and protective measures
- Public understanding of multifunctional and sustainable forest management - public understanding of multifunctional and sustainable forest management is at a very low level in the CZ (Vančura et al. 2004, Riedl and Šišák 2013).
- Conservative thinking of forest owners in terms of traditions and traditional business approaches
- Distrust of small forest owners to the association and the cooperative form of

ownership resulting from forced collectivization during the communist era

- Unstable legislative and business environment - laws and taxes have been changed many times in recent years.
- The ongoing process of restitution of church lands and forests hampered some business activities while creating new opportunities for new owners.
- Rising tensions between conservationists promoting the expansion of protected areas, including restrictions limiting traditional farming and tourism and forest owners.

5.4.1. Challenges

The forest policy, and the state administration and authorities try to support small forest owners by the enhancement of their knowledge, elaboration and use of forest management guidelines, consultancy and advising by professional licensed foresters (free of charge), and creation of forest owners co-operatives (Šišák 2006).

Czech forestry communication efforts with the general public have apparently not managed to explain effectively the real processes taking place in forests and forestry, the positive shift of Czech forestry towards multifunctional forestry and the improving condition of forests (Riedl and Šišák 2013) as well as the enhancement of the society's awareness and regard of forests and forestry (MA 2008).

CASE STUDY 2: FORESTRY AS A PASTIME

Mr. Kraus represents new well-off owners who have forestry as their hobby. The business model covering their activities contains items as amusing and meaningful work in the open air, movement in nature, saving assets for future generations etc. Mr. Kraus, a successful manager in a construction company, has always liked to work with hands. Now he is 55 years old and lives with his wife in a gas-heated family house in South Bohemia. In 2011 he bought 2 ha of forest with a predominance of spruce and pine trees: one third about 80 years old, one third around 50 years old and the rest is younger growth. On weekends Mr. Kraus regularly works in his forest. He studies professional literature and his work is supervised by a forest manager. Having bought a new fireplace with a blower setup that would move the hot air in his house, Mr. Kraus began to enjoy preparation of firewood and work in forest. Apart from the saw and other tools he invested in an off-road with a trailer for better transport to the forest. Mr. Kraus is very proud of his forest. The rest of the family (wife, daughter and son) do not share his enthusiasm but he is looking forward to building a fence and establishing a new forest next year. He feels that he is doing the right thing. On the top, the work in the woods is now his hobby and he bought another 3 ha of forest in 2014.

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 policy instrument (the Prohibition of Lease and Sublease of state forest), which is based on the Forest Act (1995), states that it is not possible to privatize state-owned forestland (According Art. 5 Forest Act "Prohibition of Lease and Sub-Lease": It is prohibited to let or sublet a state forest for the purposes of forest management). Change in ownership is only allowed for those categories that were created on the basis of the restitution process.

The reverse process exists, that is the purchase of forest from non-state forest owners by state, mostly in the cases related to the nature and landscape protection. The state has a pre-emption right in the event that the owner's land is in a specially protected natural area (and the owner wants to sell its forestland).

Establishing forests through afforestation of agricultural land is a common practice in the CZ. Non-state owners of such agricultural land can apply for support for afforestation from national or EU funds (in fact, this is the support for owners of agricultural land – not forest owners, because the concurrent ownership of forests and agricultural land is not a frequent phenomenon in the CZ).

In terms of support for creation of new legal forms (and concurrent support for forest management) there exists financial support for small forest owners associations (support for management of the associated forests). There was the theoretical possibility for such support from national and EU funds in last two decades. In reality such support does not

produce new forms of ownership, because most of the created new associations in the CZ were associations without legal entity.

6.2. Influences of policies in forest management

In CZ the basic forest policy instrument is the Forest Act (1995). It prescribes, among other things, that the state forest policy is implemented by elaboration of Regional Plans for Forest Development (OPRL), and any other planning activities as Forest Management Plans (FMP) and Forest Management Schemes (FMS) should be elaborated based on OPRL. In the CZ planning is differentiated by the size of assets, not by type of ownership. FMP are mandatory for all forests with an area of more than 50 ha. For smaller estates (if they do not have FMP) FMS are elaborated, and it depends on the forest owner, if he decides to "take over" (accept) this FMS (which then have the same value as FMP) or not (then forest management is solved by individual permits). The forest management plan includes binding provisions and provisions of recommendation. For estates smaller than 3 ha (which do not have FMP or FMS) a maximum aggregate volume of felled timber is a binding indication. For others, additional binding provisions are the minimum share of soil-improving and reinforcing species for stand regeneration, and for state and municipal forest owners the minimum area of tending activities in stands under 40 years of age shall also be a binding provision.

The elaboration of the FMP shall be financed by the forest owner, while elaboration of the FMS is covered by the state. For non-state owners, however, there is a possibility to ask for the financial support for the development of the FMP in a digital form - from the budget of the Ministry of Agriculture.

