



STATUS QUO ANALYSIS
PRIVATE FORESTRY IN SERBIA
AND ITS ROLE IN THE NFP/NFS PROCESS

Dr. Dragan Nonic
Mr. Vojislav Milijic

BELGRADE, 2008

TABLE OF CONTENTS

LIST OF ACRONYMS	3
LIST OF TABLES	3
LIST OF CHARTS	3
1. OVERVIEW OF FORESTS AND FORESTRY	4
1.1. FOREST RESOURCES	4
1.2. FOREST MANAGEMENT	6
2. OWNERSHIP CONDITIONS IN FORESTRY AND THEIR RECENT DEVELOPMENT HISTORY	8
2.1. BASIC CHARACTERISTICS OF PRIVATE FORESTS	8
2.2. DEVELOPMENT OF PROPERTY RIGHTS	9
2.2.1. Development of property rights before World War II	10
2.2.2. Development of property right after World War II	11
3. ORGANISATIONS OF PRIVATE FOREST OWNERS	14
3.1. DEVELOPMENT OF FOREST OWNERS' ORGANIZATIONS IN SERBIA	14
3.2. COMMUNITY FORESTRY	14
3.3. PRIVATE FOREST OWNERS' ASSOCIATIONS	16
4. THE RELEVANT FOREST POLICY PROCESS IN OVERVIEW (NFS/NFP)	17
4.1. OVERVIEW OF THE FOREST POLICY PROCESS	18
4.2. OVERVIEW OF FORESTRY DEVELOPMENT STRATEGY	19
4.3. OVERVIEW OF LEGISLATIVE AND ORGANIZATIONAL SOLUTIONS	21
4.4. OVERVIEW OF NATIONAL FOREST ACTION PROGRAM	22
5. RECENT POLICY DEVELOPMENT IN PRIVATE FORESTRY	25
5.1. STRATEGY	25
5.2. OVERVIEW OF EXISTING LEGISLATIVE AND ORGANIZATIONAL ASPECTS	26
5.2.1. Private forest owners	26
5.2.2. Small and medium enterprises in forestry	29
5.3. OVERVIEW OF PROPOSED LEGISLATION AND ORGANIZATION	30
5.3.1. Private forest owners	30
5.3.2. Small and medium enterprises in forestry	31
6. PRIVATE FORESTRY IN THE NFP/NFS PROCESS	32
7. SUMMARY	36
LITERATURE	39

LIST OF ACRONYMS

EU	European Union
FAO/UN	Food and Agriculture Organization of United Nations
FC	Forest Community
FE	Forest Estate
FOPER	Forest Policy and Economics, Education and Research
MAFWM	Ministry of Agriculture Forestry and Watershed Management
NFAP	National Forest Action Program
NFI	National Forest Inventory
NFP	National Forest Program
PE	Public Enterprise
PF	Private Forests
PFA	Public Forest Administration
PFO	Private Forest Owners
PFOA	Private Forest Owners' Association
PFS	Public Forest Service
SCS	Kingdom of Serbs, Croats and Slovenians
SFRJ	Socialistic Federative Republic of Yugoslavia
SME	Small and Medium Enterprise

LIST OF TABLES

TABLE T-1.1.	Basic data's on Serbian forests (2008)
TABLE T-1.2.	Forest area by type of ownership in Serbia (2008)
TABLE T-1.3.	Timber volume and Annual Increment by type of ownership (2008)
TABLE T-1.4.	Forest area by origin (2008)
TABLE T- 1.5.	Timber volume and Annual Increment by origin (2008)
TABLE T-1.6.	Timber volume and annual increment by tree species (2008)
TABLE T- 1.7.	State forest area management organisations (2008)
TABLE T- 1.8.	Private forest area by enterprises providing technical service (2008)
TABLE T- 2.1.	Structure of private forests in Serbia
TABLE T- 2.2.	Structure of private forest property by number of owners
TABLE T- 2.3.	Forest area by type of ownership in Serbia (1891)
TABLE T- 2.4.	Forest area by type of ownership in Serbia (1926)
TABLE T- 2.5.	Forest area by type of ownership in Serbia (1938)
TABLE T- 2.6.	Forest area by type of ownership in Serbia (1979)
TABLE T-3.1.	Current participation of individual owners in Forest Community
TABLE T-3.2.	Private forest Owners' Associations in Serbia
TABLE T- 3.3.	Forest area of associated owners in Bor/Boljevac municipality

LIST OF CHARTS

CHART C-2.1.	Forest ownership structure in the period of 1891-2008
CHART C-4.1.	Objectives of FAO project "Forest Sector development in Serbia"
CHART C-5.1.	Organization of private forest service within PE "Srbijasume"

1. OVERVIEW OF FORESTS AND FORESTRY

1.1. FOREST RESOURCES

Based on the results of the **National Forest Inventory¹ (T-1.1)**, which gives the official condition of resources, forests cover **2.2 million ha**. This corresponds to **29.1 %** of the Serbian state territory². The total timber volume is approximately 362 million m^3 and the total annual increment exceeds 9 million m^3 .

T-1.1. BASIC DATA'S ON SERBIAN FORESTS (2008)

Area of state territory (ha)	8,836,100
Forest area (ha)	2,252,400
Area of forests in total area (%)	29.1
Total timber volume (m^3)	362,487,000
Average timber volume (m^3/ha)	160.9
Annual increment (m^3)	9,079,772
Average increment (m^3/ha)	4.00

SOURCE: National Forest Inventory (2008)³

The ownership structure on forests is given in table **T-1.2**. Private forests are most abundant covering approximately 52.2% of the total forest area, followed with **state forests**, covering 39.8 % of the total forest area, and about 8 % is defined by the category: **other⁴**. It is expected, when ownership is determined in this category, the share of both, private and state forests will be increased compared to their current rates.

T-1.2. FOREST AREAS BY TYPE OF OWNERSHIP IN SERBIA (2008)

Nr.	TYPE OF OWNERSHIP	FOREST AREA	
		(ha)	(%)
1.	State forests	896,400	39.8
2.	Private forests	1,175,200	52.2
3.	Other ⁴	180,800	8.0
Σ	Total forest area	2,252,400	100

SOURCE: National Forest Inventory (2008)

Data on **timber volume** are presented in table **T-1.3**. The largest concentration of timber volume is in state forests, approximately, 175 million m^3 , which represents about 48,6 % of the total timber volume in Serbia. The average timber volume in state forests is 196.3 m^3/ha . The annual increment in state forests is 4.2 million m^3 , and average annual increment is 4.7 m^3/ha .

The total timber volume in private forests exceeds 162 million m^3 , representing 45 % of the total timber volume in Serbia. The average timber volume is 138.5 m^3/ha , and the total annual increment is at the level of .state forests, 4.2 million m^3 . The average annual increment is 3.6 m^3/ha .

¹ National Forest Inventory of the Republic of Serbia (NFI), conducted from 2004-2008.

² The data in this report cover Central Serbia and Vojvodina. One province of the territory of the Republic of Serbia, Kosovo and Metohija, according to the UN Resolution 1244, is since 1999 under UN administration and is not included in this report. The National Forest Inventory did not provide data on the forest resources of Kosovo and the safety belt on the borderline between Central Serbia and the Kosovo.

³ Based on internal data of the Directorate of Forests, Ministry of Agriculture Forestry and Watershed Management – (MAFWM).

⁴ This category shows forest of which ownership is not yet determined by the National Forest Inventory 2008.

T-1.3. TIMBER VOLUME AND ANNUAL INCREMENT BY TYPE OF OWNERSHIP IN SERBIA (2008)

Nr.	TYPE OF OWNERSHIP	TIMBER VOLUME			ANNUAL INCREMENT		
		(mil. m ³)	(%)	m ³ /ha	(mil. m ³)	(%)	m ³ /ha
1.	State forests	175.965	48.6	196.3	4.241	46.7	4.7
2.	Private forests	162.820	44.9	138.5	4.213	46.4	3.6
3.	Other	23.700	6.5	131.1	0.625	6.9	3.5
Σ	Total forest area	362.487	100	160.9	9.079	100	4.0

SOURCE: National Forest Inventory (2008)

Forest **types by origin** are given in table T-1.4. More than 1,4 million *ha* - 64 % of the total forest area - are covered with coppice forests, while high forests cover about 27.5 % of the forest area. Plantations are 7.8 % on the total forest area.

T-1.4. FOREST AREA BY ORIGIN (2008)

Nr.	TYPE OF ORIGIN	FOREST AREA	
		(ha)	(%)
1.	High forests	621,200	27.5
2.	Coppice forests	1,456,400	64.7
3.	Plantations	174.800	7.8
Σ	Total forest area	2,252,400	100

SOURCE: National Forest Inventory (2008)

The timber volume and the annual increment by forest type of origin are given in a table T-1.5. Although coppice forests cover more than 64 % of the total forest area, only 50 % of the timber volume is in this category, and the average timber volume in coppice forests reaches 124.4 m³/ha. On the other hand, the average timber volume in high forests is 253.3 m³/ha, and in plantations is 136 m³/ha.

T-1.5. TIMBER VOLUME AND ANNUAL INCREMENT BY ORIGIN (2008)

Nr.	TYPE OF ORIGIN	TIMBER VOLUME			ANNUAL INCREMENT		
		(mil. m ³)	(%)	m ³ /ha	(mil. m ³)	(%)	m ³ /ha
1.	High forests	157.511	43.4	253.6	3.388	37.3	5.5
2.	Coppice forests	181.188	50.0	124.4	4.458	49.1	3.1
3.	Plantations	23.787	6.6	136.1	1.233	13.6	7.1
Σ	Total forest area	362.487	100	160.9	9.079	100	4.0

SOURCE: National Forest Inventory (2008)

More than 50 % of the total annual increment is produced in coppice forests which is in absolute figures some 4.5 million m³ or 3.1 m³/ha on average. In high forests the annual increment totals in 3.3 million m³, and 5.5 m³/ha on average, while in plantations the total annual increment is 1.2 million m³, and 7.1 m³ on average.

The share of the main **tree species** in the total timber volume is given in table T-1.6. Broadleaves are 87,7 %, (317.93 million m³), while conifers are 12.3 % . Of the total annual increment 80.9 % is produced in broadleaved forests and conifers account for 19.1 % .

