



EUROPEAN FOREST INSTITUTE
CENTRAL-EAST AND SOUTH-EAST EUROPEAN
REGIONAL OFFICE – EFICEEC-EFISEE



Forest Land Ownership Change in fYR Macedonia

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 fYR Macedonia

COST Action FP1201 FACESMAP Country Report

Authors

Vladimir Stojanovski

*Ss. Cyril and Methodius University in Skopje, Faculty of Forestry in Skopje
Department Organization, Economics in Forestry
(& PhD student University of Natural resources and Life Sciences Vienna)
16 Makedonska brigada 1, 1000 Skopje
Macedonia*

Makedonka Stojanovska

*Ss. Cyril and Methodius University in Skopje, Faculty of Forestry in Skopje
Department Organization, Economics in Forestry
16 Makedonska brigade, 1000 Skopje
Macedonia*

Biljana Stojanova

*Public Enterprise "Park and Greenery"
Bul. Ilindenska 104, 1000 Skopje
Macedonia*

Vaska Nedanovska

*Ss. Cyril and Methodius University in Skopje, Faculty of Forestry in Skopje
Department Organization, Economics in Forestry
16 Makedonska brigada, 1000 Skopje
Macedonia*

The COST Action FP1201 FACESMAP Country Reports are edited by the European Forest Institute Central-East and South-East European Regional Office (EFICEEC-EFISEE) at the University of Natural Resources and Life Sciences, Vienna (BOKU). The Country Reports are not subject to external peer review. The responsibility for the contents of the Country Reports lies solely with the country author teams. Comments and critique by readers are highly appreciated.

The main parts of these Country Reports will be included in the upcoming EFICEEC-EFISEE Research Report "Forest Land Ownership Change in Europe. COST Action FP1201 FACESMAP Country Reports, Joint Volume", published online on the FACESMAP (<http://facesmap.boku.ac.at>) and EFICEEC-EFISEE (www.eficeec.efi.int) websites.

Reference:

Stojanovski, V., Stojanovska, M., Stojanova, B., Nedanovska, V. (2015) Forest Land Ownership Change in FYR Macedonia. COST Action FP1201 FACESMAP Country Report, European Forest Institute Central-East and South-East European Regional Office, Vienna. 32 pages. [Online publication]

Published by:

European Forest Institute Central-East and South-East European Regional Office
(EFICEEC-EFISEE) c/o
University of Natural Resources and Life Sciences, Vienna (BOKU)
Feistmantelstrasse 4
1180 Vienna
Austria

Tel: + 43-1-47654-4410
e-mail: eficeec@efi.int
Web site: www.eficeec.efi.int

Papers published in this series can be downloaded in PDF-format from:
<http://facesmap.boku.ac.at/library/countryreports>

Cover: F. Aggestam Layout: S. Zivojinovic



COST is supported by the EU Framework Programme Horizon 2020



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

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

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

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

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

Background of the project

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

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

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

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

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

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

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

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

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

Contents

1. Introduction	1
2. Methods	3
2.1. General approach.....	3
2.2. Methods used.....	3
3. Literature review on forest ownership in change	4
3.1. Research framework and research approaches	5
3.1.1. Types of organizations (incl. which organisations are active for which of the themes) .	5
3.1.2. Types of funding (incl. which funding type is used for which of the themes)	5
3.1.3. Theoretical and methodical approaches, and regional scope of the studies	5
3.2. New forest ownership types	5
3.3. Forest management approaches	6
3.4. Policy change / policy instruments	6
3.4.1. Policy influencing the private forestry	6
3.4.2. Subsidies	7
3.5. Major results and insights.....	7
3.5.1. Appearance of private forestry issues in Macedonia	7
3.5.2. Analyzing the profile of Macedonian Forest owner.....	7
3.5.3. Critical assessment, gaps and future research needs from your view.	8
4. Forest ownership	9
4.1. Forest ownership structure.....	9
4.1.1. National data set.....	9
4.1.2. Critical comparison with national data in FRA reporting	9
4.2. Unclear or disputed forest ownership.....	9
4.3. Legal provisions on buying or inheriting forests	10
4.4. Specific inheritance (or marriage) rules applied to forests	10
4.5. Changes of the forest ownership structure in last three decades	10
4.5.1. Changes between public and private ownership	10
4.5.2. Changes within public ownership categories.....	10
4.5.3. Changes within private forest ownership	10
4.5.4. Main trends of forest ownership change.....	10
4.6. Gender issues in relation to forest ownership	11
4.7. Charitable, NGO or not-for-profit ownership of the forests.....	12
4.8. Common pool resources regimes	12
5. Forest management approaches for new forest owner types	14
5.1. Forest management in Macedonia.....	14
5.1.1. Who typically manages forests in your country?	14
5.2. New or innovative forest management approaches relevant for new forest owner types ...	15
5.3. Main opportunities for innovative forest management.....	15
5.4. Obstacles for innovative forest management approaches	15
6. Policies influencing ownership development / Policy instruments for new forest owners	16
6.1. Influences of policies on the development of forest ownership	16
6.2. Influences of policies in forest management	16
6.3. Policy instruments specifically addressing different ownership categories	16

6.3.1. Financial instruments from Biological reproduction	16
6.4. Factors affecting innovation in policies.....	17
7. Literature.....	18
8. Annexes	19
8.1. Tables with detailed description of 7 most important publications	19
Figure 1: Gender structure of private forest owners (2009)	11
Figure 2: Gender structure of private forest owners (2013)	12

Acronyms and abbreviations

CEPF	Confederation of European Forest Owners
CNVP	Connecting Natural Values & People Foundation
COST	European Cooperation in Science and Technology Program
CPR	Common pool resource regimes
FAO	Food and Agriculture Organization of the United Nations
FMU	Forest Management Units
FOA	Forest Owners Association
FOPER	Western Balkan Forest Policy, Economics and Governance Education and Research
FRA	Global Forest Resources Assessment
GEF	Global Environment Facility
GTZ	Deutsche Gesellschaft für Technische Zusammenarbeit
MAFWE	Ministry of Agriculture, Forestry and Water Economy
NAPFO	National Association of Private Forest Owners
NFAP	National Forest Action Program
NFI	National Forest Inventory
NFP	National Forest Programme
NGO	Non-Governmental Organization
NTFP	Non-Timber Forest Products
OED	Oxford English Dictionary
PE	Public Enterprise
PEMF	Public Enterprise Macedonian Forests
PFO	Private Forest owner
PFOA	Private Forest owners' association
PRIFORT	Research into the Organization of Private Forest Owners in the Western Balkan Region
PROFOR	Program on Forests
SIDA	Swedish International Development Cooperation Agency
SME	Small and Medium Enterprises
SNV	Netherland Development Organization

1. Introduction

In the former Yugoslav Republic of Macedonia (herein Macedonia) private forests are significant resource for development of market economy and private ownership. At the moment, the share of private forests is about 10%, but there is unofficial estimation that it will increase to 12% when the restitution and denationalization (privatization) process are going to be finished. The private forest owners are represented in the national forest policy through the association of private forest owners.

Macedonia's private forestry consists of large number of private owners who own predominantly small-scaled forest properties, 65000 households own about 240000 parcels. The most of the owners are males on an average age from 50-70 years living in urban areas (1/2 of them). More than 50% of them are pensioners and farmers, while the rest are unemployed or employed in other sectors. Related to the educational level more than 80% have finish elementary and high school. The majority of private forest owners have inherited their forests from their parents and they plan to leave them to their children.

The most of the forests are broadleaf (60%)¹ and the coppice forests are dominant (70%). The private forests are mainly used for fuel wood and tourism, while nature conservation and hunting are of minor importance (Stojanovska, M. 2012, CNVP 2013). The environmental services from the forests are considered as very significant, but in practice they haven't done anything to get some benefit from them. Consequently, for about one-half of the private forest owners the forest is a gain, as reflected in its contribution to the household income (Glück, P. et al., 2013).

During the migration period after the Second World War many of the private forest owners have moved into cities completely leaving their forest and abandoning the management. Other private forest owners who live in rural areas are using the forest for their needs (mainly as fuel wood) or in some cases the non-timber forest products (NTFPs) that they sell on the market (CEPF, 2008).