Because the forest management is regulated by the Forest Act and other related acts rather strictly (e.g. with a maximum size of clearings, the set of rotation period, use of regional seedlings), there is quite a large variety of financial incentives for forest

management (from the regional budget or from the Ministry of Agriculture). The support (in the form of subsidy) is dedicated mainly at: (i) regeneration of forests affected by air pollution, (ii) reforestation, establishment of stands and their tending, (iii) grouping of owners of small-size forests, (iv) green and environmentally friendly technologies, (v) support of endangered wildlife species and (vi) breeding and training of national hunting dog breeds and hunting birds of prey. After the CZ access to the EU, forest owners are also able to apply for financial support from European rural and regional development funds. European funds have become the most important source of finance for the acquisition of investments (machinery, construction and reconstruction of forest roads, etc.) in forestry nowadays.

The Forest Act and the Act on the Nature Protection may restrict forest management through its provisions (e.g. by extension of the rotation period, limiting the method of logging, selection of technology, species diversity, etc.). In such cases, however, the forest owner has the legal right for compensation or for covering increased costs. Details for the calculation of such compensation are prescribed in the relevant regulations.

Table 11: Supported services in the Czech Republic

Type of service [mil CZK]	2009	2010	2011	2012
Aerial liming and fertilisation	19	17	2	0
Aerial fire control services	1	28	28	28
Large-scale measures in forest	2	1	1	1
Consultancy	35	35	36	21
Other services	6	7	8	0
Total	61	88	75	50

Source: MA 2013

Forestry and Game Management Research Institute (VÚLHM) provide (on request and free of charge) the expert and advisory services for forest owners in the area of forest protection (against biotic and abiotic influences, against game damages), forest and game management. Within consulting and educational activities they organise professional workshops designed especially for forest owners and their professional forest managers also helping them to improve the forest management. These seminars were mainly organized by professional forestry organizations and associations (Association

6.3. Policy instruments specifically addressing different ownership categories

There are activities in forestry which are, by their scope, beyond the capabilities of individual forest owners. Such activities are provided for forest owners by the state in the form of services. These include the aerial liming and fertilisation, aerial fire control services, large-scale measures in forests (protection), consultancy and other free services. State (from the budget of the Ministry of Agriculture) provides such services in order to help forest owners to improve the management in forests and ensure protection of forests against harmful factors. Information for forest owners on current preventive and defensive measures against harmful influences are provided within the consultancy (using the website eagri.cz and by financing of the Forest research institute, which provides consultancy through website, newspapers, workshops and conferences, or directly by answering phone or mail questions). The amount of money dedicated for such services is presented in Table 11.

of Municipal and Private forests of the Czech Republic, Czech Forestry Society, and many others) and were supported by the Ministry of Agriculture.

Another important institution, which provides consultancy for forest owners, is the Forest Management Institute (FMI). The obligation to establish a single agricultural advisory system was established in the Czech Republic with the entry into the EU on the basis of Council Regulation No. 1782/2003. This system ensures state-guarantee advice for management of farmland and forests.

Its primary aim is to ensure implementation of EU legislation and transfer plans and goals under the EU Common Agricultural Policy into practice. FMI provides consulting and educational activities on the basis of its Foundation deed and in accordance with the fulfilment of Advisory System Concept of the Ministry of Agriculture for 2009-2013. FMI consultancy services focus on financial support for forestry and legal requirements for forest management.

From the perspectives of a different approaches to forest management it is very important that in the last 10 years 4 information brochures were published (each about 30 pages) with the title *Rádce vlastníka lesa do výměry 50 ha* [Mentor for forest owner with less than 50 hectares] which were designed for small forest owners who do not

have developed FMP and for owners of agricultural land who are contemplating afforestation.

As a fundamental tool (which started in 1996 according the Forest Act from 1995) for the association of forest owners financial support (subsidies) was implemented - aid for management of common property (the amount of aid was dependent on the size of the associated property and size of the share). Competence to provide such contributions was until 2005 at the Ministry of Agriculture, the amount of the contribution is shown in the table below. In 2005, the competence for the provision of aids for forest management (including support of association) moved to a regional level. Nowadays each region can decide whether it will provide support or not in the given year.

Table 12: Support for association of forest owners

Year	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Million CZK*	1.1	1.2	2.2	3.1	3.4	3.7	3.8	3.8	4	2.7	3	1.3	1,3	1.4	1.4	0	0

Source: MA 1999, 2005, 2010, 2013

* Because in analysed period the share CZK/Euro varied substantially (between 37 and 23 CZK/EUR), the amount is given in national currency

Table 12 presents the data beginning in 1996, because since this year the new Forest Act has been valid (establishing the financial support for FOA). Before 1996 there were special support measures for forest management in forests <250 hectares.