T-1.6. TIMBER VOLUME AND ANNUAL INCREMENT BY TREE SPECIES (2008)

SPECIES	TIMBER VOLUME (mil.m ³)	%	ANNUAL INCREMENT (mil.m ³)	%
Beech (<i>Fagus silvatica</i>)	146.850	40.5	2.781	30.6
Turkish oak (<i>Quercus cerris</i>)	46.980	13.0	1.034	11.4
Sessile oak (<i>Quercus petrea</i>)	21.542	5.9	0.553	6.1
Hungarian oak (<i>Quercus farnetto</i>)	20.986	5.8	0.518	5.7
Hornbeam (<i>Carpinus bettulus</i>)	15.157	4.2	0.334	3.7
Black locust (<i>Robinia pseudoacacia</i>)	11.243	3.1	0.516	5.7
English oak (<i>Quercus robur</i>)	9.242	2.5	0.158	1.7
Poplars (<i>Populus sp.</i>)	6.137	1.7	0.338	3.7
Narrow leaved Ash (<i>Fraxinus angustifolia</i>)	5.792	1.6	0.153	1.7
Broad leaf Lime (<i>Tillia platyphilos</i>)	3.535	1.0	0.070	0.8
Manna ash (<i>Fraxinus ornus</i>)	3.505	1.0	0.102	1.1
Other broadleaves	34.001	7.4	0784	8.0
Total broadleaves	317.930	8.7	7.341	80.9
Norway Spruce (<i>Picea abies</i>)	18.810	5.2	0.605	6.7
Silver Fir (<i>Abies alba</i>)	12.659	3.5	0.715	7.9
Austrian pine (<i>Pinus nigra</i>)	8.304	2.3	0.199	2.2
Scotch pine (<i>Pinus silvestris</i>)	3.775	1.0	0.177	1.9
Other conifers	1.009	0.3	0.042	0.5
Total conifers	44.557	12.3	1.738	19.1
TOTAL	362.487	100.0	9.079	100.0

SOURCE: National Forest Inventory (2008)

The most important tree species in Serbia in terms of timber volume is beech, with a share in the total timber volume of 40.5 % and 30.6 % in the total annual increment. Turkish oak has a share of 13 % in the total timber volume and 11.4 % of the total annual increment. Sessile oak and Hungarian oak have a share of 5.9 % and 5.8 % and 6.1 % and 5.7 % in the total annual increment.

The most widespread spread conifer species is spruce, with 5.2 % area and in timber volume shares, and 6.7 % of the annual volume of timber. Silver fir's share is 3.7 % by volume and 7.9 % by total annual increment.

1.2. FOREST MANAGEMENT

The Directorate of Forests in the Ministry of Agriculture, Forestry and Watershed Management is conducting and supervising state administration related to forest policy, improvement and usage of forest condition, forest protection, and control of reproductive material, as determined by the law⁵. In addition, the Directorate represents the Serbian forest sector in international organizations and policy processes and coordinates cooperation in general.

According to the *Law on Forests*⁵ from 1991 state forests are managed by **public enterprises**: PE “Srbijasume”, PE “Vojvodinasume”, PE of national parks⁶, and others⁷. Table **T-1.7.** shows management organisations of state forests by forest area.

T-1.7. STATE FOREST AREA BY MANAGEMENT ORGANISATIONS (2008)

Nr.	USER/MANAGER	FOREST AREA		TIMBER VOLUME		TOTAL ANNUAL INCREMENT	
		(ha)	(%)	(mil. m ³)	(%)	(mil. m ³)	(%)
1.	PE Srbijasume	775,000	77.9	115.700	71.6	2.961	70.5
2.	PE Vojvodinasume	108,000	10.9	20.000	12.4	0.680	16.2
3.	PE of national parks ⁸	80,000	8.0	19.800	12.3	0.410	9.8
4.	PCE Borjak	8,000	0.8	1.800	1.1	0.041	1.0
5.	Faculty of Forestry	6,000	0.6	1.100	0.7	0.027	0.6
6.	Other organizations	23,000	2.3	3.100	1.9	0.080	1.9
Σ	State forest area^{9[9]}	995,000	100	161.500	100	4.199	100

SOURCES: Internal records of forest management public enterprises (2008)^{10[10]}

PE “Srbijasume” manages more than 77 %, PE “Vojvodinasume” 11 % and PEs of national parks manage about 8 % of the total area of state forests.

Private forest owners manage their forests, however the public enterprises are entrusted with performing professional and technical tasks¹¹ in private forests the area they manage¹². Table **T-1.8.** shows private forests by area where public enterprises perform these tasks.

⁵ *Law on Forests*, 1991. Official Gazette of the Republic of Serbia, №. 46/91, 83/92, 53/93, 54/93, 67/93, 48/94, 54/96, Belgrade.

⁶ According to the Law on National Parks, Official Gazette of the Republic of Serbia, No 39/93, the State has entrusted management of five national parks: Djerdap, Tara, Fruska Gora, Kopaonik and Sar Planina to public enterprises.

⁷ Other management organisations of state forests are: Public communal enterprise for forests management and watershed protection Borjak- Vrnjacka Banja, Faculty of Forestry, Belgrade University, and other agriculture and watershed management organizations.

⁸ PE of National Park Sar Planina is not included.

⁹ Difference in data related to state forests according to NFI and other sources occur due to methodological reasons. Other source of differences is due to the NFI was not conducted at the safety belt between Serbia and Kosovo.

¹⁰ www.srbijasume.co.yu; www.vojvodinasume.co.yu; www.npdjerdap.co.yu; www.npfruskagora.co.yu; www.tara.org.yu; www.npkopaonik.com; www.sfb.bg.ac.yu (2008).

¹¹ The *Law on Forests* from 1991 introduced the term **professional and technical tasks** in private forests. These relate to 1) issuing licenses for logging to forest owners, 2) tree marking in private forests, 3) issuing timber and fuel wood transport licenses for forest owners, 4) organizing activities on forest protection in private forests.

¹² The Law on Forests from 1991 defines 27 forest management areas and five national parks. All state forests within those forest areas are managed by forestry companies (PE Srbijasume, PE Vojvodinasume). The state forests of the national parks are managed by the national park public enterprises. According to the Law, private forests within each forest area are in the custody of the responsible state forest enterprise. The specified professional and technical tasks will also be conducted by this company.

T- 1.8. PRIVATE FOREST AREA BY PUBLIC ENTERPRISES PROVIDING TECHNICAL SERVICE (2008)

Nr.	USER/MANAGER	FOREST AREA		TIMBER VOLUME		TOTAL ANNUAL INCREMENT	
		(ha)	(%)	(mil. m ³)	(%)	(mil. m ³)	(%)
1.	PE Srbijasume	989,000	96.7	103.800	95.23	2.100	94.89
2.	PE Vojvodinasume	5,000	0.5	0.300	0.28	0.012	0.54
3.	PE of national parks	25,000	2.4	4.500	4.13	0.090	4.07
4.	PCE Borjak	4,000	0.4	0.400	0.37	0.011	0.50
Σ	Private forest area¹³	1,023,000	100	109.000	100	2.213	100

SOURCE: Internal records of forest management public enterprises (2008)¹⁴

PE “Srbijasume” performs **professional and technical activities** in approximately 97 % of private forest area dominating these tasks.¹⁵

2. OWNERSHIP CONDITIONS IN FORESTRY AND THEIR RECENT DEVELOPMENT HISTORY

2.1. BASIC CHARACTERISTICS OF PRIVATE FORESTS

According to the latest data from the National Forest Inventory (2008), on the territory of Serbia, without Kosovo, **private forests** cover 52, 2% of total forest area. Basic data about forest area, timber volume and annual increment by ownership type are presented in Table **T-1.2** and **T- 1.3**.

Table **T-2.1.** shows **structures** of private forests in Serbia and shows a large number of forest owners, with corresponding small average forest properties in small parcels.

T- 2.1. STRUCTURE OF PRIVATE FORESTS IN SERBIA

Area of private forests (ha)	1,175,200
Estimated number of forest owners	900,000
Forest property size <i>per</i> owner (ha)	1.27
Number of forest parcels	3,900,000
Average size of forest parcel (ha)	0.30

SOURCE: National Forest Inventory (2008)

Small sized private forests under today’s forest policy circumstances are a significant problem for efficient forests management therein. Private forests, by size of the estate and the number of owners, are presented in a table **T-2.2.**

¹³ Apart from these reasons for the differences in data between NFI and other sources, this difference for private forests occurs because private land regenerated naturally. The Forest Inventory of 1979 did not consider this aspect yet.

¹⁴ www.srbijasume.co.yu; www.vojvodinasume.co.yu; www.npdjerdap.co.yu; www.npfruskagora.co.yu ; www.tara.org.yu; www.npkopaonik.com;

¹⁵ Vojvodina has a small share of private forests as agricultural land use dominates there. Forests cover 6% of Vojvodina mostly in state ownership. Apart from NP Fruska Gora, the majority of forests in Vojvodina are located only along river banks (Sava, Danube, Tisa...etc).

T-2.2. STRUCTURE OF PRIVATE FOREST PROPERTY BY NUMBER OF OWNERS¹⁶

0,01-1 ha	1-10 ha	10-20 ha	20-30 ha	over 30 ha	Total
638,322	233,846	8,372	1,516	426	882,482