After the Macedonian independence from SFR Yugoslavia in 1991, the private forestry issues were not properly supported or developed. In that time there were no insights in the private forestry sector specifically, data were lacking about the situation of private forests, the profile of private forest owners, their needs and interest. As a part of the forestry sector, private forestry was considered as not important element firstly as a result of the small share comparing with the state forests, and secondly as it was mentioned before, a lot of private forest owners have abandoned their property and did not show any interest for their management. About ten years later private forest owners and private forestry in Macedonia started to be issue in the national forest policy and consequently in research topics. The first holistic approach related to the ultimate planning document, named as Strategy for Sustainable Development of the Forestry in Macedonia (2006), was carried out with the broader main objective than traditional wood oriented forestry. The focus was "to increase the contribution of the forestry sector to the national economy and rural development, through sustainable forest management, ensuring renewable resources and protection of local and global environment, and providing products and services for improving the quality of life of all citizens" (CNVP 2013). In addition, this Strategy for the first time involved private forestry as a part of the forestry sector and it was not neglected as previous times.

When talking about the extension service to the private forest owners, it is important to stress that the sector for Forestry and hunting at Ministry of Agriculture, Forestry and Water Economy is obliged to provide these kinds of services. Most forest owners miss advice in harvesting, maintenance and silviculture techniques or complain that they do not get the service they need. At the moment private forests owners see the National Association of Private Forest Owners (NAPFO) as *extension service*, as an entity, which will provide services for improving their forest management. They usually maintain and utilize their forest by themselves or by the family members, using equipment and tools

¹ www.stat.gov.mk/Default.aspx

they possess such as axe, chain saw, tractors. In meanwhile the private licensed entities took the role of the Public Enterprise (PE) Macedonian Forests for offering services to private forest owners (PFOs). The PFOs which received services from the licensed

entities are now satisfied with this recently established opportunity mentioning that the cost for service is lower, accuracy is also emphasized and timing for the service is now very short (Stojanovska, M., 2013)

2. Methods

2.1. General approach

The country report aims to give a comprehensive overview of forest ownership issues in the country, based on a mix of methods. These include a review of literature and secondary data and 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 describes the state-of-knowledge in the constituent countries of the UK 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. The data and case study analyses provided in the country reports will be analysed in subsequent stages of the COST Action.

2.2. Methods used

Mix of methods was used for the writing the Macedonian Country Report. The parts with quantitative data (data on the share of private forests, forest area, etc.) were derived from the reports of the Statistical Office of the Republic of Macedonia (statistical data e.g. from national forest inventories). While for the other information data from previous studies as well as expert consultation were used. Data from national or regional studies on forest ownership, as far as they exist, were used mainly forgetting quantitative data on new forest ownership as well as an expert interviews/consultation for answering qualitative questions, giving overview assessments, and provide case examples. Beside these own expert knowledge was used for preparing this country report.

3. Literature review on forest ownership in change

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

The scope of the literature review is as follows:

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

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

Summary of literature review

Private forests are represented in Macedonia with 10% of total forest area. Due to the negative influence from previous political regime the importance of private forests is still neglected and undervalued. The economic value is not recognized in the multifunctional benefits not only for the private forest owners but for the whole community also. According

to statistical data, in Macedonia there are more than 55.000 forest owners, owning in total 100.000 ha, and area with more than 220.000 parcels with average size of 0.4 ha (SNV 2009).

During the migration period after Second World War many of the private forest owners have moved into the cities completely leaving management of their forests; the other private forest owners which live in rural areas are using the forest for their needs (mainly for heating) or in some cases the NTFPs products they sell on the market. (CEPF, 2008)

After the Macedonian independence from Yugoslavia, the private forests were not properly supported, developed or even properly researched. In that time there was no insight in the private forestry sector specifically, lacking data about the situation of private forests, the profile of private forest owners and their needs and interests? As a part of the forestry sector, private forests were not properly explored in order to find the opportunities for future development of private forests and to fulfil owner's interests. Ten years ago private forest owners and private forestry in Macedonia start to be issue in research objectives. In 2006, the Strategy for Sustainable Development of the Forestry was developed, with main objective to increase the contribution of the forestry sector to the national economy and rural development through sustainable forest management, ensuring renewable resources and protection of local and global environment and providing products and services for improving the quality of life of all citizens (CNVP 2013).

Since 2009 the Netherland Development Organization – (SNV) start to support private and decentralized forestry, in that manner a sub-sector analysis for private forestry in Macedonia 2009 was create. The analysis served to guide SNV's inputs in the forestry sector as well strengthen the stakeholders in the sector and give increase understanding the situation of private forests in Macedonia (SNV 2009).

3.1. Research framework and research approaches

Most of the studies in Macedonia about private forestry were about:

- Trendafilov A. et al (2008): Analysis of private forestry in Macedonia
- and its role in the National Forest Strategy process, report CEPF
- Sub-Sector Analysis of Private Forestry in Macedonia, report (SNV, 2009)
- Glück, P. et al (2010): The Preconditions for the Formation of Private Forest Owners' Interest Associations in the Western Balkan Region, Forest Policy and Economics
- Glück, P. et al (2010): Organization of Private Forest Owners'
- Associations in the Western Balkan Region (PRIFORT), EFI report
- Sub-sector Analysis of private forestry in Macedonia (2013), unpublished report, author Stojanovska, M., CNVP.

3.1.1. Types of organizations (incl. which organisations are active for which of the themes)

National Association of Private Forest Owners (NAPFOs) as NGO is representing the needs and interests of private forest owners in Macedonia. The Netherlands' Connecting Natural Values and People (CNVP) was the main donor and logistic support of NAPFO, helping them to become important actor in the forest sector in Macedonia. The CNVP and NAPFO made the first sub-sector analysis of the private forest owners in 2009. The analysis took in consideration many aspects of private forest owners (socio-demographic, institutional, management and silviculture and economic) and together with the previous project PRIFORT, the results were followed up from it (book and paper) made a significant base for creating the profile of the private forest owner in Macedonia, its needs, expectations and understanding of sustainable forest management.

The professors from Forest Faculty in Skopje also have researched about private forestry

issues, by taking part in analysis of the sub-sector analysis of private forest owners, through the reports and papers about private forest owners (status quo analysis, social, economic and institutional aspects).

3.1.2. Types of funding (incl. which funding type is used for which of the themes)

At the beginning, of 2000 when the issue of forestry became more prominent, the international donors such as SIDA, GTZ, SNV, FAO, GEF provided funds for supporting forestry. The funds were mainly used to support research that covered all segments of forest ownership (social, economic, institutional, management) and to support private forest owners (organization, association etc). There are also some domestic funds from the Ministry of Agriculture, Forestry and Water Economy (MAFWE) sector Forestry and hunting used mainly for research on institutional and silvicultural aspects.

3.1.3. Theoretical and methodical approaches, and regional scope of the studies

As main methodological approach, the questionnaire surveys were used. The questionnaires were developed for collection of quantitative and qualitative data. The social, economic, institutional, organizational aspects as theoretical approaches were used in these studies.

3.2. New forest ownership types

Two sub-sector analysis of private forestry had identified the scatter parcels and many owners of small parcels as main problems that private forestry is facing nowadays. In the middle of last century, having more than 3 children was a common tradition. All children had the same right for inheriting the forest property by the parents. This trend is still practiced in Macedonia although the number of the children decreased in same way the private forest area owned by one person also decreased. Nowadays we have 3 or 4 persons possessing 1 ha or less forest area, and as individuals they cannot do proper

management but as group they would have better option (CNVP 2013).

This new trend of joining the parcels by having family management of private forests is very important but unfortunately is still not recognized by the forest authorities.

3.3. Forest management approaches

The Law on Forest (2009) recognize only two types of ownership: state and private. In the Law on Forest it is prescribed that state forests are managed by the PE Macedonian forests, while the management of the private forest, recently (Changes on the Law on Forest, 2011) was passed to the licensed entities. Licensed entities have the right to mark the trees in the private forest and the owner for the first time get the opportunity to be involved in the marking tree process in his own property. However, owner's opinion surely cannot be the final, because the Law recognize the forest as a public good and the owners are not allowed to do what they want, but it has to be done according to the sustainable forest management rules.

3.4. Policy change / policy instruments

After the independence, the process of denationalization of the forest land had started in Macedonia. Although some land is returned to the owners there is lack of data about the denationalized forest area (according to expert estimation 1,2%). The process is still ongoing but the estimations are that the private forest land will not exceed more than 12%.

The studies done by SNV (2009) and CNVP (2013) show that many of the private forest owners are complaining about the small and fragmented parcels, as results of the Inheritance Law (1996). According to the private forest owners, the small parcels did not allow many possibilities for effective forest management and probably that is one of the most important issue why private forestry is not considered as an important one in Macedonia.