With the accession into the EU in 2004, a new possibility emerged to support the creation of new associations also from the European Agricultural Guidance and Guarantee Fund (EAGGF). In practice, the possibility remained completely unfulfilled, because for the related sub-measure during 2004-2006 not a single application was submitted. The problem was with the legal formulation of associations, the absolute majority of Czech FOA did not suit the prescribed characteristics.

6.4. Factors affecting innovation in policies

The fundamental problem in this context is that the issue of different forest management by owner's category did not become a focus of political or scientific attention. Scientific research/analyses on this topic have not been

carried out so far. The main policy documents (although this need is mentioned) are primarily concerned with the possible differences (only) in the management of state forests and other ownership categories. The issue of small and new forest owners has not been considered as crucial, and there was not enough information on this issue to become a major political point.

The functions of the institutions in the innovation process could be divided into three categories: **reducing uncertainty by providing information, conflict management and cooperation, granting financial and non-financial support** (Edquist and Johnson 1997). The evaluation of the three functions in Czech forestry is as follows:

Support granting: this function of the system is fulfilled rather significantly in the CZ, but not exhaustively. Actually, the support of innovation implementation is not declared explicitly, but is only understood as the support of innovations. Its fundamental shortcoming consists in the fact that no criteria exist for evaluation of the importance of innovations implementation support.

If we are to efficiently accomplish this function of the innovation system, we would need to explicitly declare the implementation support in future program periods, and set the indicators used for the evaluation of the support. The analysis of innovations implementations by forest owners in the CZ shows that the support from public expense program was an essential and fundamental factor for the innovators, and influenced the implementation. Therefore, the function of providing the support might be declared definitely important.

The functions of **providing information, and management and support for collaboration** are rather tightly interconnected, therefore difficult to evaluate individually. Seen from this point, the above-mentioned function of implementation support is also significantly related to the other two, as the support is inadequate without sufficient information. Respondents expressed both views related to sufficient information on new innovation processes (Pudivítrová and Jarský 2011). Some respondents admit they felt encouraged to implement innovations thanks to sufficient information, while the non-innovative respondents claim lack of information on new possibilities. Therefore, we evaluate the **information function** of the innovation system similarly to the support function – the information function of the IS **is only partially fulfilled**.

Cooperation is generally considered as the most important instrument of the third function of the innovations system realisation – conflict management, i.e. management of the existing conflicts and preventing the imminent ones. Apart from various associations, this function should be performed by other institutional-innovation system items, especially state (public) organisations and institutes. Administration-law instruments should play its fundamental role in this issue, together with forest-political documents. Nevertheless, they do not pursue the issue of practical conflict

management – they deal with some situations only indirectly and ex-post. Respondents often mention a negative factor for implementation of innovations – legal acts are generally denounced as too strict and unsupportive. A strict diversification of competences might be one of the reasons of this inadequacy. Multi-functionality of forestry (i.e. variety of forest functions) is a widely acknowledged fact, but actually it provokes rather strict diversification by setting significance of the individual function (e.g. categorisation of forests in the CZ together with the competence splitting). Such a traditional view should be refused as all forests are multifunctional. Innovations implementation in protection forests and special forests are more complicated nowadays than in commercial forests, no matter whether the innovation concerns other than timber production function. In view of innovations system functions we might say that competence splitting is a potential source of conflict rather than its prevention. One of scarce examples of prevention of conflicts arising from the forests multi-functionality is the utilisation of financial support aimed at nature and landscape protection in forest support (e.g. payments in the framework of NATURA 2000 in forests). The question at issue is whether these activities should be carried out as subsidies (not legally enforceable; the forest owner is the applicant). More innovative (fair) could be to carry out these activities as services purchased by the public sector (state) from the forest owners. At present the forest owners are reimbursed for detriment (ex-post conflict management) but, as the analysis showed, the related regulations are not optimal (both factually as formally – too complicated). There is not enough political will to make changes in this point. Therefore we can say that the **conflict management function is insufficiently fulfilled** (Jarský 2014).