SOURCE: PRIFORT Serbia (2008)¹⁷

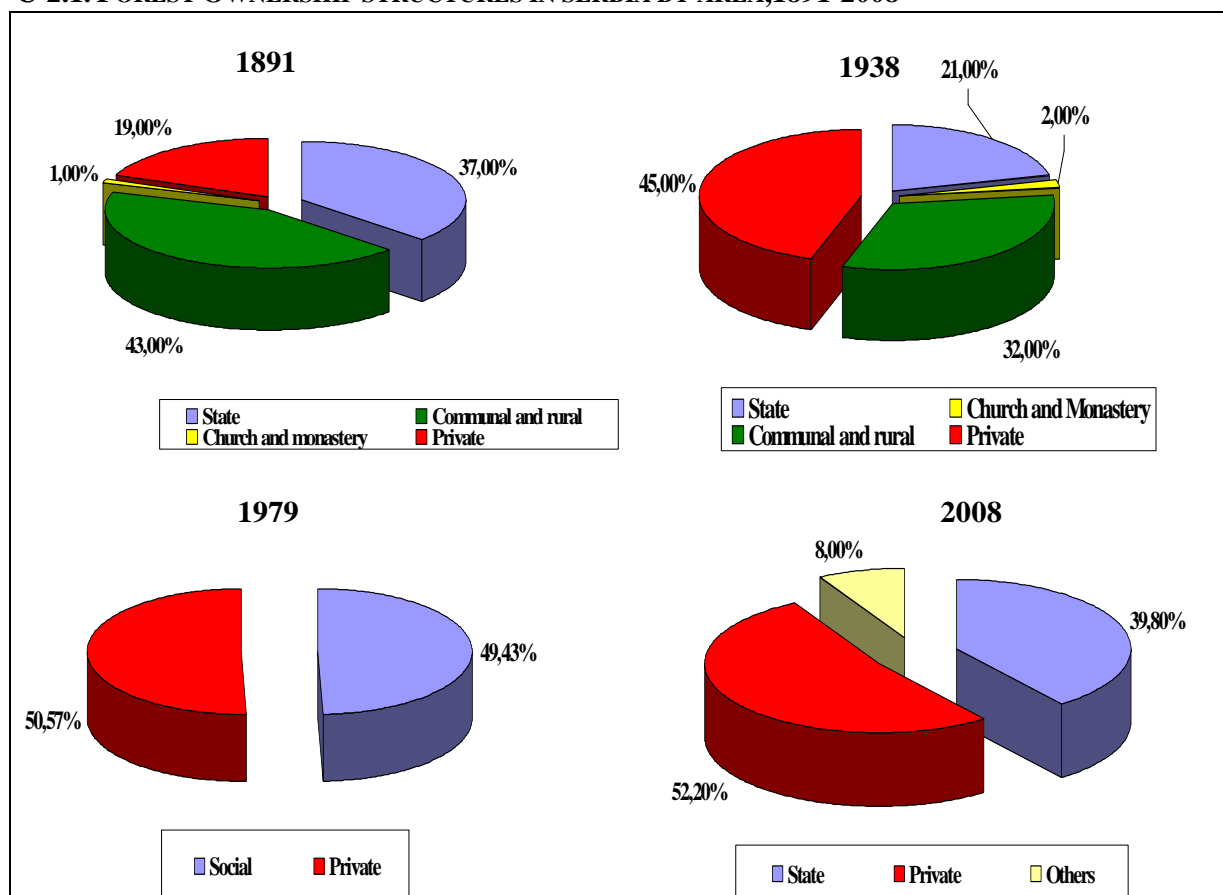
More than 72 % of the owners have properties smaller than 1 ha, 26 % own property between 1 to 10 ha, and only 2 % of forest owners have forest property larger than 10 ha.

In sum, the private forest sector in Serbia is characterized by high fragmentation of properties, a large number of parcels and owners, and by insufficient organization of forest management. Whatever, their size, significant timber volume, and annual increment, which are similar to those of the state forests, stress their importance as resource.

2.2. DEVELOPMENT OF PROPERTY RIGHTS

Development of property rights in Serbian forestry and their organization must be viewed historically (Nonic, 1993). The property types and their changes are closely related to the social-economic conditions experienced in different ages of development (Chart C-2.1).

C-2.1. FOREST OWNERSHIP STRUCTURES IN SERBIA BY AREA, 1891-2008



SOURCES: Marinovic (1926); Statistics for forests and forest economy for 1938 (1940). Inventory of forest fund (1983); National Forest Inventory (2008).

¹⁶ This data's refers to Serbian territory without Kosovo and Vojvodina.

¹⁷ Internal data from PRIFORT - Project „Research into the private forest owners organization in Western Balkan countries - Serbia“, 2008.

2.2.1. Development of property rights before World War II

Various forms of property had different developments since the 19th century. After the dominance of state forests until the end of the 19th century, new forms of property emerged private, communal, and rural¹⁸.

The first **private and communal property** of forests in Serbia occurred by direct occupation of public forests, i.e. by forced occupation and capture of public property. These processes were very intensive in the first decades of the restored Serbia, but subsequently declined by the end of the 19th century.

The more complete legal regulations of private forest property management occurred since the 1870's. Until then partial regulations existed, which were mainly aimed at protecting the forests from premature harvesting and clearing. The Forest Regulation of 1861 recognized four categories of property ..: state, public, communal, and private forests (Nonic, 1993).

Due to an increasing loss of forests, and consequently higher values of the remaining forests, and the activities of the early professional foresters, the first modern **Serbian Forest Law was passed in 1891**¹⁹. Its aim was to regulate forest property by establishing management rules. The first Article of the, new Law states: "*forests (mountains, hills ...) in Serbia are state, communal, rural, monastery, church, or private property*", which indicates that this Law recognized two new categories of ownership: rural and church property, and previously public forests are designated as state-owned forests (1920).

This law improved the state of affairs in forestry in general. The Ministry of Peoples Economy had formed Forestry Departments, which formed county forestry departments with professional foresters. The Ministry was in charge of state forest administration. It also exercised control on other forest properties, except the privately owned ones. Municipal councils, i.e. peasants were in charge of the municipal and village forests. In private forests, no approval for felling was needed, except in cases of protected forests. This law can be viewed as progressive for the time, but in practice, it was difficult to apply.

Ownership demarcation in the field was absent, forest administration was being formed too slowly and the lack of professionals was evident. The Law gave some relative indicators of the forest ownership structure in Serbia (see table T-2.3).

T- 2.3. FOREST AREAS BY TYPE OF OWNERSHIP IN SERBIA (1891)

Nr.	TYPE OF OWNERSHIP	FOREST AREA (%)
1.	State	37.0
2.	Communal and rural	43.0
3.	Church and monastery	1.0
4.	Private	19.0
∑	Total forest area	100

SOURCE: Marinovic (1926)

The development of forest property rights in Serbia was gradual throughout the 19th century, but was not settled before the Second World War.

In the first official statistics on Forestry of the Kingdom of Serbs, Croats and Slovenians (SCS), published by the Ministry of Forestry in 1926, the division of forests was made based on ownership and the type of soil (1926). According to the type of ownership three main categories were distinguished there (T-2.4): the state owned (47.7% of the forests in the entire Kingdom), communal (19%) and private (33.3%).

¹⁸ The term "rural forests" is used for forests which were in the ownership of villages. The term "communal forests" was used for forests which were in the ownership of cities and municipalities.

¹⁹ Law on Forests, from 30th of March 1891 – with amendments from 2nd of August 1898, 26 of January 1900 , 16th of May 1902. and 23rd of March 1904.

T- 2.4. FOREST AREAS BY TYPE OF OWNERSHIP IN SERBIA (1926)

Nr.	TYPE OF OWNERSHIP	FOREST AREA (%)
1.	State forests	47.7
2.	Communal forests	19.0
3.	Private forests	33.3
Σ	Total forest area	100

SOURCE: Forests of the Kingdom of SCS (1926)

The forest Law of the Kingdom of Yugoslavia²⁰ in 1929 classifies forests into: **state owned forests and forests not owned by state** (Art. 1). The latter were (Art. 4): „... forests of self-managing bodies, tribal²¹ forests, and forests of property communities, land communities and similar corporations, as well as all private forests“ (1930).

In 1938, the first reliable statistical data on forests were processed. The forest area according to the ownership is given in the table bellow (T-2.5).

T- 2.5. FOREST AREAS BY TYPE OF OWNERSHIP IN SERBIA (1938)

Nr.	TYPE OF OWNERSHIP	FOREST AREA	
		(ha)	(%)
1.	State forests	323,000	21
2.	Monastery and funds	29,000	2
3.	Communal forests	501,000	32
4.	Private forests	708,000	45
Σ	Total forest area	1,561,000	100

SOURCE: Statistics for forests and forest economy for 1938 (1940)

According to data from 1938 (1940), the property structure of forests in Serbia (of the total of 1,561,000 ha) was: state forests 323,000 ha (21%), monastery and funds forests 29,000 ha (2%), rural and communal forests 501,000 ha (32%), and private forests 708,000 ha (45%).

It was a characteristic of the forest-police regulations that they referred to all **forests, regardless of ownership type**. Clearing of forests without a government permit was prohibited, as well as the land use form change. Every owner of a forest was obligated to replant every cleared forest land as soon as possible or within three years after clearing.

This Law had introduced the unique system of forests management in the whole territory of the Kingdom of Yugoslavia. A characteristic of forest – police regulations was, that the forestry authorities had the right to declare certain forest areas as permanently or temporarily protected, regardless of ownership.

2.2.2. Development of property rights after World War II

In the period **after** W W II with the new government changes were introduced in the state organization and also the ownership structure in general and also on forests.

As first the so-called **socially owned property was established** by nationalization and originating from state, communal, and private forests, monastery and church forests. Rural and communal forests got resolved and entirely designated as state forests.

²⁰Law on Forests, Ministry of Forests and Mining, Official Gazette No. 307-CXXX, from 31.12.1929, Belgrade

²¹ In Montenegro province, certain larger communities, called tribes, existed and owned land and forests.

On the confiscated forests the *Basic Law on Expropriated and Confiscated Forest Property*, was passed in .²².

A part of these properties was given to new owners, based on the Federal Law on Agricultural Reform and Colonization, and those were farmers without any land property and forest cooperatives, which were established for forest management improvement.

In **1947**, a *Basic Forest Law* was passed, forming the legal basis of the “state socialism” principle in forestry. The basic article of the Law was that all forests, regardless of their ownership, should serve the general interest of the people and are protected by the State.

According to their significance, all forests were divided into federal, national, provincials, and forests of local significance. In terms of ownership there were three categories left: **state, cooperative** and **private**. In practice however, two basic categories of forest ownership existed in the whole period after W W II, state (social) and private (whose name has been often changed based on legislative formulation). In certain periods, statistics showed a category of cooperative forests, but their share was always minor.

Related to these issues Damjanovic emphasized that: “...*place and the role of private forests in the post war period of Serbian development was very poorly investigated in our forest policy...*”. For evaluation of this policy: “...*it is necessary to scientifically research the special effects of agricultural reform by which confiscation in favour of the state of large-scale forest properties, private forests of certain persons, church and monastery forests (confiscation without notification), as well as confiscation of all surplus of forest properties which were beyond the limit determined by the State, took place. In literature, there are no reliable data on how much the ownership structure of Serbian forests was change by these measures, and also there is no critical analysis of forest policy in Serbia in the post war period, which is characterized by numerous organizational changes in forestry of state and private sector*” (Damjanovic, 1986).

According to statistical indicators in **T-2.6** after W W II there were two basic categories of forest ownership: social and private forests (which had changed their name to *forests with a right of ownership*“).