3.4.1. Policy influencing the private forestry

The private forest owners were used to the situation of having powerful public forest administration who implements the forest regulations on private forest owners in concurrence with the state forest company (e.g. levies for timber harvests, permission for harvesting, tree marking by forest authority before felling, license for timber transport, etc.) (Glück, P. et al., 2009; Nonić, D., 2004). However, due to the changes in the Law on Forests (2011) this situation has been dramatically changed. The services provided by the Public Enterprise Macedonian Forests (PEMF) were moved to the legal licensed entities and this is a completely new situation. Legal licensed entity is a private company where the owner must have at least 2 years of experience in forestry. Private forest owners are obliged to mark the borders of their forests and to enter them into the Cadastre or to get property list. That issue initiate additional financial sources, because they have more than one parcel, and they point out that as a problem (mainly financial). Secondly, the great number of private forest owners in combination with the small average size of their forest land, often fragmented into a number of dislocated cadastral plots, makes the owners believe that their property is not worth much. Thirdly, forest ownership often cannot be allocated to individual persons but rather to the family (common property). Fourthly, such small parcels of fragmented forest land are difficult to manage efficiently for the production of valuable timber assortments (Glück, P. et al. 2009). Thus, it is not surprising that the share of fuel wood in the annual removals dominates in private forest management. The preference for fuel wood production corresponds with the dominance of coppice forests in private forests with relatively modest growing stock per hectare and annual increment per hectare compared to state forests. Finally, demographic characteristics of the private forest owners as well as political culture, interests and values of forest policy decision-makers are further reasons for the existing situation of private forestry in the Western Balkan region and Republic of Macedonia as a part of it.

Private forests in Macedonia were not properly supported, developed or even properly researched so far. The situation has started to move forward and the issue related to private forestry has risen when the first association of private forest owners was established in 1997. In the beginning of its existence, no radical changes have been made. Association had small number of members and the powerful public forestry was neglecting their needs. The first sign for improving this situation was made in 2006 when the Strategy for Sustainable Development of the Forestry in Macedonia was made. The main goal of this document was to increase the contribution of the forestry sector to the national economy and rural development through sustainable forest management, ensuring renewable resources and protection of local and global environment and providing products and services for improving the quality of life of all citizens.

In the content of the Strategy, as a holistic document made on participatory approach basis, there are clear chapters related to forest ownership and private forest management. In the chapter of forest ownership it is stated that the Constitution ensures the ownership of the state and private forests are equal under the Law. Due to the fact that in the old Cadaster there were no clear borders between the state and private parcels, the first goal in the Strategy was upgrading the Cadaster of the forests and making clear distinction of state and private owned parcels. Also, related to fragmentation of the private parcels, which is above mentioned as a problem, the goal stated in the Strategy was introducing consolidation of the state and private forestlands.

3.4.2. Subsidies

The subsidies are the issue that is on the top of the agenda of the National Association of Private Forest Owners. The results from two studies done by SNV (2009) and CNVP (2013), have also shown that private forest owners consider that the environmental aspects of their forests are neglected. The private forest owners are obliged to pay 3% of the wood price for extended reproduction. From this amount the MAFWE provide fund

for afforestation and silviculture measures for private forest owners. The private forest owners prepare plan for afforestation or silviculture measure and submitted to the MAFWE. Private forest owners have stressed that they get subsidies for seedlings for afforestation, which is not enough. Thus, they consider that the policy regulation related to subsidies should be developed in that way to secure financial and informational instruments such as training, protection measures etc.

3.5. Major results and insights

3.5.1. Appearance of private forestry issues in Macedonia

As it was stressed before, during the socialistic period in Macedonia private forestry was not a relevant issue. That was a time when the most of rural agriculture and forest land was abounded as a result of a migration process from the village to the city. Nobody considered as an important to enlarge its private forest area or to make an estimation how much the gain from its management can be.

The beginnings of setting up this issue about private forestry were during 90s in the last century when the association of private forest owners was established. In the beginning, stakeholders in the forestry sector have tried to communicate with governmental bodies and forest enterprises. These were the first steps toward private forestry creation in Macedonia. After that an international financial help through Netherland's SNV was introduced and continuously there are more and more changes in this sector. During 2008/2009 first research activities related to private forestry were done and that was a state of art or the basis for the further research.

3.5.2. Analyzing the profile of Macedonian Forest owner

According to the data gathered from 2009 - 2013, there are no significant changes in the results. Private forests in Macedonia are fragmented and their approximately size is 0,4 ha (according to the Statistical Office). The number of private parcels is 220.000 or 65.000 households who own the forest land in our country. More than 95% are male owners

with average age from 50-70 years. About 1/3 of them are pensioners and the other third are farmers, high school-level employees or unemployed. The majority of private forest owners have inherited the forests and want that their children inherit the forest.

According to the subsector analysis conducted on 1000 private forest owners: Most private forest owners hold forest properties smaller than 1 ha, the smallest is 0,01 ha and the biggest one 10 ha, and the average size is 4,17 ha (Stojanovska, M., 2013; CNVP 2013).

In addition, these properties are often fragmented in average 4 parcels. Broadleaved and coppice forests are dominating the stands. Private forests are mainly used for domestic fuel wood and tourism, nature conservation and hunting are of minor importance, although they have stressed that the environmental services from their forests are very significant but they are not used. Consequently, for about one-half of the private forest owners the forest is a source of income, which is represented through its contribution to the household income.

3.5.3. Critical assessment, gaps and future research needs from your view.

Conducted research so far should be considered when creating new policy documents, future strategies and plans, as they provide insights on how the forest sector should be developed. In Macedonia, the main

actors in forestry sector are: Ministry of Agriculture, Forestry and Water Economy (MAPFE), Sector for Forestry and Hunting; Public Enterprise "Macedonian Forests"; Forest Faculty in Skopje and National Association of Private Forest Owners (NAPFO). The authors and contributors to the listed studies are coming only from the Forest Faculty in Skopje and NAPFO. The funds for the studies are coming mainly from international donors. The logical question that can be posed is: are the international donors more concerned about forest sector in Macedonia than the relevant governmental / state bodies.

As a summary, the main problems related to forest ownership are the unclear borders between state to private forests and private to private forests. Very often the misunderstanding between P.E. Macedonian Forests and private forest owners is about this issue. The law oblige private forest owners to do cadastre for their forests if they want to utilize their forests while this is not a case for state forests. The costs for creating cadastre are high for private forest owners. The SNV (2009) and CNVP (2013) research find out that some of the private forest owners are not aware about their (forest) property. Although 65 000 households appears as forest owners not all of them are members of NAPFO. The NAPFO newsletter is the only source of information about policy changes for private forest owners. The ministry should develop and create efficient informational instrument in order to improve the information of the novelties and changes in the regulations.

4. Forest ownership

The aim of this chapter is to give a detailed overview of forest ownership in the country. The most detailed information on national level is often structured in different ways in different countries. In order to show the most accurate information, it was decided to use the national data sets in the country reports. In order to make this information comparable still, the information is also collected in an international format, which is used in the Forest Resources Assessments by FAO. The transfer from national data sets to international definitions is, however, not always easy. This report therefore critically assesses in how far the national categories and definitions may be transformed into the international FRA data structure or in how far there are inconsistencies between them.

4.1. Forest ownership structure

4.1.1. National data set

Law on Forest (Official Gazette of RM 64/09) in article 2 define that the forest ownership can be public and private.

Private forest owners: forest owned by individuals, families, communities, private co-operatives, corporations and other business entities, private religious and educational institutions, pension or investment funds, NGOs, nature conservation associations and other private institutions.

Although the definition of private forest owners have broad understanding the data from Statistical office indicate that only individuals, families or the church is appearing as private forest owners. The Law on Forest does not provide definition about individuals, families or church private forest owners.

The state forest are mainly managed by PE Macedonian Forest (90%) and the rest of the state forest belongs to National Parks (10%).

90.14% of the total forest area is state owned, while their part of the total wood mass is **92.2%**. Private owned forests are **9.86%** (94,146 ha) of the total forest area, and their portion of the total wood mass is **7.8%**. (Strategy for sustainable development of forestry in RM, 2006)

FRA 2010 Categories	Forest area (1000 ha)		MAFWE (2010)
	2005		
Public ownership	881		881
Private ownership	94		94
...of which owned by individuals	94		94
...of which owned by private business entities and institutions	0		0
...of which owned by local communities	0		0
...of which owned by indigenous/ tribal communities	0		0
Other types of ownership	0		0
TOTAL	975		975

The FRA report is the last version of official data about the forest inventory data. For that reason, the data are the same (www.fao.org/docrep/013/al642E/al642E.pdf)

4.1.2. Critical comparison with national data in FRA reporting

The FRA report is latest published data about the forest area in Macedonia. The members which participating in writing the FRA report were also contacted and contribute in writing as in this country report. This means that at the moment making critical comparison with

national data in FRA reporting is not possible.