CASE STUDY 3: IMPORTANCE OF ASSOCIATIONS - ASSOCIATION OF MUNICIPAL AND PRIVATE FOREST OWNERS

In the CZ the most important forest owners association is Association of Municipal and Private Forest Owners (SVOL), which became a very important partner in creation of the Czech national forest policy during the last 20 years. In the period 1991-1992 most of the municipalities got their property back. In April 1992, about 60 municipalities decided to establish an association with the main idea to provide assistance, information and experience exchange. The founder members were 93 owners of 990 ha of municipal forests. Since 1996, SVOL is a voluntary organization that associates owners and managers of all kind of non-state forest property. Municipalities, forest municipal and church communities (since 2008) are organized in SVOL directly, through the chamber of municipal forests. Private owners may participate through chamber of private owners, the single legal entity, which is a collective member of SVOL. Nowadays there are 530 members with 356 thousand ha of forests. The main objective is to advocate the ownership rights in the legislation processes regarding forestry and to highlight the importance of forest management in terms of stability and rural development. The basic organizational unit consists of regional organizations without legal status. The members' meeting, as a body, elects delegates to the conference, which is the highest body of SVOL and decides on the major issues concerning the association. The initial activity of the association is managed by the presidency of a representative of each region. SVOL manages the income from its own activities, membership contributions, donations from third parties, with the benefits of sponsorship and advertising activities. SVOL management is governed by a budget is proposed by the National Committee and approved by the SVOL conference. SVOL is a member of the following international organizations: European Federation of Municipal Forest Owners (FECOF), CEPF, PEFC and ELO (source: www.svol.cz).

7. Literature

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8. Annexes

8.1. Tables with detailed description of 7 most important publications

SELECTED REPORTS/PUBLICATIONS	
Full reference of study/publication	Oliva, J. (2006) <i>Vliv státu na vlastnictví lesů</i> [Influence of state on forest ownership]. <i>Zprávy lesnického výzkumu, Svazek 51/4: 265-271.</i>
English language summary/abstract	This article analyses from the historical point of view the instruments used by the state to influence management in forests in all forms of ownership. The state influence is based on the fact that forest fulfils a lot of functions that are irreplaceable for the society. The article sets the form how the state influences forest owners and the position of the state towards forest owners. As state interventions always cause intensive political discussions and conflicts, it is necessary to know historical background and use experience when creating new legal regulations. That's why the article analyses all forms of state forest management supervision from its beginning in 1784 until now. It also gives historical overview of all legal rules that have been issued in connection with forest management since 1243 (Forest Act no. 289/1995).
Language of the study/publication	Czech
Type of organization conducting the study (in case of multi-institutional studies multiple answers allowed)	<input checked="" type="checkbox"/> University <input type="checkbox"/> Public Research Institute <input type="checkbox"/> Private Research Institute <input type="checkbox"/> Other (please name below) <input type="text"/>
Type of funding used (multiple answers allowed)	<input type="checkbox"/> Private Industry <input type="checkbox"/> Private other <input checked="" type="checkbox"/> National <input type="checkbox"/> Public Sub-National <input type="checkbox"/> Public EU/cross-national Europe <input type="checkbox"/> Public International beyond Europe <input type="checkbox"/> Public other
Regional scope	<input type="checkbox"/> Sub-national <input checked="" type="checkbox"/> National <input type="checkbox"/> Cross-national Europe <input type="checkbox"/> International beyond Europe
Theoretical approach	Political sciences – forest policy
Methodical approach	Historical comparative analysis

<p>Thematic focus</p>	<p>ownership change (incl. on changes in <input checked="" type="checkbox"/> quantitative terms, emerging new ownership types, etc.)</p> <p><input type="checkbox"/> motives and behaviour of ownership types</p> <p><input type="checkbox"/> new management approaches</p> <p><input checked="" type="checkbox"/> policy instruments addressing ownership</p>
<p>Main results should be given here if not yet included in the summary.</p>	<p>The state influences the management in forests of any ownership much more than in case of other management activities. This often leads to forest-policy conflicts among forest owners and state. That's why the state uses various political instruments to influence the management in forests without regarding the forest owner. These instruments are as follows:- issue of forest regulations, acts to regulate man's behaviour in forest; the history of these rules begins in the 12th century- creation of system of state forest administration, the oldest one is from the half of the 18th century-creation of state forest policy and participation in international multilateral agreements- education- support of smaller forest properties to implement useful measuresState is in the following positions in face of forest owners:- holder of state power (state forest supervision)- lawmaker- provider of grants, state support for management but also tax collector- competitor – has its own forestsState forest supervision has been exercised since the 17th century. It was modified for several times and today's form is very complicated, divided between two Ministries and many other subjects on lower level. The article gives analysis of state forest administration development since 1785 till today. When the supervision was established it was related especially to municipal forests. Its detailed content was in the Act no. 250/1852. When Czechoslovakia was established, the state supervision almost did not change. In 1927 the changes were realized by Act no. 125/1927. During the Second World War the German way of state supervision was accepted. It was very important that political institutions did not influence forest supervision in that time. After 1945 the state supervision was handed to district and regional authorities and its forms changed several times. After 1990 it was divided between two Ministries – Ministry of Agriculture and Ministry of Environment and came into today's complicated form that can be quite demanding for both forest owner and also the state. Legal rules are one of the most important state instruments. This article deals with the general position of legal rules in forestry and after that gives very detailed analysis of legal rules from the past till today. It also pays attention to nowadays Forest Act no. 289/1995. This analysis can serve as a source document for creation of new legal rules. These are definitely going to be a topic of intensive political discussions. The question is if law restrictions are in comparison with other European laws reasonable and cannot be the reason for disadvantageous position of Czech forest owner on the European timber market.</p>
<p>Weblink</p>	<p>http://www.vulhm.cz/sites/File/vydavatelska_cinnost/zpravy_lesnickeho_vy_zkumu/zlv_2006_04.pdf</p>