In some statistics, a category of “communal forests” of insignificant portion in total area was registered.

T- 2.6. FOREST AREAS BY TYPE OF OWNERSHIP IN SERBIA (1979)

Nr.	TYPE OF OWNERSHIP	FOREST AREA	
		(ha)	(%)
1.	Public forests	1,143,334	49.43
2.	Private forests	1,169,533	50.57
∑	Total forest and forest land area	2,312,867	100

SOURCE: Inventory of forest fund (1983)

It could be assumed, that due to almost equal shares of ownership categories, that in Serbia organization of both sectors have been developing **equally**, nevertheless the situation in practice was totally different.

²² Forest properties nationalized according to article 3, 10 and 26 of the *Federal Law on Agricultural Reform and Colonization*, were in the previous ownership of persons who did not have a status of a farmer; the 3rd Reich, Third Reich citizens, and persons of German nationality; criminals and other persons from which forests were confiscated based on court decisions. Also the owners belong here, against whom confiscation started and had not been finished, according to previous *Law on Liquidation of Agricultural Reform on Large-scale properties* from 1931. All these forest properties were transferred to ownership of the State. There was no compensation for those nationalizations (Official Gazette of the Federative People Republic of Yugoslavia, No. 61/46).

In the post war period, the private sector in general was not developed along with the state sector, which consequently has led to the current condition of private forests. Private forests were the ones evidently of lower quality than state ones. As table T.1.3 shows private forests had a lower timber volume and annual increment. In addition, the share of coppice forests is larger in private than in state forests. This difference in private and state forests is the consequence of the different treatment of private and social/state forest sector.

According to Damjanovic: *“...throughout the post war period the two parallel forest policies have been practiced - one according to the social sector of forestry, by which this sector through a gradual reorganization liberated itself from administrative restraints. The second policy - the sector of the private forests - remained essentially unchanged, because their control remained the responsibility of the government. During the numerous reorganizations and self-management transformations of the entire society, only the form of control had been changed; the responsibility was transferred from county councils to municipalities. The legal sector of forestry was not consecutively developed with the social sector, as it was necessary”* (Damjanovic, 1986).

Related to development of property rights on forests in Serbia, it can be concluded that its structure reflected the political and socio-economic development and was dominated by the state.

The **development of forest ownership** went through the stages of forest as a public source of welfare owned by the society in mid of 19th century. Different forms of forest ownership (private, communal, rural) were then formed by the end of 19th century and defined in the first Serbian Forest Law from 1891. After W W II, the process went on in the opposite direction, and social attention was drawn to state or public forest sector.

However, it should be emphasized that private forest ownership existed in former Yugoslavia throughout the whole period after W W II, unlike most of “the Eastern European Block” socialist countries, although the usage of private forests was limited.

The legislative framework and proposed forest management goals were not significantly different for private and state forests. However, basic shortcomings of these regulations were the lack of clearly defined long-term policy and strategy of state administration toward the private forest sector including supporting mechanisms of finances, extension, and support for associating. By legislative articles related to private forests, the state has tried to regulate forest management without interfering in ownership rights. In all forest law measures related to private forests²³ restrictions were increased beyond than previous ones²⁴. Perhaps all of these measures were positive and needed, but the Private Forest Service within municipal council administration, were not able to implement them. The Private Forest Service in most cases has not used their legislative authorities and in some organized forest service no professionals were employed. Damjanovic emphasises that: *“...by keeping in their jurisdiction decisions of commercial, organizational and professional character, which are e.g.: organization of forest management planning and control over it, determination of needed forest management measures, tree marking and timber stumping, municipalities have taken a role of commercial institutions and the role of managers of private forests. Beside inspection, all other tasks should not be done by administrative bodies but organized institutions such as the private forest owners, etc. Instead of active relations in the management of forests, which they owned, forest owners have been put in the position of passive users of services provided by public services within municipalities. By this municipalities have taken the role of commercial institutions ”* (Damjanovic, 1986).

Related to private forest management Drazic claims: *“...laws on forests which were changed numerous times did not restrict integral ownership rights, but by treating private forests as a good of public interest, laws have limited right of uncontrolled usage of private forests, by obligating forest*

²³ Prescribed measures in most cases were: measures of protection, custody over timber transportation and improvement of forest management related to afforestation, melioration of degraded forests.

²⁴ In most cases those measures were related to 1) including private forests in commercial forest areas, 2) entrusting management of private forests to commercial forestry organizations, 3) passing forest management plans for private forests, 4) declaration of private forests whose primary function was protection.

owners to protection and improvement of forests as an ecosystem. However, beside declarative concern for private forests the State did not pay attention to private forests so they were indeed often managed unsustainably²⁵, depending of owners' relations toward their own forests" (Drazic, 1991)

It is estimated that the share of private forests in the total forest area will increase to 56% when the ownership type of forests specified as "others" is determined.

3. ORGANISATIONS OF PRIVATE FOREST OWNERS

3.1. DEVELOPMENT OF FOREST OWNERS' ORGANIZATIONS IN SERBIA

According to Nonic (2004), **forest cooperatives** are the first organizations of private forest owners in Serbia. Cooperatives have been established in the period after 1930: "...after dividing large properties, which peasants have bought in favour of their cooperatives for the purpose of easier and more rational mutual management" (Nonic, 2004: 41).

The purpose of these cooperatives was **joint forest management**, guarding of forests and pastures and they were established voluntarily except in cases of ownership under forests with protective function. Apart from existing laws and regulations, by which cooperatives were established: "... in terms of their implementation, there was no adjustment of certain declarations", which slowed or even blocked establishment of cooperatives (Nonic, 2004: 41).

After WW II, a certain form of "cooperative approach" was established and laws and regulations, which enabled organizations of forest owners, were passed. However: "...even though Law gave a possibility for voluntarily organizations of private forest owners within agricultural cooperatives organizations of joint work, which managed forests as social property", it can be concluded that this possibility was never realized, and forest cooperatives were never formed (Nonic, 2004: 43).

Recently, during the course of the joint project activities of the Food and Agriculture Organization of the United Nations and the Directorate of Forests, private forest owners became interested in associating, by which they would be strengthened in achieving their goals and in representing their joint interests (Milijic, 2007).

Two models of forest owners' organizations exist at the moment in Serbia:

- **community forest** model²⁶, which aims at joint forests management;²⁷
- **private forest owners' associations**, which aim on representation of members' interests (mainly economic).

No other organisation forms of private forest owners are present in Serbia yet (2008).

3.2. COMMUNITY FORESTRY

Community Forestry (*Gemeinschaftswald/Community forest*), based on community ownership was developed in Austria (*Vorarlberg*), based on forest owners who were not farmers. Agricultural communities (*Agrargemeinschaft*) are good example of successful joint forest management by non-

²⁵ A legal obligation of forest-management plans for private forests: "...which deadlines for preparation are prolonged to present days, is one of the basic reasons that private forests did not play almost any role in the economic development of our Republic. With such conditions related to the management of private forests, one can not speak about their modern management and their role in economic prosperity, nor can their functions . be optimally used for improvement of environment" (Drazić, 1991).

²⁶ Corporate Forest / Community Forest is applied here in the sense of FAO (2000): the formal type of organization in which individual ownership is transferred into shares of members. The entire membership area is then jointly managed.

²⁷ "Joint forest management" is applied here in the sense of FAO (2000): it represents contract based agreements between a defined number of owners of forest land to create a larger joint property by the merger of smaller individual units.

farmers. They also exist in other regions of Central Europe e.g. in Burgenland (Urbarialgemeinden) and in Thüringia (“Waldgenossenschaften”). The internal structure of these forest communities is different, but a role in ownership, mutual responsibilities and possibilities for forest management are common for all of them (Illyés, Nießlein, 1997).

The forest community (*Sumska zajednica*) in Beocin was established in 1903 by 79 owners. They purchased 509 acres (about 193 ha) of the forest “*Plemicko dobro*” on Fruska Gora (from Beocin to peak Brankovac) from three Austro-Hungarian nobleman.

The goal of the Association was to help members, who were mainly poor peasants, to secure some additional income and satisfy their needs for wood for their households through common management of the forests (Nonic, 2004).

The forest community has predominated as the only one in the region many historical changes (changes of state and their administrative requirements) and therefore presents a unique value even on the European scale. It has today 77 members, including women can be found in contrast to the 1903 situation. The ownership of these forests is divided into so-called “**ideal parts.**” All the owners have a certain number of those ideal parts originating from conditions of the purchase in 1903 and inheritance since then and trade among members. Ideal parts must remain in ownership of either the members or the Community. . No owner is allowed to **sell** his/her parts to outside persons, but just to other members. Assembly of members decides who can buy a part of forest offered for sale. . Those with the smaller shares have priority. If no one is interested, the organization buys itself the offered share. **Because of this regulation no change of ownership or the total area was registered in cadastre during 100 years of its existence.**

Based on the size of their shares, the owners dispose of different shares in the produced fuel wood and timber. The distribution of shares shows that the vast majority of the owners have small shares as only two have larger shares than one “ideal part” (T-3.1).

Ownerships and the right to manage the forest are determined with an **initial contract** made on the occasion of establishing of the Association. This sets that the owners will “jointly possess and enjoy the forest”, whereas wood distribution is based on the owned ideal portions. Today similarly, the principle of wood distribution is the division of 552 m³ into 46 integral parts, resulting that there are 12 m³ per ideal part share. The rest of the harvest will be sold and profits will be divided according to the shares again.

T-3.1. CURRENT PARTICIPATION OF THE OWNERS IN FOREST COMMUNITY

SIZE of forest part	Number of owners	Number of ideal parts	Part for distribution (m ³)	
			per owner	total
1 1/2	1	1.50	18	18
1 1/4	1	1.25	15	15
1	21	21.00	12	252
3/4	1	0.75	9	9
2/3	2	1.33	8	16
1/2	27	13.50	6	162
1/3	12	4.00	4	48
1/4	8	2.00	3	24
1/6	4	0.67	2	8
Σ	77	46.00	—	552

SOURCE: Our Century (2003)

The entire area is part of the National Park “*Fruska Gora*”, mostly in level II of **protection**. This means that all management activities are determined by the corresponding **Forest Management Plan** and by the Spatial Plan of Fruska Gora.

The owners so far have respected the determined silvicultural and harvesting regime. At present there is a forest engineer – who is also a member - in charge of technical forest management tasks.