4.2. Unclear or disputed forest ownership

The only example where the ownership is unclear is the areas where the process of denationalization is not finish. The process of denationalization starts in 1998 when the Law for denationalization was carrying out. The process is ongoing very slowly. Unfortunately, there are no data about forests under denationalization process.

4.3. Legal provisions on buying or inheriting forests

There are no restrictions for buying or selling private forest. Selling state forests is impossible according to the Law on Forests (2009). According to Law on Forests (2009), article 17 regulates possibilities of exchanging forests between state and private. Basic rule in forestry and agriculture is when if the PFOs decide to sell the forest, s/he must first contact-offer the forest to neighbours (private or state). If they do not have the interest then others can buy the forest. At the moment does not exist any legal restriction that limited private forest owners in buying or selling forest. There is no regulation that regulate the price of the forests per ha.

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

There are no specific inheritance rules, which can be applied to forests. Every child inherits the same amount of the forest only if the owner did not prescribe in testimonial differently.

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

4.5.1. Changes between public and private ownership

The main changes in the ownership structure come as result of the process of denationalization from public to private.

4.5.2. Changes within public ownership categories

There are also small changes within the public ownership, where some of the forest area managed by P.E. Macedonian Forests was transfer in protected areas managed by other entity. In 2008 part of P.E. Macedonian Forest in the Forest Management Unit Prespa Drvo was proclaimed as protected forests and was embedding to the National Park Pelister.

4.5.3. Changes within private forest ownership

There is no data about changes within private forest ownership.

4.5.4. 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).

Privatization, or restitution, of forest land (giving or selling state forest land to private people or bodies): Macedonia was one of the six republics of Yugoslavia and after the Macedonia become independent in 1991 the political regime was changed. At that time the beginnings of the process of restitution or giving back the forest land, which was taken by the state, has been started. The expectations of the restitution were very big but the restitution did not change to greater extent the ownership structure in Macedonia. Although the restitution is not finish yet, expectations are that the private forest owners will participate with max 15% stake in ownership structure in Macedonia.

Privatization of public forest management (introduction of private forms of management, e.g. state owned company): Fifteen years ago the P.E. Macedonian Forest, which is responsible for management of the 90% of the state forests, privatized the

harvesting operation (cutting, hauling transport and transport). 80% of the activities were privatized while 20% are still done by P.E. Macedonian Forest for security reasons.

New private forest owners who have bought forests: Relevant to some extent for Macedonia. There is no data that new private forest owners have bought forests. There are some examples of buying forest but the trading is between private forest owners (pensioners – younger owners or owners migrating to city with no interest to manage forest sell the forest to some local forest owners (mainly forests neighbours)

New forest ownership through afforestation of formerly agricultural or

waste lands: Although many debates in Macedonia stressed that big area of agricultural land became forest, as the results of migration of the people to cities and land abandonment, no statistical data exist about of the areas which was transferred from agricultural or land abandonment into forest. Until now there are rare cases where the owners ask for change of the land use (agricultural land into forest land).

Changing life style, motivations and attitudes of forest owners (e.g. when farms are given up or heirs are not farmers any more): For this case there are no data, no research, so even the experts do not have their opinion.

Trends in forest ownership: New forest ownership through...	Significance*
<ul style="list-style-type: none"> Privatization, or restitution, of forest land (giving or selling state forest land to private people or bodies) 	2
<ul style="list-style-type: none"> Privatization of public forest management (introduction of private forms of management, e.g. state owned company) 	2
<ul style="list-style-type: none"> New private forest owners who have bought forests 	1
<ul style="list-style-type: none"> New forest ownership through afforestation of formerly agricultural or waste lands 	1
<ul style="list-style-type: none"> Changing life style, motivations and attitudes of forest owners (e.g. when farms are given up or heirs are not farmers any more) 	0
<ul style="list-style-type: none"> Other trend, namely: 	

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

4.6. Gender issues in relation to forest ownership

Survey done in 2009 by SNV shows that from the total number of 479 interviewed people, 92% are male and 8% are female.

The results on this questionnaire were confirmed in PRIFOR Study (2009) when 96% were male population and in the results of Sub-sector analyses conducted by SNV (2009/10) when 92% were male population.

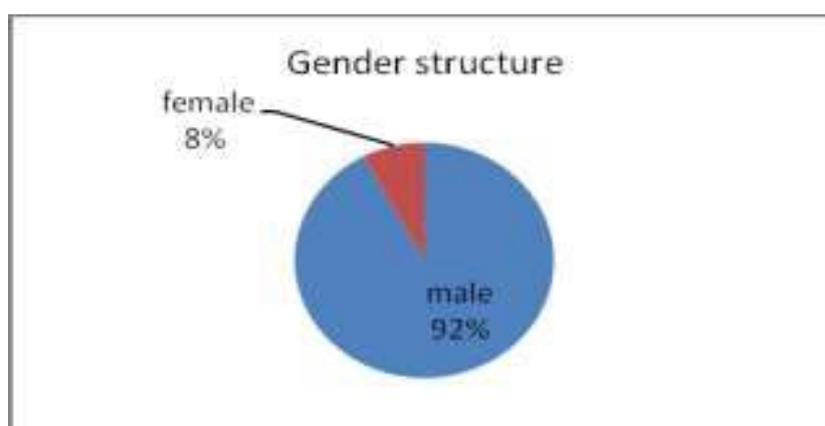


Figure 1: Gender structure of private forest owners (2009).
(Source: Connecting Natural Values & People Foundation – Netherlands: Subsector analysis of Private Forestry in Macedonia (2009-2010))

Again, in 2013, the results have shown that the most of the private forest owners in

Macedonia are male (96%) and only 4% are female.

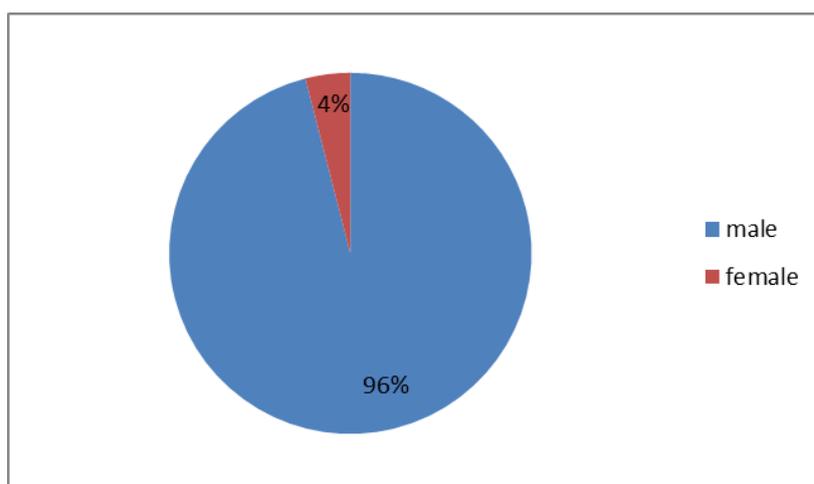


Figure 2: Gender structure of private forest owners (2013).
 (Source: Connecting Natural Values & People Foundation – Netherlands: Subsector analysis of Private Forestry in Macedonia (2013))

4.7. 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; humane” OED) organisations. The management objective for these forests is usually to deliver social or environmental aims with maximisation of financial or timber returns as a secondary concern. Most owners are corporate and may invoke at least an

element of group or participatory 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.

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	

4.8. 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 traditional CPR regime are pastures, forest land communities in Sweden,

Slovakia, Romania, Italy and other European countries or irrigation systems in Africa or Asia. The number of new common property regimes is growing and it is challenge of this Action to transfer knowledge and skills of traditional CPRs to new CPRs and vice versa. Example of new CPR regime is community woodlands in UK, established in last 20 years mainly in Scotland, Wales. Our interest in” traditional” and “new” common pool resources regimes (CPRs) in European forest, is based

on the understanding that robust resource regimes are critical for sustainable forest management regardless of the property rights. Ongoing practice shows that local land users (without ownership share) leased use agreement may also be CPR regime if they have the rights to determine management rules typical for commons (e.g. 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 key for sustainable use of CPR regimes.

According to the definition for CPR regimes mention above, CPR do not exist in Macedonia.