SELECTED REPORTS/PUBLICATIONS	
Full reference of study/publication	Kupčák, V. (1998) <i>Economic Transformation of Forestry and Management of Forest Joint-Stock Companies in the Czech Republic</i>. Finnish Journal of Business Economics. Vol. 2, no. 3, s. 1-6. ISSN: 0024-3469.
English language summary/abstract	The basic motive of the economic reform in state forests of the Czech Republic after 1990 was to separate management in forests from the implementation of production activities. The state company "Forests of the Czech Republic" with its headquarters in Hradec Králové was charged to manage state forests. From the present 7 enterprises of state forests 78 joint-stock companies have been established which carry out silvicultural and logging activities in state forests and in forests of other owners under conditions of the competition environment and on the basis of contracts. The paper deals with the exact evaluation of partial and present results of the development of forestry economic reform with the orientation to study the behaviour of transformed forest joint-stock companies privatized by the method of coupon privatization.
Language of the study/publication	English
Type of organization conducting the study (in case of multi-institutional studies multiple answers allowed)	<input checked="" type="checkbox"/> University <input type="checkbox"/> Public Research Institute <input type="checkbox"/> Private Research Institute <input type="checkbox"/> Other (please name below) <input type="text"/>
Type of funding used (multiple answers allowed)	<input type="checkbox"/> Private Industry <input type="checkbox"/> Private other <input checked="" type="checkbox"/> National <input type="checkbox"/> Public Sub-National <input type="checkbox"/> Public EU/cross-national Europe <input type="checkbox"/> Public International beyond Europe <input type="checkbox"/> Public other
Regional scope	<input type="checkbox"/> Sub-national <input checked="" type="checkbox"/> National <input type="checkbox"/> Cross-national Europe <input type="checkbox"/> International beyond Europe
Theoretical approach	Economic reform in state forests, changes in forest ownership, separation of forest ownership from management activities in the state forests.
Methodical approach (e.g. case studies, questionnaire survey, qualitative interviews, etc.)	The description of the course of transformation was carried out including the structure of newly arisen legal subjects and their owners. Basic selected economic parameters of the market environment and their development in the time series were discussed (indicators of capital market, economic results and their level, the development of indebtedness). The analyses aimed at 78 of forest joint-stock companies (FJSC) were orientated to methods of comparisons between particular enterprises illustrated on actual available data.

Thematic focus	<p>ownership change (incl. on changes in</p> <p><input checked="" type="checkbox"/> quantitative terms, emerging new ownership types, etc.)</p> <p><input type="checkbox"/> motives and behaviour of ownership types</p> <p><input checked="" type="checkbox"/> new management approaches</p> <p><input checked="" type="checkbox"/> policy instruments addressing ownership</p>
Main results should be given here if not yet included in the summary.	<p>Based on the analysis of the period 1991–1996, some other trends result indicating worsening the basic economic parameters and thus also the conditions for the development of FJSC. The increase in indebtedness due to bank credits is an important accompanying phenomenon resulting from the fact that the level of profit does not create necessary financial sources in FJSC. In 1991, 1992, 1993, 1994, 1995, and 1996 mean indebtedness amounted to CZK 1 194 000, 1 996 000, 7146 000, 10 370 000, 11 581 000, and 18 713 000, respectively. The alarming development of the economic parameters including relationships to other macroeconomic conditions caused that in 1997, a number of FJSC amalgamated and further measures were carried out with the aim to increase profitability. The first unofficial economic results for 1997 indicate slight improvement of the parameters. In addition to the description of the course of the transformation an information basis have been established for using evaluation methods such as factor analysis and particularly gnostic analysis of indefinite data. Procedures were initiated allowing to provide objective answers to substantial questions as e.g. if the principle of separating state forests administration from production activities fulfilled supposed expectations or in the method of coupon privatization was the most suitable way for determining the optimum ownership structure, restructuring and increasing the efficiency of forest enterprises.</p>
Weblink	<p>http://lta.hse.fi/1998/3/lta_1998_03_d6.pdf</p>