3.3. PRIVATE FOREST OWNERS' ASSOCIATIONS

As mentioned before, numerous workshops for private forest owners within the FAO projects²⁸ have resulted in an increased interest of owners for associating. During 2006, several **private forest owners' associations (PFOA)** were formed: Rastiste-Bajina Basta, Milicinica-Valjevo, and Podgorac-Boljevac, followed by three more in Bor municipality: Zlot, Krivelj and Brestovac. In May 2007, the seventh association was established, in Bigrenica, Cuprija municipality. By the end of 2007 two more associations were formed: Selacka, – Zajecar Municipality and Negotin – Negotin municipality. In February 2008 the association Mackov Kamen was formed in Krupanj municipality in Western Serbia. The associations are NGOs and **their statutes** and overall goals are very similar (Milijic, 2007). They aim to represent the interests of their members and not on joint forest management. Every owner manages his own forests, while the association coordinates joint works like forest infrastructure, and joint marketing activities. Training and cooperation with other associations and institutions is carried out jointly.

An overview of the private forest owner associations is given in table **T-3.2**.

T-3.2. PRIVATE FOREST OWNERS' ASSOCIATIONS IN SERBIA

Association – Municipality	Year of Establishment
Rastiste – Bajina Basta	2006.
Milicinica – Valjevo	2006.
Podgorac – Boljevac	2006.
Zlot – Bor	2006.
Krivelj – Bor	2006.
Brestovac – Bor	2006.
Bigrenica – Cuprija	2007.
Selacka – Zajecar	2007.
Negotin – Negotin	2007.
Mackov Kamen – Krupanj	2008.

SOURCE: Milijic (2007)

Data on **forest area** of associated forest owners are available for associations of Bor and Boljevac municipality, and they are presented in table **T-3.3**.

T- 3.3. FOREST AREA OF ASSOCIATED OWNERS IN BOR/BOLJEVAC MUNICIPALITY

Nr.	ASSOCIATION	MEMBERS	FOREST AREA (ha)	AVERAGE FOREST PROPERTY
1.	Podgorac	49	510	10.4
2.	Zlot	31	279	9.0
3.	Krivelj	21	132	6.3
4.	Brestovac	23	117	5.1
Σ	Total	114	1038	9.1

SOURCE: Milijic (2007)

²⁸ FAO project FAO/TCP/YUG/2902(A): „Institutional Development and Capacity building for the National Forest Program“ (www.forestserbia-fao.sr.gov.yu) and FAO project GCP/FRY/003/FIN: “Forest Sector Development in Serbia“.(www.forestryprojectserbia.org).

Basic data on the **average size of forest property** of associated forest owners shows that their forest properties are larger than the Serbian average (**T-2.2**). This can be explained by the reason that active owners of larger properties oriented to entrepreneurship in forestry have joined the association. They aimed explicitly at furthering their economic interests.

Further development of PFOA will eventually lead to establishment of **forest management associations**. Some associations like PFOA Podgorac is considering this possibility and has progressed in that sense by making the efforts in developing a forest management plan for the whole associated forest area.

Even though all existing PFOA have been formed in the past two years, some of them like **PFOA Podgorac** presents a good example to other associations and unorganized forest owners. They perform the following activities: 1) representation of the members' interests, 2) joint work on forest infrastructure, 3) joint forest management, 4) joint marketing of forest products. This association has 49 members owning 510 *ha* of forests. They do charcoal production, timber trade and services in state forest harvesting as contractors to Public Enterprise "Srbijasume". Representatives of PFOA Podgorac have participated in preparation of *Forest Development Strategy of the Republic of Serbia*, and the *National PEFC* standard. They have also applied for state financial incentives for forest road construction and training for the members.

Other associations are less active at the moment. Some of them were established but members are having communication problems with their activities, while others like association in Bor municipality (Krivelj and Zlot) try to rely on experience of PFOA Podgorac and cooperate with it. As a result of cooperation between PFOAs Podgorac, Zlot and Krivelj, and National Alliance of Slovenian Forest Owners, with support of FAO project, Directorate of Forests, and PE "Srbijasume" a visit of Slovenian forest owners and entrepreneurs to the these associations was organized in April 2007. The Serbian owners visited Slovenia in August 2007.

The **example** of PFOA Podgorac clearly shows that establishment of a well-organized system of state support (financial, advisory and technical), can encourage activities of associations and stimulate unorganized forest owners to associate. However this process needs more time to develop.

Although there are ten PFOAs, an **umbrella organization** of forest owners in Serbia has not yet been established. This can be explained because most of the local associations are not working strongly and members are not willing to support them or do not see clear interest and benefits from such a national level organization. The present forest legislation is not supportive enough for that while the local members do not have capacities and defined clear interests to succeed. However, some initiatives exist to establish an umbrella organization which deserves further support of the state administration.

4. THE RELEVANT FOREST POLICY PROCESS IN OVERVIEW (NFS/NFP)

Forest policy and organization of forestry in Serbia during the last 15 years has been built on a **centralized** institutional framework, as laid out in the 1991 *Law on Forests*²⁹. However, in the context of the political and economic changes after 5th of October 2000, as well as reform processes within the public administration, significant changes also occurred in the field of forestry (Nonic *et al*, 2006).

After the political changes in Serbia, the Serbian forest sector is not fully reformed, especially in deregulation and privatization. Significant steps were made in establishing a strategic framework for the development of forestry in general culminating in the formulation of the National Forest Program of Serbia.

²⁹ *Law on Forests*, 1991, Official Gazette of the Republic of Serbia, №. 46/91, 83/92, 53/93, 54/93, 67/93, 48/94, 54/96, Belgrade

4.1. OVERVIEW OF THE FOREST POLICY PROCESS

In November 2002, the forestry administration's supervision was transferred from the Ministry of Agriculture, Forestry and Water Management to the newly established Ministry for Protection of Natural Resources and Environment. A Deputy Minister in charge of the Directorate of Forests assists the Minister.

The Directorate of Forests is appointed with the administrative functions for forestry. The operational and management responsibilities of state forests have been devolved to PE "Srbijasume" and since the beginning of 2003 to PE "Vojvodinasume"³⁰. It became common knowledge in the Serbian forestry sector, that, most of the institutional shortcomings in the forest sector derive from the lack of a declared forest policy and an outdated legislative framework. This is strengthened because forestry institutions are not structured, staffed and equipped to deal with the challenges that are emerging in the sector. The country is also under pressure to make sustained efforts to achieve its policy goal of the accession to the European Union.³¹

The Government of the Republic of Serbia approached the Food and Agriculture Organization of United Nations and asked for support in the development of a modern forest policy and related legislation frame to achieve sustainable development of the forestry sector. In April 2003, the technical cooperation program - FAO project FAO/TCP/YUG/2902(A): „*Institutional Development and Capacity building for the National Forest Program*“, started. It lasted 18 months with the basic goals of development of a national forest policy and forestry legislation. It was also aimed at establishing a modern forestry administration equipped with the necessary institutional tools and capable staff to promote and ensure sustainable and participatory management of the country's forest resources in a market oriented economy. Further, it tried to provide elements of a nationally controlled national forest program consonant with the national development and environmental action plans.

The specific objectives of the Project were:

1. to draft a forest policy and strategy for the forestry sector;
2. to revise the existing forest law or draft new legislation harmonized with other national legislation and recent international commitments made by the Serbian Government;
3. to design a self-reliant forestry institutional framework capable of providing leadership for sustainable development of the sector, including private forestry development;
4. to strengthen national capacities for policy and program development.

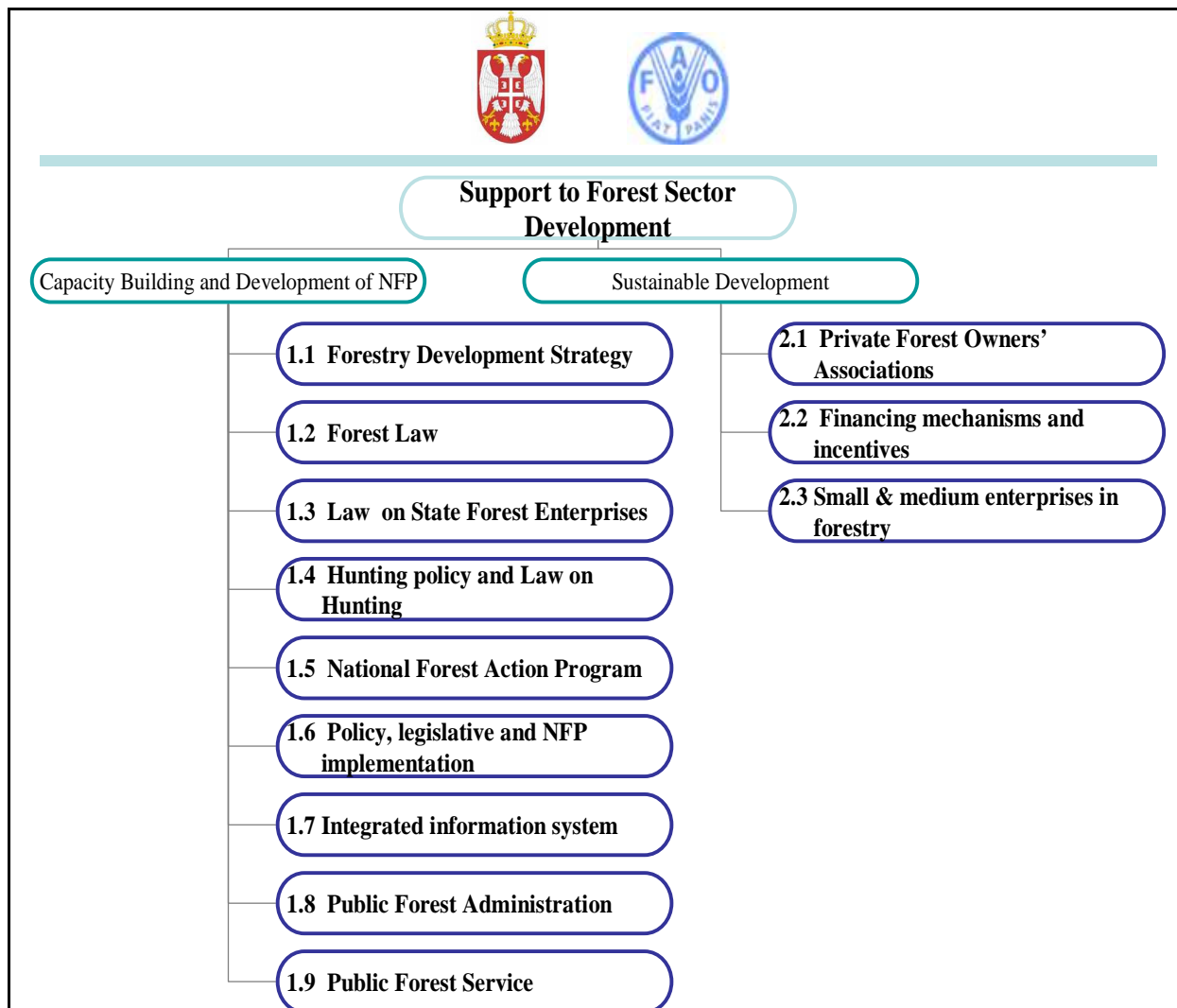
Analyses of the forestry legislation were made, resulting in first proposals of legal steps to address problems. Also capacity building on the use of participatory approaches in forest policy making took place.