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 issue 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 kind 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 Macedonia

5.1.1. Who typically manages forests in your country?

In Macedonia, 90% of the forests are state forest while 10% are private forests. PE Macedonian Forest manages 90% of the state forests, while the rest belong to national parks. The government of Macedonia establish Public Institutions for managing National Parks. The National Parks have integrated management plans according to which they manage the park area.

The state administrative body competent for forestry matters, approved by the Government and the Parliament, should prepare the General Forest Management Plan. The law also stipulates that "based on the general forest management plan, the users of forests shall adopt special forest management plans for each forest management unit" (Law on Forests, 2009). According to the data gathered from the forest management plans, about 8% of the total area of forests is not covered by management plans. These areas are mainly degraded forests, shrub lands and forest bear land, and some smaller part under crops and cultivated plantations, which are not covered by any forest management unit. In order to facilitate the planning and management of the

managed (planned) forests, they are divided to 187 Forest Management Units (FMUs). The PE Macedonian Forest is responsible for managing most of them (175 FMUs).

According to the Article 28 of the Law on Forest (2009), the following planning documents are defined:

- Forest Management Plan elaborates the general conditions defined in the General Forest Management Plan of RM, which analyze the management measures to be introduced, determine the management plans according to type and scope of work, the time and manner of implementation, and determine the value of the forests. In addition, besides the state forests, the private forests of more than 100ha must have a management plan as well.
- Forest Management Programme covers seedling plantations, windbreak belts on an area of more than two acres, silviculture and plantations on an area of more than two acres that are not part of a forest management unit, as well as private forests that cover an area of less than 100 ha, and
- Annual Forest Management Plans are prepared in accordance with the special forest management plans.

According to the Law on Forest, private forest owners with more than 100 ha should prepare their own management plan, while the private forest owners with small forest area are included in the Management plans within the state forest. The management plans are prepared and implemented by the PE Macedonian Forest" without consultation with private forest owners about their needs and interests. The time-period of the management plans is 10 years. Until 4 years ago some of the forest utilization activities (marking, licence for cutting, transport) in the private forests were done by employees in PE Macedonian Forest, now private licensed bodies are obliged to do these activities. The owners of private licensed bodies (entities) need to have at least 2 years working experience in forestry. They get the licence from Ministry for Agriculture, Forestry and

Water Economy, sector Forestry and Hunting. All planning activities and some of the harvesting activities in private forests are done by these private licences entities. They do tree marking, and giving transport documents for the harvested wood. The rest of the activities woodcutting, hauling transport and transport the private forest owners organize by itself.

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

Subsidies for thinning and planting in private forests

In 2009, the Ministry of Agriculture, Forestry and Water Economy (MAFWE) provided opportunity to private forest owners to submit proposals in to annual program for support to SFM. The activities that are subsidies are thinning and planting. Usually the cases are forest where pre commercial thinning was planned to be implemented. These forests are in age below 30 years where silviculture activities usually results with more cost then benefit from forest operation. That is why pre commercial thinning is subject of support from Ministry fund. PFOs need to go on the field to collect field data about forest stand condition as age, number of trees, height, width, health condition, natural regeneration etc. Based on the data collected from a field, program proposals were prepared and submitted with all other necessary documents to MAFWE for approval. Than the PFO received an approval, later is contracted by Ministry, and the thinning can start. The whole process finished when forestry inspection confirmed that all requirements according to contract with MAFWE were respected and PFOs are able to receive the subsidy. The amount of subsidy is, enough to cover the costs of pre commercial thinning.

5.3. Main opportunities for innovative forest management

Common pool resources regime

There are more than 65 000 private forest owners in Macedonia. More than 50% of them possess small parcels, which are scattered. The common pool resources regime is one of the main opportunities for innovative forest management for private forest owners. Based on our expert knowledge and data the private forest owners are complaining about small and scattered forests, leading to limited possibilities for forest management. In this regards CPR regime can be great possibility for private forest owners to become more concrete and to have bigger possibilities for forest management.

5.4. Obstacles for innovative forest management approaches

Obstacles in developing new or innovative forest management approaches are following:

- Lack of willingness for usage of innovative techniques – most of the private forest owners are old people, which are not willing to change the techniques that they are using.
- Lack of knowledge and skills – the private forest owners does not have adequate knowledge and skills to develop new forest management approaches. Investments in harvesting are too expensive and the owners cannot afford investments.
- Lack of training – for the owners who wants to improve knowledge regarding the innovative forest management approaches or harvesting techniques.

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 process of denationalization starts in 1998 when the Law for denationalization was carrying out. It is a process of returning the forest to the owners as results of changing the system. The process is ongoing very slowly and there are no data about forests under denationalization process. As it was mentioned before, besides the on-going process of denationalization there is no other policy instrument that influence the forest ownership in Macedonia. However, this process will not change ownership structure significantly, because according to some unofficial information the private forest land is expected rise up to around 15% after finalizing this process (at the moment this share is about 10-11%). The main problem of the private forests is that they are small and fragmented. The fragmentation is because of inheritance rights not regulated by regulative framework.

In addition, there are no policy instruments fostering afforestation of agricultural lands.

6.2. Influences of policies in forest management

Forest management plans for the private forest owners is obligatory only for the ownership bigger than 100 ha. Because the private forests are small and scattered (fragmented) the most of the private forest owners are not obliged to make a forest management plan, but it does not mean that there is no plans for their areas. The PE together with the management plan for the

state forests makes the Forest Management Plans for private forests. The branch of the PE Macedonian Forest is making forest management plans for the whole area which is under their jurisdiction, which means together state and private forests areas (smaller than 100 ha). Private forest owners possessing forest area >100 ha are responsible for creating a own management plan, the private forest <100 ha are included in the management plan of the state forests. The monitoring of the management plan is done by the state. Another problem here is that the process of marking clear borders is on-going. It means that there is no clear border between state and private ownership and in many cases both sides are making "mistakes" in harvesting. This is also a kind of basis for illegal activities because both sides complain each other. The new Law on Forest (2009) obliged the PFOs to made cadastre measurement of the border. The National Association of Private Forest Owners (NAPFO) complains in MAFWE about having not equal status, because this obligation is relevant only for private forest owners. According to NAPFO many of PFOs as results of this obligation have no willingness to manage their forest as results of high cost for cadastre measurement compared to incomes gain from forest management.

6.3. Policy instruments specifically addressing different ownership categories

6.3.1. Financial instruments from Biological reproduction

Since 2009 the Ministry of Agriculture, Forestry and Water Economy provided opportunity for private forest owners to submit proposals for annual program for support to SFM (thinning and planting). The amount that PFOs receives as subsidise is enough for covering the management costs. All PFOs can apply for subsidies. The operation (thinning or planting) should be done on an area bigger than 0,5 ha.

According to the data from NAPFO until 50-60 PFO had applied for subsidies with territory of 90-100 ha.

6.4. Factors affecting innovation in policies

After establishing the first Forest Owner Association (NAPFO) in 1997 there are some changes, but still there is a lot work to do in future. Due to the organizational reasons as well as anonymity of the association they did not took any serious role in the policy processes. After 2000, they became more recognized and important in forest arena in Macedonia. Nowadays NAPFO is participating in the policy processes, having

consultation with people from the Ministry about some policies that are affecting private forest owners (ex. cadastre measurement). At the moment NAPFO is very well established and provide information's and services to the private forest owners such as trainings (for harvesting operation, basic forest measurement activities etc.), seminars, information's(application for subsidies etc.). The PFOs are satisfied with the quality of information's gain from NAPFO. The studies from SNV 2009 and CNVP 2013 show that PFOs in the past before 2000 all relevant questions, and problems were address to the PE Macedonian Forest. The outcome was not satisfactory; the PFOs were receiving limited information.

CASE STUDY 1: ROLE OF NATIONAL ASSOCIATION OF PRIVATE FOREST OWNERS IN PROVIDING FINANCIAL INSTRUMENTS FOR PRIVATE FOREST OWNERS FROM MINISTRY OF AGRICULTURE, FORESTRY AND WATER ECONOMY. CASE: THINNING

NAPFO have contacted internal members and selected two PFO to be part of effort to obtain subsidy for SFM in private forest. One of forest owners was coming from Berovo branch and the other from Probistip. In both cases, the forest selected for subsidy was coniferous stand where pre commercial thinning was planned to be implemented. In this kind of forests, that are in age below 30 years, silviculture activities usually results with more cost then benefit from forest operation. That is why pre commercial thinning is subject of support from Ministry fund. NAPFO with support of SNV advisors went on the field to collect field data about forest stand condition as age, number of trees, height, width, health condition, natural regeneration etc. Based on the data collected from a field, program proposals were prepared and submitted with all other necessary documents to Ministry for approval. Beside of program, NAPFO was supporting a program submitted with letter of support to their members. When programs were approved and FO contracted by Ministry, implementation was possible to start. After careful selection of trees to be felled, FO has implemented a thinning operation. The process finished when forestry inspection confirmed that all requirements according to contract with Ministry were respected and FO were able to receive the subsidy. The amount of subsidy was 200 euro/ha, enough to cover the costs of pre commercial thinning. In both cases FO were very satisfied from the whole process and NAPFO itself because for the first time private forestry was supported from the Ministry. That was possibility for NAPFO to start promoting new policy and opportunity for their members. This positive experience was internally presented at the association. It resulted with higher interest among FO for 2010 year.