SELECTED REPORTS/PUBLICATIONS	
Full reference of study/publication	Flora, M. (1997) <i>Effectiveness of legal standard as a tool of forest-related policy in market society</i>. Dissertation work [PhD thesis]. Mendel University in Brno, 340 pp.
English language summary/abstract	<p>The work focuses on the issue of forest law. It is an extended study (341 pages) of a comparative nature. To assess the effectiveness of legal standards, the author uses methods of social experiment and, in particular, comparison of law. With a certain modification he also used empirical sociology methods in an indirect way of documentary study of administrative and judicial decisions from the sphere of forest law published especially in accordance with forest act and related regulations. Comparatus for the work is the forest law currently in effect (i.e. 1st July 1997), represented particularly by the Act No. 289/1995 Coll., on forests and change and amendments of several acts (forest act). Comparandum were historical standards of forest law in force on the territory of Bohemia, Moravia, Silesia and Slovakia as well as forest law standards of the Federal Republic of Germany, Austrian Republic, Polish Republic and Swiss Confederation. Results of the work are categorized under selected concepts comparing 18 principal institutes of forest law: Designation of legal regulation, purpose and issue of introductory provisions, Definition of concepts forest, forest land, Proprietary regime, Forest area preservation, Forest categorisation, General use of the forest, Basic principles of forest management, renewal and education of the forest, Forest harvest and transportation, Forest protection, Forest reproduction material, Soil amelioration and creek fencing, Management planning, Providing management at an expert level, State administration with forest management, Sanctions for anti-legal behaviour, Forest owners associations, Compensation for restriction of proprietary rights and state support of forest management, Adjustment of several other issues. In the second part of his work, the author dealt with the analysis of external and internal prerequisites to identify the effectiveness of legal standards. Finally, the author attempted to analyse the effectiveness of current forest law in the Czech Republic and, based on his findings, he proposes the adjustment of several institutes to achieve a balanced relation between set objectives of the forest-related policy and existing social needs. The work was submitted before the accession of the CR to the European Union and many proposals for solutions appeared and were used for the harmonization of law with the EU directives during a pre-accession period. Despite the time that has lapsed since the date of the analysis, the proposed solutions are still up-to-date and they repeatedly appear in discussions connected with the amendment of forest law.</p>
Language of the study/publication	Czech
Type of organization conducting the study (in case of multi-institutional studies multiple answers allowed)	<input checked="" type="checkbox"/> University <input type="checkbox"/> Public Research Insitiute <input type="checkbox"/> Private Research Institute <input type="checkbox"/> Other (please name below) <input type="text"/>

Type of funding used (multiple answers allowed)	<input type="checkbox"/> Private Industry <input type="checkbox"/> Private other <input checked="" type="checkbox"/> National <input type="checkbox"/> Public Sub-National <input checked="" type="checkbox"/> Public EU/cross-national Europe <input type="checkbox"/> Public International beyond Europe <input type="checkbox"/> Public other
Regional scope	<input type="checkbox"/> Sub-national <input checked="" type="checkbox"/> National <input checked="" type="checkbox"/> Cross-national Europe <input type="checkbox"/> International beyond Europe
Theoretical approach	Law and political sciences, forest policy
Methodical approach	Comparative diachronic and cross-country analysis
Thematic focus	<p>ownership change (incl. on changes in</p> <input type="checkbox"/> quantitative terms, emerging new ownership types, etc.) <input type="checkbox"/> motives and behaviour of ownership types <input checked="" type="checkbox"/> new management approaches <input checked="" type="checkbox"/> policy instruments addressing ownership
Main results should be given here if not yet included in the summary.	in the summary
Weblink	

SELECTED REPORTS/PUBLICATIONS	
Full reference of study/publication	Kupčák, V. (2005) <i>Elementary financial analysis of the Forests of the Czech Republic, state enterprise</i>. JOURNAL OF FOREST SCIENCE, 51, (3): 127–140
English language summary/abstract	The basic feature of an economic reform of the forestry in the Czech Republic after 1990 was separation of supervision in the state forests from operating performance. The Forests of the Czech Republic, state enterprise, was charged with management and supervision, hence economic activities of the subject are provided on the basis of contracts by entrepreneurial units called contractors in the forestry. The purpose of the paper is economic analysis of the Forests of the Czech Republic, state enterprise, in the period 1998–2002. The objective is the construction and testing of an elementary method of financial analysis as well as outline of financial situation and development of the chosen subject generally. The paper contributes to branch economy analysis, common in agriculture and wood-processing industry.
Language of the study/publication	English
Type of organization conducting the study (in case of multi-institutional studies multiple answers allowed)	<input checked="" type="checkbox"/> University <input type="checkbox"/> Public Research Institute <input type="checkbox"/> Private Research Institute <input type="checkbox"/> Other (please name below) <input type="text"/>
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Regional scope	<input type="checkbox"/> Sub-national <input checked="" type="checkbox"/> National <input type="checkbox"/> Cross-national Europe <input type="checkbox"/> International beyond Europe
Theoretical approach	Economic,
Methodical approach	financial analysis
Thematic focus	<input type="checkbox"/> ownership change (incl. on changes in quantitative terms, emerging new ownership types, etc.) <input checked="" type="checkbox"/> motives and behaviour of ownership types <input checked="" type="checkbox"/> new management approaches <input type="checkbox"/> policy instruments addressing ownership