In July 2005, a second FAO project started as a follow up activity entitled: "*Forest Sector Development in Serbia*" (GCP/FRY/003/FIN). This project continued the efforts of the Directorate of Forests to support sustainable development of the forestry sector. Finances came from the Government of the Republic of Finland. The basic goals of this project are presented in chart C-4.1.

³⁰ According to the *Law on Establishing Jurisdiction of Autonomous Province* from 2006, Official Gazette of the Republic of Serbia No. 6/02.

³¹ www.forestserbia-fao.sr.gov.yu

C- 4.1. OBJECTIVES OF FAO PROJECT: “FOREST SECTOR DEVELOPMENT IN SERBIA”



SOURCE: Project “Forest Sector development in Serbia” (GCP/FRY/003/FIN)

4.2. OVERVIEW OF FORESTRY DEVELOPMENT STRATEGY

In July 2006 the *Forest Development Strategy of the Republic of Serbia*³² was prepared and adopted. As the Strategy says: „...to date the Republic of Serbia has not had a comprehensively founded and defined development strategy by such document. The strategy has been defined by legal regulations and individual strategic documents, as a base of the forests sector development“ (2006/b: 8).

This document represents a basic strategic and development document of the Serbian forest sector, and by it, the State has determined the principles, development goals and the measures of implementation. It set the framework and demands for intuitional reform and redefining of relations, roles, and responsibilities within the complete Serbian forestry sector. The basic goals of the Strategy are:”... conservation and enhancement of forests’ condition and the development of forestry as an economic branch” (2006/b:12), and „...to increase contribution of the forest sector to the economic and social development of the Republic of Serbia“ (2006/b:14).

The Strategy addresses the following **principles** (2006/b):

- sustainability;

³² Official Gazette of the Republic of Serbia №. 59/06, Belgrade.

- forest multi-functionality;
- role of forestry in rural development;
- relations between forestry and the public;
- stakeholder participation;
- increase of forest area and productivity;
- forest management principles;
- tasks deriving from international commitments and agreements;
- forest degradation and environmental impact assessment;
- conservation of forest health;
- research, education and training;

The Strategy defines the **role of the State** in the forestry sector development, the role of the forestry sector in economic and social development, conservation and enhancement of environment and nature. In addition, the Strategy defines the links between the State and private forests. Also aspects of game management were addressed. This document defines **development goals** of the public relation work, of the international and regional cooperation, research, education and links to wood industry and timber market. The Strategy, also, defines key elements of implementation, as follows (2006/b):

- sector planning;
- investments;
- co-ordination between sectors;
- institutional reform;
- forestry legislation;
- international and regional cooperation;
- follow up and evaluation.

According to the Strategy, the **National Forest Program (NFP)** is the action plan for implementation: *"...implementation of the Strategy requires significant **financial and human resources**, and The Government will create the conditions for the continuous and stable investments in the forest sector through the process of implementation of the National Forest Program"* (2006/b: 26).

One of the key elements for support of the Strategy implementation is the **institutional reform** of the forestry sector. This reform will be based on (2006/b):

- redefinition of roles and responsibilities, on central, regional and local levels, and redefinition of relations between institutions in forest sector;
- increased role of the private sector in providing goods and services;
- development and strengthening capacities of NGOs on local level;
- definition of the role of forestry in rural development;
- transparency in the process of sector development.

The Strategy also links up to the legal tasks to be completed: *"...the new Forest Law will provide legal framework for the implementation of the Strategy and the National Forest Program. This will supersede the effective Law from 1991. The Government will also undertake activities on harmonization of laws³³ and regulations, which address the forest sector directly or indirectly"* (2006/b: 29).

³³ *Law on Environment Protection*, Official Gazette of the Republic of Serbia No. 66/04; *Law on Hunting*, Official Gazette of the Republic of Serbia No. 39/93; 44/93; 60/93; *Law on Waters*, Official Gazette of the Republic of Serbia No. 46/91, 53/93, 67/93, 48/94, 54/96; *Law on Agricultural Land*, Official Gazette of the Republic of Serbia No 49/92; 53/93; *Law on Inheritance*, Official Gazette of the Republic of Serbia No. 46/95; *Law on Public Enterprises and Activities of Common Interest*, Official Gazette of the Republic of Serbia No. 25/00, 25/02, 107/05 i 108/05; *Law on Local Self-Government*, Official Gazette of the Republic of Serbia No 9/02.

Accordingly, key issues of the new legislative framework shall be (2006/b):

- sustainable forest management;
- mechanisms for participation of stakeholders in forestry development;
- setting frames for coordination and sector planning;
- definition of roles and responsibilities of the forestry sector institutions and stakeholders including the State and enterprises for state forest management;
- definition of a functional financing system in forestry;
- definition of the model of a public forest service for private forestry;
- harmonization with international commitments already made.

Assessments of the effects of the proposed institutional reforms will also be performed as a part of NFP by applying the following success indicators (2006/b):

- maintenance of environmental services and biodiversity conservation;
- sustainable use of resources;
- economic growth including related other businesses;
- notable implementation of international commitments already made;
- organized private forestry, with established associations of private forest owners capable of active participation in decision-making;
- modernization of the state forest sector.

4.3. OVERVIEW OF LEGISLATIVE AND ORGANIZATIONAL SOLUTIONS

As a result of the first FAO TCP project a *draft Forest Law*³⁴ was prepared. Propositions of this draft offer solutions to numerous **problems** of the forestry sector, with special attention to the following:

- overlapping rights and responsibilities of organizations;
- inefficiency in implementing sustainable forest management;
- conflicts of interest in performing certain tasks of public interest;
- unsatisfactory treatment of private forests, etc.

Solutions proposed include the following **measures** (2007/a):

- redefinition of roles and responsibilities and internal relations of sector organizations with clear functional separation (executive, control, supportive and function of ownership);
- establishment of new institutions –e.g. the **Agency for Forests**³⁵ (Art. 69; Art. 70);
- definition of rights and responsibilities of state forest management organizations (Art.71- 79);
- incentives to organizing private forest owners and joint forest management, etc. (Art.69; Art. 70; Art. 80).

According to the Draft, **the Agency for Forests** will have the following tasks (2007/a, Art. 69):

- coordination tasks for all forests³⁶
- executive tasks³⁷;

³⁴ *Draft of Forest Law* of the Republic of Serbia, version 5.0. (www.forestryprojectserbia.org), 2007.

³⁵ Agency for Forests relates to all state and private forests. It should be an independent public forest institution under the authority of the related Ministry.

³⁶ Strategic and regional development planning in forestry and hunting, analysis of efficiency of legislative measures, coordination and responsibility for planning, preparation and evaluation of annual plans for the use of financial means, monitoring of forest health, works on forest protection.

- advisory affairs and affairs of education and training³⁸;
- affairs of incentives³⁹;
- development tasks⁴⁰;
- tasks for forest promotion⁴¹, and other matters of public interest.

The proposition of the Forest Law also regulates financing in forestry (2007/a, Art. 82-92), along with conducting forestry work⁴² (2007/a, Art. 94-99).

Parts of the draft of the Forest Law related to private forests will be more closely elaborated in the next chapters.

4.4. OVERVIEW OF NATIONAL FOREST ACTION PROGRAM

The Draft of the Forest Law defines a role of the **National Forest Action Program (NFAP)**, of the Republic of Serbia according to the Forestry Development Strategy (2006/b) being the action plan for implementation. The NFAP was passed in the Parliament of the Republic of Serbia and it is valid for a period of ten years.

The process of the NFAP development started with general **capacity building** for determining the elements of the document. A separate study on “Financing and Forest Valuation” was prepared (2007/b). The Development of the national forest valuation methodology, the forest financing mechanisms and incentives was done by international and national consultants. In the framework of the consultant’s mission, the situation and needs were first assessed and discussed with stakeholders. The study consists of two parts, one on valuation and one on financing.

The forest valuation sub-study provided a new valuation methodology for forest products and services, based on their total economic value (TEV) in a certain year. Results of the valuation showed that the TEV of the non-wood forest products and services was 5 – 8-times higher than the value of the wood products. For ecological and social forest functions, this result serves as a basic justification for the claim of increased public financial support. This money is needed for the maintenance and enhancement of the public forests.

The forest financing sub-study has provided, scenarios for forest and forest financing support needs. The scenarios have been developed for the implementation of the new Forestry Strategy (FS) and the Draft Forest Law and serve as a framework for developing the NFAP. Both, the potential self-financing and the public financing sources have been taken into account for covering the needs. The public financing increase is certainly one of the basic preconditions for that and for sustainable forest development including conservation.

³⁷ This consists of coordination on conducting indirect measures of support, work on forest protection and procurement of reproductive material.

³⁸ This consists of analysis of needs and development of educational programs for professional affairs of Public Forest Service, coordination of education for executive tasks performed by specialized institutions.

³⁹ This consists of organization and responsibility for realization of direct measures of support provided to private forest owners, their associations, small and medium enterprises and coordination of indirect measures of support (advising, tree marking, professional and technical tasks, education and training).

⁴⁰ This consists of development of analysis ad standards, cooperation on basic and applicative research, transfer of knowledge, development work according to needs of the Public Forest Service.

⁴¹ This consists of promotion for the use of means for forest protection and improvement, support for public participation in processes of sustainable forest management, preparation of professional literature, information and documentation needed for sector needs, promotion of stakeholder participation in planning and the decision-making process.

⁴² A precondition for performing professional tasks in forestry is the **license**, issued by the **Chamber** of Forest Engineers of the Republic of Serbia, a new institution proposed by this Law.