The Ministry annual program for 2010 has provided space to support FO in afforestation of 50 ha of bare lands exposed to risk from erosion and for pre commercial thinning on 50 ha. The amount of support for afforestation was 1.000 euro/ha and 200 euro/ha for pre commercial thinning. Usually annual program is announced at official gazette and very limited number of PFO was informed about the program. NAPFO took the responsibility for spreading out the information about the subsidy. Beside their regular contacts with the network of branch organizations, NAPFO have announced this opportunity on their web page and in their newspaper and many PFO from Macedonia started to ask for support. NAPFO was offering to PFO assistance in field data collection, completion of papers required by Ministry, preparation and submission of program, supplying with seedling. In this regard NAPFO have contacted seedling producers and provided good offer to PFO for buying seedlings for afforestation. NAPFO succeed to negotiate with seedling producers guarantee about payment to be executed when subsidy will come from Ministry. In the same time, delivering the services NAPFO was working on improvement of their financial sustainability. For any subsidy program support to PFO NAPFO was earning fee 10% from received amount of subsidies or in practise this is 10€ per 0,1ha. PFO is paying to NAPFO when s/he received the subsidy. In addition, they succeed to negotiate to receive fee from seedling producers for mediation with PFO in supply of seedlings. In 2010 FO have implemented 18 programs supported by subsidy and have received total amount of 12.060 euro.

The whole chain of service delivered from NAPFO was working perfect, in interest of all parties. Ministry has finally found a partner to cooperate on issues related to private forest management. NAPFO was fulfilling their mission to become service-oriented organization to their members. FO had opportunity to get support for implementation of SFM measures improving the quality of forest stands and planting forest on lands that were not productive and used for agriculture.

7. Literature

- CNVP (2013) Subsector analysis of Private Forest Owners in Macedonia. CNVP - Connecting Natural Values & People Foundation.
- Glück, P., Avdibegović M., Čabaravdić, A., Nonić, D., Petrović, N., Posavec, S., Stojanovska, M. (2010) The preconditions for the formation of private forest owners' interest association in Western Balkan region, *Forest Policy and Economics*, Volume 12, Issue 4, pp 250-263.
- Glück, P., Avdibegovic, A., Cabaravdic, A., Nonic, D., Petrovic, N., Posavec, S., Stojanovska, M., Imocanin, S., Krajter, S., Lozanovska, N., Maric, B., Milijic, V., Mrkobrada, A., Trninic, S., (2011) Final report on the research results, Volume 1: Main results. Project: Research into the Organizations of private forest owners associations in the Western Balkan region (PRIFORT), European Forestry Institute Research Report 25.
- Stojanovska, M., Stojanovski, V., Nikolovski, G., Nedanovska, V., Blazevska A. (2012) State of forests managed by Public Enterprise "Macedonian forests": Comparative analysis of 2000 and 2010, Book of Abstract. Conference: Forestry science and practice for the purpose of sustainable development of forestry – 20 years of the Faculty of Forestry in Banja Luka, 1-4 November 2012. p. 113.
- Stojanovska, M., Miovska, M., Jovanovska, J., Stojanovski, V. (2013) The process of forest management plans preparation in Republic of Macedonia: Does it comprise governance principles of participation, transparency and accountability? *Forest policy and Economics*. Elsevier, Volume 49, pp 51–56.
- Stojanovska, M., Petrovic, N., Lengyel, A. (2009) Investment in locally controlled forestry in the SEE sub-region, TFD Background Paper, *The Forests Dialogue*.
- Sub Sector Analysis of Private Forestry in Macedonia (2009-2010).
- Todorov, V., Stojanovska, M., Miovska, M. (2011) New Forest legislation and its applicability concerning sustainable forest management practices in R. Macedonia, XIII International symposium on Legal aspects of European Sustainable Development, Kaunas, Lithuania.
- Trendafilov A., Rizovska Atanasovska J., Simovski B., (2008) Analysis of Private Forestry in Macedonia and its Role in the National Forest Strategy Process, Program on Forest (PROFOR) CEPF, Skopje, p. 35.

8. Annexes

8.1. Tables with detailed description of 7 most important publications

SELECTED REPORTS/PUBLICATIONS	
Full reference of study/publication	CNVP (2013) Subsector analysis of Private Forest Owners in Macedonia. CNVP- Connecting Natural Values & People Foundation
English language summary/abstract	<p>In the Republic of Macedonia private forests are significant resources for the development of market economy and private ownership. Although the share of private forests is about 10% there is unofficial estimation that it will increase when the restitution and privatization process are finished in about 12%. The private forest owners are represented in national forest policy through the interest association of private forest owners'. In Macedonia there is large number of private owners of predominantly small-scaled forests which are about 240,000 parcels or 65.000 households. The owners are mainly males of an average age of 50-70 years and half of them live in urban areas. About 1/3 of them are pensioners and the other third are farmers, high school-level employees or unemployed. The majority of private forest owners has inherited the forests and wants to leave them to their children. Most private forest owners hold forest properties smaller than 1 ha, the smallest is 0,01 ha and the biggest one 10 ha, and the average size is 4,17 ha. In addition, these properties are often fragmented in average 4 parcels. Broadleaved and coppice forests are dominating. The private forests are mainly used for domestic fuel wood and tourism, nature conservation and hunting are of minor importance, although they have stressed that the environmental services from their forests are very significant but they are not used. Consequently, for about one half of the private forest owners the forest is a gain, as reflected in its contribution to the household income. Almost all private forest owners stated that there were no advices provided by PEMF related to management of their forest, but only services and the price for these services was from 290 to 630 denar's. Most forest owners miss advice in harvesting, maintenance and advice in silviculture. At the moments they see the NAPFO as extension service, as an entity, which will provide services for improving their forest management. They usually maintain their forest by themselves or the family members and from the equipment and tools they possess axe, chain saw, tractors. The most of them still have not got services from the licensed entities but, the majority of them who had that experience stated that they are satisfied because the price for the service is lower, accuracy is also emphasized and timing for the service. That is the reason why almost half of them stressed that the biggest problem they face at the moment is lack of licensed entities on the market.</p>
Language of the study/publication	English
Type of organization conducting the study (in case of multi-institutional studies multiple answers allowed)	<input type="checkbox"/> University <input type="checkbox"/> Public Research Institute <input type="checkbox"/> Private Research Institute <input checked="" type="checkbox"/> Other (please name below) <input type="text" value="SNV/ CNVP ? Connecting Natural Values & People Foundation"/>

Type of funding used(multiple answers allowed)	<input type="checkbox"/> Private Industry <input type="checkbox"/> Private other <input type="checkbox"/> National <input type="checkbox"/> Public Sub-National <input type="checkbox"/> Public EU/cross-national Europe <input checked="" 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	The analysis was consisting of few approaches in order to have better understanding of private forest owners with regard to sociological, economic, silvicultural and institutional aspects.
Methodical approach	The method that has been applies for this research is quantitative door-to-door surveys of randomly selected private forest owners members and non-members of the National Association of Private Forest Owners (NAPFO).
Thematic focus	<p>ownership change (incl. on changes in</p> <input checked="" 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 checked="" type="checkbox"/> policy instruments addressing ownership
Main results should be given here if not yet included in the summary.	The results are included in the summary.
Weblink	