Main results should be given here if not yet included in the summary.	The establishment of the Forests of the Czech Republic, state enterprise (FCZ), in 1992 was one of the important steps of economic reform and transformation of the forestry in the Czech Republic after 1990. As a representative of the Czech state the FCZ own about 50% of total forests in CZ. According the privatisation process almost all technologies were privatised and important part of the forest activities are provided as outsourcing from private companies or other forest owners. The results form financial and economic analysis are important not only for FCZ, but for all other forest owner and forest companies cooperated with FCZ.
Weblink	http://www.cazv.cz/attachments/5_Kupcak.pdf

SELECTED REPORTS/PUBLICATIONS	
Full reference of study/publication	Pulkrab, K. (2006) <i>Economic effectiveness of sustainable forest management</i>. Journal of Forest Science, 52, 2006 (9): 427–437.
English language summary/abstract	The article deals with economic aspects of sustainable forest management. The analysis stems from Plíva's typological system. Several hundreds of variants were calculated for forest silviculture profitability classified according to management intensity, target management system, proportion of ameliorating and improving species, proportion of natural regeneration, and set of forest types. The results show a possibility of labour saving and also marked differentiation of the effect of wood production function depending on natural and production conditions and management intensity.
Language of the study/publication	English
Type of organization conducting the study (in case of multi-institutional studies multiple answers allowed)	<input checked="" type="checkbox"/> University <input type="checkbox"/> Public Research Institute <input type="checkbox"/> Private Research Institute <input type="checkbox"/> Other (please name below)
Type of funding used (multiple answers allowed)	<input type="checkbox"/> Private Industry <input type="checkbox"/> Private other <input checked="" type="checkbox"/> National <input type="checkbox"/> Public Sub-National <input type="checkbox"/> Public EU/cross-national Europe <input type="checkbox"/> Public International beyond Europe <input type="checkbox"/> Public other
Regional scope	<input type="checkbox"/> Sub-national <input checked="" type="checkbox"/> National <input type="checkbox"/> Cross-national Europe <input type="checkbox"/> International beyond Europe
Theoretical approach	Silviculture, economics
Methodical approach	Financial analysis, comparative analysis
Thematic focus	<input type="checkbox"/> ownership change (incl. on changes in quantitative terms, emerging new ownership types, etc.) <input type="checkbox"/> motives and behaviour of ownership types <input checked="" type="checkbox"/> new management approaches <input type="checkbox"/> policy instruments addressing ownership
Main results should be given here if not yet included in the summary.	The results show that all forest owners could predict the effectiveness of their property according the typological characteristics. Such information could help the owner to decide which management approach chose (intensive or extensive). For smallest owner the results could help with decision whether keep or sell forest.
Weblink	http://www.cazv.cz/userfiles/File/JFS%2052_427-437.pdf

SELECTED REPORTS/PUBLICATIONS	
Full reference of study/publication	Šišák, L. (2011) <i>Forest visitors' opinions on the importance of forest operations, forest functions and sources of their financing</i>. <i>Journal of Forest Science</i>, 57, 2011 (6): 266–270.
English language summary/abstract	The survey was conducted in three selected areas of the Czech Republic in 2008, with the results processed in 2009. Forests visitors received inquiry forms (face to face interviews, random sample). The total number of visitors on 8 survey days was 7,369. The total number of filled-in questionnaires in the three areas was 1,122. Tree planting and tree protection are considered as the most important forest operations, followed by road and stream bank maintenance. On the contrary, timber transport and harvesting are considered as the least important activities. The nature-protecting function is considered as the most important forest function, followed by soil-conservation, climatic, hydrological and health (recreational) functions. Timber production and non-timber production are the least important functions according to the respondents. 20% of respondents claimed that increased costs needed to improve non-market forest functions, used by the visitors, should be partially or fully financed from the timber sales revenues, while only 6.5% of respondents say the costs should be partially or fully financed from payments by the users of forest functions.
Language of the study/publication	English
Type of organization conducting the study (in case of multi-institutional studies multiple answers allowed)	<input checked="" type="checkbox"/> University <input type="checkbox"/> Public Research Institute <input type="checkbox"/> Private Research Institute <input type="checkbox"/> Other (please name below)
Type of funding used (multiple answers allowed)	<input type="checkbox"/> Private Industry <input type="checkbox"/> Private other <input checked="" type="checkbox"/> National <input type="checkbox"/> Public Sub-National <input type="checkbox"/> Public EU/cross-national Europe <input type="checkbox"/> Public International beyond Europe <input type="checkbox"/> Public other
Regional scope	<input type="checkbox"/> Sub-national <input checked="" type="checkbox"/> National <input type="checkbox"/> Cross-national Europe <input type="checkbox"/> International beyond Europe
Theoretical approach	sociology
Methodical approach	Questionnaire survey
Thematic focus	ownership change (incl. on changes in <input type="checkbox"/> quantitative terms, emerging new ownership types, etc.) <input checked="" type="checkbox"/> motives and behaviour of ownership types <input checked="" type="checkbox"/> new management approaches