The results of these studies serve as background for the promotion of the public importance of forests in Serbia and, justify proposals made for public finances. The proposed forest valuation methodology should be implemented and further developed. A regular system of national forest accounting or valuating shall be established and supported by data within the regular forest inventories. The methodology and results of forest financing scenarios will be used for the NFAP and other strategic planning.

NFAP proposals related to improvement of the public forestry administration and public forestry service were developed by international and national consultants for forestry inspection; public forestry extension and organization; services for private forest owners and public forestry organizations. In addition training was organized for core groups of inspectors and forestry extension specialists and there were organized study tours to selected countries. Questionnaires were used to identify training needs for private forest owners' extension services and situation analyses were performed. Education plans for the Inspection Service and for the Service for Private Forests (within PE "Srbijašume") were also developed.

The education of trainers was organized for candidates for the forestry inspection and extension core group. This aimed at contemporary forestry participation, extension and group promotion methods, as well as some concrete forestry operation training examples (e.g. presenting how certain forest operations could be performed in proper way). As a result of the capacity building process, 13 candidates were qualified as trainers. Capacity building of inspectors and forestry extension specialists was done with regional capacity building workshops. This focused on practical application of forest law with special emphasis on changing to a more advisory and a less restrictive role for the forestry inspector. The following issues were tackled: communication with private forest owners; forest owners' rights and obligations including churches (e.g. monasteries), and implementation of forest management plans for private forests.

There were two trainings of foresters organized from the Inspection Service and the Services for Private Forests (within PE Srbijašume and PE National Park Tara) aimed at forestry communication, participation and extension approaches. 51 inspectors and forestry engineers passed through that training.

Related to organizational issues the following activities were done:

- systematization of posts within the Directorate of Forests, including forestry and hunting inspections including descriptions of the posts, and guidelines for performance assessments .
- Proposal for a new coordination unit for private forestry support,
- Proposal of a new organization concept of the Service for Private Forests within "Srbijašume", adapting the hierarchical organization and improving the functioning of the Service. This also includes guidelines for performing individual services for private forests. To increase operational efficiency of the services for private forests, purchasing of their necessary equipment has already started.
- The final study was worked out for the organization of public forestry administration & service and the support for the private forest sector.

Further capacity building will be taken over by the national core group (coordinators of inspection and extension services) of trainers who will transmit their knowledge of methods and approaches to other forestry inspectors and extension specialists. Then the Inspection Service and the Services for private forests should start to change in functional terms, e.g. by becoming more preventive than repressive, or more offering more extension services than administration to forest owners. In the Forestry and Hunting Inspection the reduction and re-description of inspector's posts was proposed. The surplus staff will be used for establishing of the coordination unit or for an independent coordination service within the new Agency for Forests.

The strategic-planning framework for implementation of the organizational and functional reforms was prepared in the draft NFAP for which the Organizational Study served as a background paper. Further organizational reforms, such as the establishment of the Agency for Forests and empowerment of additional private forestry organizations, depend on the adoption of the Draft Forest Law (Nonic

2007). Other reforms such as service for Private Forests within PEs, seems to be dependant on the PEs' internal restructuring which has not yet started. The organizational and functional reforms highly depend on forest legislation and related public finances and could only be feasible if corresponding political support is assured.

Further topics elaborated within the NFAP are the followings⁴³:

1. Ecological and social functions of forests, including:

- Utilization and conservation of forestland and surroundings;
- Conservation of biodiversity and monitoring;
- Protection and monitoring of forest vitality;
- Protection of forest soil from erosion and improvement of watershed protection;
- Reduction of climate change (based on Kyoto guidelines);
- Protection and sustainable management of nature protection areas;
- Improvement of recreation, tourism, health, aesthetic values, etc..

2. Productive forest functions and utilization of forest products, including:

- Utilization of forest products (by ownership categories);
- Aforestation and silviculture (by ownership categories);
- Biological reproduction of existing high and coppice forests (by ownership categories);
- Improvement of damaged forest stands (by ownership categories);
- Procurement of reproductive material and conservation of genetic resources;
- Construction and maintenance of forest roads (by ownership categories);
- Support for marketing development and sustainable utilization of forest products and forest certification;
- Support for development of forest industry.

3. Organization of Public Forest Administration, Service and support, including:

- Development of Public Forest Administration and Service (central and operational level for state and private forests);
- Support for private forest owners and their associations;
- Support for small and medium enterprises in forestry.

4. Forest management planning, monitoring, valuation and promotion, including:

- Forest management planning (national, regional, operational level), inventory and cadastre;
- Valuation of forest functions;
- Monitoring of NFAP implementation;
- Public relations.

5. Education in forestry and development work, including:

- Plan of education in forestry;
- Plan of research in forestry and development work.

Parts of the National Forest Action Program related to the private forest sector will be explained in detail in the next chapters of this study.

⁴³ www.forestryprojectseriba.org

5. RECENT POLICY DEVELOPMENT IN PRIVATE FORESTRY

After the political changes in Serbia in 2000, significant reforms were made in establishing strategic and legislative frameworks for the development of forestry and in the formulation of a National Forest Program. While redefining roles and responsibilities within forestry, the importance of the **private forestry sector** is emphasized with special attention to development of an adequate advisory service for private forest owners.

Until 2006 in Serbia, there was no overall forestry development strategy, since strategic goals were implemented in legislation and certain documents⁴⁴. This changed with the development of the *Forest Development Strategy of the Republic of Serbia*⁴⁵.

5.1 STRATEGY

Related to status and concern for **private forests**, as declared in the Strategy: “...*the responsibility of the State in resolving almost all major issues about the growing stock, from the assessment of the state of the forest to the organizations of forest owners, requires the State initiative undertaken especially when the owners’ initiative is lacking, and a decisive executive role, to create a uniform attitude to forests regardless of their ownership form. The objective is the enhancement of private forests and the sustainable development of private forestry within rural development*“ (2006/b:19).

To attain this objective, the following measures are planned (2006/b):

- assessment of the state of private forests and development of a planning and control system for private forest management;
- professional and financial support for organizations of forest owners to strengthen their capacities for achieving sustainable forest management;
- creation of legal preconditions for a smooth implementation of sustainable management in cases of absentee forest management and owners,
- by creating the normative preconditions, the consolidation of private forest holdings will be enabled. It will be stimulated by measures of economic policy⁴⁶ and further fragmentation of forest holdings will be prevented;
- the Government will optimally use available measures of economic policy and ensure the permanent and long-term financial means for stimulation of private forest management, to ensure protection and improvement of the condition of private forests.

The Strategy emphasizes the need for the development of **small and medium-sized enterprises in forestry (SME)**. The traditional significance of forests for residents of rural regions, primarily for satisfaction of their basic needs for firewood and timber, determined the forms of business in forestry and related branches.

The basic goal of establishment and development of small and medium-sized enterprises in forestry is to increase the contribution of forestry to economic and social development of the Republic of Serbia

⁴⁴ These are five year valid programs of forestry development (1996/a; 1996/b; 2000).

⁴⁵ During the two years of project activities (www.forestserbia-fao.sr.gov.yu) the accent was on defining the strategy, the draft of the new law on forests and optimizing the organizational structure of forestry institutions. Capacity development for the Directorate of Forests and more than 30 workshops took place. More than 400 representatives of different institutions were interviewed and a survey with 300 questionnaires was carried out on the problems and reforms needed within forestry.

⁴⁶ To achieve these goals **measures of economic policy** in terms of financing are planned for: afforestation; silviculture measures in afforested areas until the time of first selective cuttings; regeneration of high forests; silviculture measures in high forests; sanitation of endangered forests; indirect conversion of coppice forests; direct conversion of coppice forests and reconstruction of degraded forests; construction and maintenance of forests roads. More detailed activities with costs are given in the *Study on Forest Valuation and Financing the Forest Valuation Sub-study* (2007/b).

(2006/b). According to the Strategy, SMEs in forestry should provide enhancement of living standards of Serbian citizens, especially in rural areas, increasing employment and regional development.

There are several other policies that influence private forestry such as *Agriculture Development Strategy*⁴⁷, *the Strategy for Sustainable Development and Rural Development* that comprises elements of forest policy as part of rural development.

There is the *Strategy on Development of SMEs and entrepreneurship* for the period of 2003-2008⁴⁸ for forestry and forest based industry SMEs

The main strategy is support for SMEs and entrepreneurship in priority sectors, institutional support for their interests, solving legislation impediments, financial support, education and training, export promotion, analysis, technical support and national promotion, implementation and evaluation of strategy. The forestry development strategy and other strategies should provide significant development of private forests in Serbia.

5.2. OVERVIEW OF EXISTING LEGISLATIVE AND ORGANIZATIONAL ASPECTS

Legislative aspects related to the private forest sector are defined by the *Constitution of the Republic of Serbia* from 2006, existing *Law on Forests* from 1991, and by the *draft of the Forest Law*⁴⁹.

By the section 86th of the *Constitution of the Republic of Serbia*⁵⁰, private and state ownership rights are equal and have equal legislative protection, however section 87 declares that all natural resources are goods of public interest and therefore are owned by the state. This section does not adequately define the status of private forests, since they are not considered as good of public interests. This represents a problem in passing of the new forest law.

In section 88 a difference between forest and forestland is defined, and forestland is not consider as a good of public interest, therefore private forestland can be used freely, and the law can limit the usage which can endanger environment or interests of other owners (2006/a).

5.2.1. Private forest owners

The existing *Forest Law of the Republic of Serbia* (1991), prescribes that „...forests as public welfare must be maintained, regenerated and utilized in such a way that their values and multiple benefits are conserved and increased, sustainability and protection is ensured, and increment and yield are permanently increased“ (1991, Art. 2). With this aim, forest regions were formed by the same Law „...to carry out rationally the measures of management in forests, woodland and other forest potentials in a defined territory“ (1991, Art. 5). They include both state-owned and private forests (1991, Art. 21). In this way, all forest management operations and tasks must be equally implemented in all forests, disregarding the category of ownership.

The current Forest Law was based on old concepts and designed for the political, social and economic conditions of the past decades of socialism. It contains no references to, nor does it address any resolutions adopted at international meetings held since UNCED in Rio (1992) on the protection and sustainable management of the environment, natural resources and forests. Nor are the implications of

⁴⁷ *Strategy of Agriculture Development of the Republic of Serbia*. Official Gazette of the Republic of Serbia 78/05, Belgrade.