SELECTED REPORTS/PUBLICATIONS	
Full reference of study/publication	Glück P., Stojanovska M., Avdibegovic M., Cavarabdic A., Nonic D., Petrovic N., Posavec S., Imocanin S., Krajter S., Lozanovska N., Milijic V., Mrkobrada A., and Trninic S., (2009) <i>Research into the organization of private forest owners' associations in the Western Balkan region (PRIFOR)</i>. European Forest Institute Research Report 25, 2011
English language summary/abstract	<p>The Western Balkan countries: Bosnia and Herzegovina, Croatia, Macedonia and Serbia have in common that their private forests are significant resources for the development of market economy and private ownership. Although the share of private forests varies between 10% (Macedonia) and 52% (Serbia), and probably will increase when the restitution and privatization process will have been finished, the private forest owners are almost not represented in national forest policy due to the lack of independent interest associations. Private forest owners' interests are mainly in the hands of public forest administration. In all four countries there are very large numbers of private owners of predominantly small-scaled forests varying between 240,000 in Macedonia and 800,000 in Serbia. They are mainly males of an average age of 53 years and most of them live in rural areas in settlements with less than 5,000 inhabitants. More than one half of them are farmers, lower-level employees or unemployed. Regarding education, more than one-half of them have high school or vocational college qualifications and one-quarter elementary school qualification. The majorities of private forest owners inherited the forests and want to leave them to their children. Most private forest owners hold forest properties smaller than 1 ha. In addition, these properties are often fragmented into 2 to 7 parcels on average, most often in Serbia and Bosnia and Herzegovina. Mixed and coppice forests dominate and volume and annual increment per hectare are modest compared to state forests. The private forests are mainly used for domestic fuel wood and saw log consumption; tourism, nature conservation and hunting are of minor importance. Consequently, for about one half of the private forest owners the forest is a gain, as reflected in its contribution to the household income. In order to increase the efficiency of forest management, all forest owners are prepared to cooperate with other private forest owners, first and foremost in road construction and maintenance. Of second priority is cooperation in forest training for the respondents from Bosnia and Herzegovina, Macedonia and Croatia, and cooperation in sharing harvesting equipment for Serbian respondents. Almost all private forest owners are unsatisfied with the existing situation. They miss extension services of the public forest administrations and state forest enterprises for improving their forest management. Most forest owners miss advice in harvesting, support of road construction and maintenance and advice in silviculture, however, with different priorities in the four countries according to their special needs. Private forest owners are also much concerned that their interests are not appropriately represented in national forest policy by an independent interest association. In particular, they expect such an association to fight for provision of financial incentives, tax breaks and reformulation of the existing forest laws in the interest of private forest owners. The respondents suffer from restrictive legal regulations concerning private forest owners. Prescription to pay levies for timber harvests and permissions for harvesting and tree marking by the forest authority before felling are indicated as the most restrictive ones. Although private forest owners' organizations are very rare for the time being, the respondents are well aware about their tasks. The preconditions for the formation of private forest owners' associations for both extension service at the local and regional levels and interest representation at the national level are favorable. Between one and two quarters of the respondents are prepared to engage themselves in the formation of an interest group. They declare to join such an organization voluntarily if they may expect either economic advantages or positive performance of the organization or very low membership fee. In each of the four countries there is a critical mass of entrepreneurial forest owners who strongly support an association of private forest owners; in Bosnia and</p>

	Herzegovina the “drivers” amount to 55% of the respondents. A majority of two thirds of Bosnian private forest owners also support compulsory membership in accordance with the forest policy decision-makers in this country, while the positions of both private forest owners and representatives of institutions in Serbia and Croatia are reserved in this respect. An explanation could be that in Serbia private forest owners’ associations at the local level have been developing slowly during the last two years, and Croatia supports their formation by the Forest Extension Service, a department of the public forest administration. In Macedonia compulsory membership is most refused by the representatives of existing private forest owners’ associations
Language of the study/publication	English
Type of organization conducting the study (in case of multi-institutional studies multiple answers allowed)	<input type="checkbox"/> University <input type="checkbox"/> Public Research Institute <input type="checkbox"/> Private Research Institute <input checked="" type="checkbox"/> Other (please name below) <input type="text" value="Austrian Ministry of Agriculture"/>
Type of funding used(multiple answers allowed)	<input type="checkbox"/> Private Industry <input type="checkbox"/> Private other <input 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 type="checkbox"/> National <input checked="" type="checkbox"/> Cross-national Europe <input type="checkbox"/> International beyond Europe
Theoretical approach	Silvicultural, Sociological, Economical, Institutional aspects
Methodical approach	Two different methods of social research have been applied: quantitative door-to-door surveys of randomly selected private forest owners and qualitative depth-interviews of consciously selected forest policy decision makers.
Thematic focus	<input type="checkbox"/> ownership change (incl. on changes in <input checked="" 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 checked="" type="checkbox"/> policy instruments addressing ownership
Main results should be given here if not yet included in the summary.	The results are included in the Summary.
Weblink	

SELECTED REPORTS/PUBLICATIONS	
Full reference of study/publication	Stojanovska, M., Miovska, M., Jovanovska, J., Stojanovski, V. (2013) The process of forest management plans preparation in Republic of Macedonia: Does it comprise governance principles of participation, transparency and accountability?, Forest policy and Economics. Elsevier, Volume 49, December 2014, Pages 51–56
English language summary/abstract	Leaving the centralized and trying to embrace the market economy, the forestry sector of the country has been brought to a challenge of moving from government to the new trend of governance. The paper examines whether governance principles of participation, accountability and transparency are comprised in the process of preparation of forest management plans. By scrutinizing the prevailing governance theory through a relevant legislative content analyses and conducted in-depth interviews with relevant stakeholders, the paper provides findings about cooperative forest policy-making in the process of Forest Management Plan preparation through self-organizing networks of participants from policy and society. Results obtained from the Law on forests and other related secondary legislation show that only two entities are involved in the preparation process, whereas the Ministry of forestry, agriculture and water economy and the Public enterprise "Macedonian Forest". On the other hand, results obtained from the conducted in-depth interviews and the legislation content analysis corresponds to the situation where the governance principles of participation, transparency and accountability are not respected in the process of creation of forest management plans.
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	Policy and silvicultural aspects
Methodical approach	Secondary data analysis, in-depth interviews.

<p>Thematic focus</p>	<p>ownership change (incl. on changes in <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</p>
<p>Main results should be given here if not yet included in the summary.</p>	<p>The results are included in the summary.</p>
<p>Weblink</p>	

SELECTED REPORTS/PUBLICATIONS	
Full reference of study/publication	Stojanovska, M., Stojanovski, V., Nikolovski, G., Nedanovska, V., Blazevska A. (2012): State of forests managed by Public Enterprise "Macedonian forests": Comparative analysis of 2000 and 2010, Book of Abstract. Conference: Forestry science and practice for the purpose of sustainable development of forestry – 20 years of the Faculty of Forestry in Banja Luka, 1-4 November 2012. p. 113
English language summary/abstract	The term forest in Law on Forest (Official Gazette of RM 64/2009) is defined as "land covered with forest trees and shrubs as well as forest bare lands and meadows, forest roads, forest nurseries and other areas which are closely associated with forest". According to the statistical office in 2010 the forest land had occupy 960 431 ha, which is 37,8% of all territory of Macedonia. 91,6% or 879 554 ha are state owned forest and 8,4% or 80 877 ha are private forest. The private forest land is scattered and the average area is 0,6 ha. The state forests are divided in 187 management units. 175 management unties are managed by Public Enterprise "Macedonian Forest" and the rest belongs to protected areas (national parks). The main objective of the paper is to compare the forest area, structure and utilization of wood mass from forest which are managed by P.E. "Macedonian Forest" for the period of 10 years (2000-2010) and to define which branch of P.E. "Macedonian Forest" is working the most efficiently . The methodology used for this research is qualitative analyses of collected data. The main data are reports from Statistical Office of Republic of Macedonia and management plans of P.E. "Macedonian Forest". The results present that there is no difference of the most efficient branches of P.E. "Macedonian Forest" during last 10 years. The branches which work more efficiently in 2000 are still managing most efficiently in 2010 although. there is a small increasing of the forest area as a result of afforestation.
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 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 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 checked="" 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, policy aspects
Methodical approach	Content analysis

<p>Thematic focus</p>	<p>ownership change (incl. on changes in <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 type="checkbox"/> policy instruments addressing ownership</p>
<p>Main results should be given here if not yet included in the summary.</p>	<p>Included in the summary</p>
<p>Weblink</p>	