	<input type="checkbox"/> policy instruments addressing ownership
Main results should be given here if not yet included in the summary.	According the published results the forest owner could decide which management approach should be utilised to be “good” in the forest visitor’s eyes. According the respondents opinion mainly the state forest should utilised management approaches suitable for nature protection.
Weblink	www.agriculturejournals.cz/publicFiles/42895.pdf

SELECTED REPORTS/PUBLICATIONS	
Full reference of study/publication	Špičková, V. and Jarský, V. (2013) <i>Zhodnocení možností a efektivity financování lesního hospodářství z fondů EU</i> [Possibilities and efficiency assessment of funding forestry from the EU funds]. <i>Zprávy lesnického výzkumu</i>. 58/2. 176-185
English language summary/abstract	The area of forestry, with respect to grant policy, is included in the EU programme period of 2007–2013 under two grant programmes. Subvention to forestry can be gained from Rural Development Programme and the Operational Programme Environment. The most important tool is Rural Development Programme, which involves eight grants focused on forestry development and improvement of forest conditions. The Operational Programme Environment includes two grants supporting forestry, nature and countryside protection. Ten forestry support measures, in which the interim evaluation for the period of 2007–2010, evaluation of efficiency and comparison of approved grants according to the types of forest owners are carried out, are identified within these programmes. Starting point of the article was analysis of documents considering particular indicators and aims of individual grants in the area of forestry during the programme period of 2007–2013. The results of the interim evaluation are compared to the results in the official mid-term evaluation documents held by the Ministry of Agriculture and Ministry of the Environment in the Czech Republic
Language of the study/publication	Czech
Type of organization conducting the study (in case of multi-institutional studies multiple answers allowed)	<input checked="" type="checkbox"/> University <input type="checkbox"/> Public Research Institute <input type="checkbox"/> Private Research Institute <input type="checkbox"/> Other (please name below) <input type="text"/>
Type of funding used (multiple answers allowed)	<input type="checkbox"/> Private Industry <input type="checkbox"/> Private other <input checked="" type="checkbox"/> National <input type="checkbox"/> Public Sub-National <input type="checkbox"/> Public EU/cross-national Europe <input type="checkbox"/> Public International beyond Europe <input type="checkbox"/> Public other
Regional scope	<input type="checkbox"/> Sub-national <input checked="" type="checkbox"/> National <input type="checkbox"/> Cross-national Europe <input type="checkbox"/> International beyond Europe
Theoretical approach	Forest policy
Methodical approach	Document analysis, comparative analysis, face-to-face interview

Thematic focus	<p>ownership change (incl. on changes in</p> <p><input type="checkbox"/> quantitative terms, emerging new ownership types, etc.)</p> <p><input checked="" type="checkbox"/> motives and behaviour of ownership types</p> <p><input type="checkbox"/> new management approaches</p> <p><input checked="" type="checkbox"/> policy instruments addressing ownership</p>
Main results should be given here if not yet included in the summary.	<p>The sector of forestry is considered as a significant part of the European Union economy. The area of forestry does not have own funding programme but within the conditions of the Czech Republic is included in funding programmes: Rural Development Programme and the Operational Programme "Environment". The aim of the article is so-called interim evaluation, including evaluation of individual grant efficiency relating to forestry for 2007–2010. Part of the evaluation is comparison of using the resources from EU funds for various types of forest owners. On the basis of the executed analyses of materials, description of individual grants was carried out. Then the input, output, result and target indicators were identified. Principal tool employed in forestry is Rural Development Programme, which involves eight grants in total; their primal aim is the area of forestry development and improvement of forest conditions. The Operational Programme "Environment", which includes two grants relating to forestry, is another financial tool. Through their content they are primarily related to the issue of nature and countryside protection, however, they include also the issues of forestry. Initial point of the evaluation is presented, where allocation of individual grants during 2007–2013 is shown. The next step is evaluation of efficiency as to whether and to what extent the targets of individual grants were fulfilled (within the whole programme period) till the end of 2010, and whether the targets will be accomplished till the end of the programme period. The last part of the evaluation is a comparison of approved applications with regard to various forest owners. Projects implementation significantly contributed to improvement of forest functions and competitiveness of Czech forestry. Knowledge gained from the evaluation can be applied when creating strategic documents to gain grants within the coming EU programme period of 2014–2020, whose preparation started in the Czech Republic in 2012.</p>
Weblink	<p>http://www.vulhm.cz/plugins/downfile.php?typ=FULL&id=307</p>



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CENTRAL-EAST AND SOUTH-EAST EUROPEAN
REGIONAL OFFICE - EFICEEC-EFISEE

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