SELECTED REPORTS/PUBLICATIONS	
Full reference of study/publication	SNV (2009) Sub Sector Analysis of Private Forestry in Macedonia. (Macedonia 2009-2010) SNV Netherland Development Organization (Connecting Natural Values and People Foundation – Netherlands)
English language summary/abstract	<p>Private forests are represented in Macedonia with 10% of total forest area. Importance of these forests is undervalued. It is not recognized in economic value but also not in their multi-functional benefits for the whole community. According to statistical data, in Macedonia there are more than 55.000 forest owners, owning in total 100.000 ha, and area with more than 220.000 parcels with average size of 0.4 ha. Many owners are living in the cities and never manage their forests; others are living in rural areas and use their forest for their needs (heating, other purpose) or some of the products they sell on the market. During past years, private forests in Macedonia were not properly supported, developed or even properly researched. Currently there is no insight in the private forestry sector specifically. There are no data on what is the situation of private forests, what is the profile of private forest owners and their needs and interests. As a part of the forestry sector, private forests have a real need for further exploring in order to find the opportunities for future development of private forests and to fulfill the main objective of the Strategy for sustainable development of the forestry in Macedonia: To increase the contribution of the forestry sector to the national economy and rural development through sustainable forest management, ensuring renewable resources and protection of local and global environment and providing products and services for improving the quality of life of all citizens. SNV in its support to private and decentralized forestry has undertaken a sub-sector analysis for private forestry in Macedonia. The analysis served to guide SNV's inputs in the forestry sector as well strengthen the stakeholders in the sector and give increase understanding the situation of private forests in Macedonia. SNV has undertaken the sub-sector analysis with involvement of NAPFO for major parts of this sub-sector analysis. The objective of the sub-sector analysis is: Carry out an analytical review for private forestry in Macedonia leading to increased understanding and focus for private forestry in Macedonia. Specific areas of attention in the sub-sector analysis are:</p> <ul style="list-style-type: none"> - To obtain relevant data for the income situation of private forest owners - To research the overall situation of private forest owners. Identifying the main issues, problems, trends and opportunities <p>The survey on the field was implemented in two phases. In the first phase the survey was directed private forest owners being member of the National Association of Private Forest Owners, for which 187 household's people were interviewed. In the second phase the survey was implemented in 292 households in which wereinterviewed 292 private forest owners which were randomly selected by Cadastral data and who are not necessarily members of the National Association of Private Forest Owners. In total compilation of the data collected with the surveys from the field, 479 interviews were done and questionnaires filled in with data were used for the survey and analyses of the private forestry in Macedonia.</p>
Language of the study/publication	English
Type of organization conducting the study (in case of multi-institutional studies multiple answers allowed)	<input 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" value="SNV - Net her l and Devel oopner"/>

Type of funding used(multiple answers allowed)	<input type="checkbox"/> Private Industry <input type="checkbox"/> Private other <input type="checkbox"/> National <input type="checkbox"/> Public Sub-National <input type="checkbox"/> Public EU/cross-national Europe <input checked="" 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	Sociological, silvicultural, institutional, economic aspects
Methodical approach	Questionnaires,
Thematic focus	<p>ownership change (incl. on changes in</p> <input checked="" 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 checked="" type="checkbox"/> policy instruments addressing ownership
Main results should be given here if not yet included in the summary.	<p>Relevance of the analysis: (a)Analyses of private forests in Macedonia was never done before and it clearly indicates that forestry should be part of rural development. b)To be able to include forestry into support measures of rural development programs data from the field are needed (one of the sources is sub-sector analyses of private forestry) c) Results derived from the analysis clearly shows the needs and issues that Private Forest Owners (PFO) have. Issues of members and non-members of NAPFO are the same, as this analysis has shown. Cooperation with relevant institutions: a)Cooperation should be initiated by all stakeholders, not only NAPFO, b) Based on the analysis NAPFO and MAFWE (forestry sector) should prepare draft proposal for transfer of responsibilities (service provision) from Public Enterprise "Macedonia forests" to other organizations such as NAPFO, c) Request from NAPFO to MAFWE to assist in the field (private forests) with professional staff. Financing: a) To be able to use state subsidies, naturally afforested areas (meadows, fields and pastures) should be transferred in to forest land in cadaster. Possibilities to organize group transfer of the land in cadaster by NAPFO should be analyzed. b) More transparency is needed about funds for extended biological reproduction and possibilities for their use in private forests c) Introduction of green tax. d_ Financial support to NAPFO trough extension of funds in extended reproduction program. The recommendations of the reflection workshop are used for elaborating the main conclusions of the analysis.</p>
Weblink	

SELECTED REPORTS/PUBLICATIONS	
Full reference of study/publication	Trendafilov A., Rizovska Atanasovska J., Simovski B., (2008) Analysis of private forestry in Macedonia and its role in the National Forest Strategy process, Program on Forest (PROFOR) – CEPF, Skopje, June, 2008 p. 35.
English language summary/abstract	This document analyses the resources and capabilities potential of private forestry in the Republic of Macedonia, within the framework of the National Strategy for Sustainable Development of Forestry in Republic of Macedonia (NSSDF). In Republic of Macedonia there is no National Forest Program at the moment. In Macedonia the policy process at stake is called NSSDF to which the National Association of Private Forest Owners (NAPFO) is a stakeholder organization. In accordance with the Constitution of the Republic of Macedonia and the laws which regulate property and ownership rights there are no community forests but state and private forests. In the past private forest ownership was not in the political system of the country or the national forest policy. This has meaning especially for the status and role of private forestry for Macedonia including the principles of sustainable development. Further the needs for financing environmental value of the forests or the definition of the ecological effects and their evaluation is also impacted. The NSSDF was developed to address the use of forests and wood products. To date, in Macedonia there is no system established for evaluation and paying for the use of ecological functions of forests, by companies, government or by individuals. Efforts to do this made by foresters have had no success. The area of private forests in Macedonia is small but it is significant in terms of the socio-economical well-being of 65,000 families who own forests.
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 checked="" 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	Socio-economical approach.
Methodical approach	Content analysis and expert knowledge

<p>Thematic focus</p>	<p>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 type="checkbox"/> new management approaches <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>Included in the Summary.</p>
<p>Weblink</p>	

SELECTED REPORTS/PUBLICATIONS	
Full reference of study/publication	Stojanovska, M, Petrovic, N, Lengyel, A., (2009) Investment in locally controlled forestry in the SEE sub-region. The Forest Dialogue TFD background paper.
English language summary/abstract	<p>The SEE sub-region hosts around 32.8 million ha of forests and nearly 15.6 million ha of other wooded land and represents some 16% of the forests and 42% of the other wooded land area in Europe without the Russian Federation. This means that, all in all, about one third of its land area is covered by trees and woods. There is an overall tendency of a slight increasing of the forests and decreasing of the other wooded land, corresponding to a modest growth of the growing stock. However, Albania and Serbia reported losses between 2000 and 2005 regarding both issues. Whereas the area of broad leaved forests has been increasing since 2000, interestingly, the area of mixed forests has continuously decreased in SEE. The forest area available for wood supply in 2005 was reported to be 82%, with a slight increase between 1990 and 2005. This share is equal to one of the Nordic/Baltic countries of Europe and is some 10% less than it is in Central and North West Europe. The net annual increment is steadily increasing (91 million m³/yr) whereas annual fellings are rather stable amounting to around 40-41 million m³ yearly (1990-2005). In South East Europe the countries report to the NAI a yearly felling rate lower than 50%, a part from Albania where the utilization rate exceeded 300% in 2000 and 500% in 2005 thus being a harsh violation of sustainable harvesting rates. Concerning silvicultural issues, the sub-region is well known for the wide use of natural regeneration in general and especially for coppicing practices (Albania, Bulgaria, Macedonia, Serbia). It is however also striking that in Europe only Serbia and Albania have reported over 30 endangered forest tree species as of 2005 whereas the wide majority counts 0-4 species being threatened. In Albania 1 forest trees species has been reported as extinct. On the other hand, large areas are under protection for biodiversity and landscape. For example, in Albania and Serbia this figure is well above 20%, whereas in Croatia, Greece, Bulgaria and Romania it is lower than 10%. The sub-region is well known for its strong rural traditions indicating that non wood forest products (NWFP) are of outstanding economic importance and personal use. For instance, among the MCPFE reporting countries Bulgaria is the top mushroom producer in terms of quantity, whereas Serbia is the one with the highest value per ton; Albania is well-known for its medical plants and Macedonia for honey production.</p>
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 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 type="checkbox"/> National <input checked="" type="checkbox"/> Cross-national Europe <input type="checkbox"/> International beyond Europe
Theoretical approach	Economic and silvicultural
Methodical approach	Expert knowledge.
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.	Included in the summary
Weblink	http://tfd.yale.edu/sites/default/files/tfd_ilcf_macedonia_background_paper.pdf



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

European Forest Institute Central-East and South-East European
Regional Office (EFICEEC-EFISEE) c/o
University of Natural Resources and Life Sciences, Vienna (BOKU)
Feistmantelstrasse 4
1180 Vienna, Austria

Tel: + 43-1-47654-4410
eficeec@efi.int
www.eficeec.efi.int