⁴⁸ *Strategy of Development of Small and Medium Enterprises and Entrepreneurship in the Republic of Serbia*. Official Gazette of the Republic of Serbia, 45/03, Belgrade. It should use the potential of SMEs and entrepreneurship to contribute to the general Serbian development and also increasing numbers of new jobs, enhance income growth and to speed up regional development.

⁴⁹ Draft of Forest Law of the Republic of Serbia version 5.0. 2008. (www.forestryprojectserbia.org)

⁵⁰ *Constitution of the Republic of Serbia*, Declared on November 8,2006, Official Gazette of the Republic of Serbia 83/06.

the 64 international agreements and conventions ratified by the former Yugoslavia's (Socialist Federative Republic of Yugoslavia and Federal Republic of Yugoslavia) and the present Government reflected in the Law (Nonic *et al*, 2007).

According to the existing Law, obligations of private forest owners are (1991, *Art. 38; Art. 39; Art.47; Art.54*):

- to have a forest management plan;
- tree marking before felling performed by private forest service;
- obligatory compensation for logging which the owner pays to a private forest service of PE⁵¹;
- obligatory timber and fuel wood stamping and license for transport;

The Law does not even mention **indirect**⁵² and **direct**⁵³ measures of financial support for private forest owners. Moreover, **support** for private forest owners in Serbia is in initial phase and it is implemented through the FAO project, and its activities on capacity building of public forest administration and support for forest owners' associations. Activities are performed through workshops and education of forest owners.

The existing Law established PE "Srbijasume" (1991, *Art. 9*). Tasks of PE beside silviculture, forest protection, production of timber of state forests etc. consists of professional and technical tasks in private forests (1991, *Art. 10*). The State has entrusted PE "Srbijasume" and national parks with professional and technical tasks in all private forests which are in their jurisdiction. The existing model of technical support for private forest owners through a Private Forest Service within public forest enterprises proved to be inefficient as well as the previous one when support was provided through municipality services⁵⁴. The Public Enterprises concerned do not have enough developed technical and organizational capacities. They lack the interest for successful performance of these duties in private forests, which is a significant obstacle for improvement of private forest management (Begus, 2006).

According to Begus (2006), the biggest lack of the current system of organizing professional and technical tasks in private forests is a clear **conflict of interest**. Since the major task of PE is state forest management, private forest issues cannot be in the first line of their attention. Performing services for private forest owners can cause conflicts of interest, since foresters cannot be independent in technical activities and advising (Begus, 2006)

Another problem is **financing** of service for private forests. That has not been adequately solved, and the situation is very complex. Every year the Directorate for Forests makes a contract with Public Enterprises, where professional and technical tasks for private forests - are defined. While there is Directorate of forests that pays certain amount of financial support to PE "Srbijasume", for technical activities in private forests, PE "Srbijasume" uses the money only for activities without any further control of activities at the end. This means about 1,2 million € every year for: making temporary yearly management plans, tree marking, stamping of wood assortments and issuing of transport documentation, controlling of work. done, activities about tending and protecting of private forests, preparing plans for forestation, evidence of work. done, gathering of taxation data on parcels, .

⁵¹ Every forest owner who performs logging in his forest is obligated to pay service fees of 3% of the commercial value of the traded logs. The fee is to be paid to the PE Srbijasume and will be accounted to the State Budget. From this source silviculture and forest protection measures will be financed. However, only measures in state forests were financed out of this source so far.

⁵² **Indirect measures of support** consist of constant and organized advisory activities, extension and training. There is also organisational support for associate private forest owners. The goal of those measures is to provide knowledge for performing work in their forests. Awareness rising on sustainable forest management is part of these activities. The owners' needs and expectations will also be addressed (Nonic, 2004).

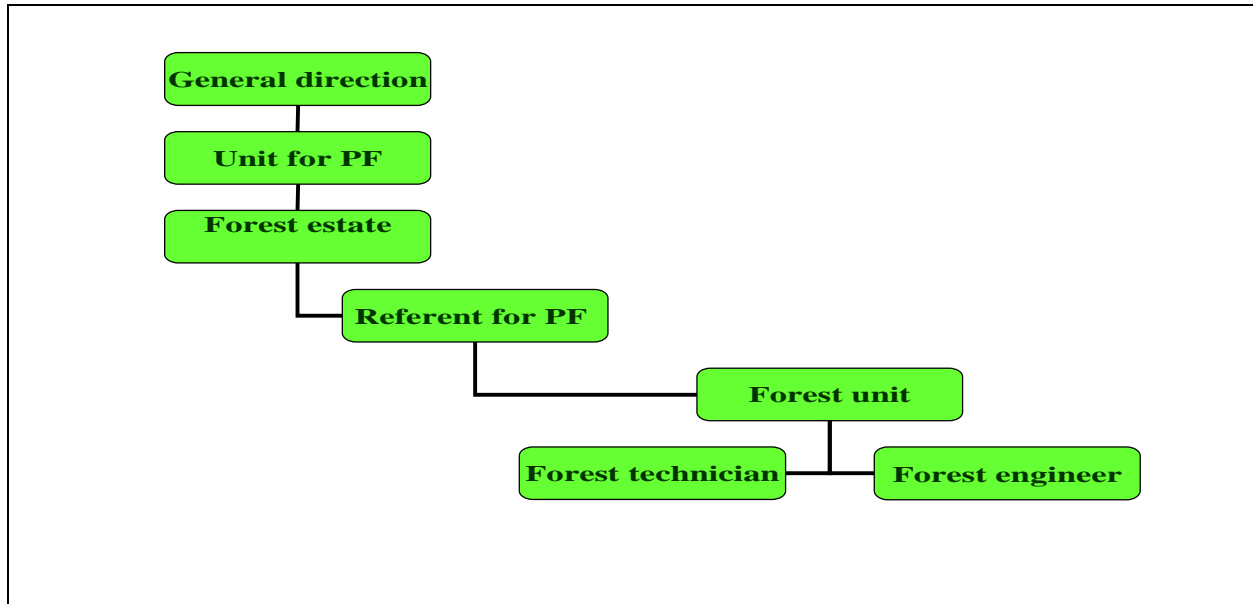
⁵³ **Direct measures of support** are related to those affairs in private forests, which cannot be financed by private forest owners (Nonic, 2004).

⁵⁴ Before 1992, municipality services did all activities for private forests. In that period the Public Enterprise took over 500 foresters from municipalities who have been from that time paid by the state's budget.

education of forest owners. Mainly activities in administrative procedure have been provided (Nonic *et al* 2007).

Another serious problem is also the **inadequate organizational structure** (Chart - C.5.1), of service for private forests within the Public Enterprise “Srbijasume”⁵⁵, which does not function as an independent department and, until recently, without personal to coordinate the work. This results in no vertical coordination and communication with regional and local levels of government.

CHART C-5.1. ORGANIZATION OF PRIVATE FOREST SERVICE WITHIN PE “SRBIJASUME”



SOURCE: Statute of PE “Srbijasume”(1992).

Private forest service is organized in four levels:

- I. **level:** General direction of PE forestry and nature protection. There is a Unit for private forests, headed by a Unit manager. Unit managers gather and process data from Forest estates and present it to the general and executive managers, and coordinate the work of skilled workers for private forests, which are in Forest Estates;
- II. **level:** In Forest estates, there is a service for Forest management planning and development in which the private forest service is situated. Tasks in private forests are coordinated by the skilled workers for private forests. The skilled worker works on annual private forest management plans and coordinates their implementation in forest estates and forest units.
- III. **level:** Forest Unit tasks in private forests are conducted by skilled workers within forest units. The Forest unit referent coordinates activities of foresters and organizes tree marking, forestation in private forests, forest protection, etc.
- IV. **level:** Forest engineers and forest technicians for private forests perform tree marking, timber and fuel wood stumping, control of logging and other activities within their jurisdiction. Forest engineers perform tree marking in high forests and forest technicians perform tree marking in coppice forests.

The current **number of employees** in service for private forests in PE “Srbijasume” is 320 and they are mainly forestry technicians. Their activities are mostly concentrated in tree marking, marking of industrial and fuel wood, and issuing of documentation for timber transport. Because of those duties,

⁵⁵ When established in 1992 PE, “Srbijasume”, consisted of 7 sectors directorates and 27 forestry units. Today it has of 8 sector directorates and 17 forestry units covering the entire territory of Serbia (There are 66 management units).

they do not have enough time for other activities, and especially not for advisory activities. They also do not have adequate knowledge and skills (Begus, 2006).

Staff in the field is not motivated and material and financial working conditions are poor. Even if they would like to be educated and informed, they do not have any possibilities (Begus 2006).

Since a program for private forest management, which is obligatory under the Law on Forests (1991, Art. 24) is missing, PE performs professional and technical tasks in private forests according to annual management plans for private forests⁵⁶. Those plans are created by PE and approved by the Directorate of Forests. Annual plans cover the territory of forest estates, by municipalities.

However, **Forest management plans** are missing, so foresters do not have enough information about private forest property / forests, and consequently do not have a clear picture of the situation, which causes inadequate an approach to management of private forests. Communication between forest owners and foresters runs mainly from foresters to owners and is mainly about legal procedures. Extension service is limited because procedures are too complicated. Some extension work is done, mainly by tree marking, but it is not coordinated and organized.

The current organization of extension and technical services for private forests and the lack of an organized advisory service do not satisfy either owner's needs nor the State demands for sustainable stewardship and improvement of private forests. Reorganization of professional and technical service and the foundation of an advisory support service is a priority for further improvement of private forests as well as profits for the owners (Nonic *et al*, 2007).

5.2.2. Small and medium-sized enterprises in forestry

Until the year 2000, the **sector of small and medium-sized enterprises** has been developing very slowly in Serbia. The Law on Forests from 1991 prescribed the formation of an enterprise which will perform forest utilization by a contract with the Public Enterprise "Srbijasume". However, this was never realized and PE "Srbijasume" performed forest utilization by 2001.

The existing Law on Forests does not even mention the term "small and medium-sized enterprises" in forestry, and therefore no regulations related to SMEs are prescribed. Existing Law only defined a role of PE "Srbijasume", and proclaimed this PE as the only user and manager in state forests.

Until 2000, PE "Srbijasume", along with 27 forest estates that have performed forest management and utilization in state forests, owned four wood processing enterprises, and one enterprise which has produced food, mineral water and other agricultural products. Based on the program of economic, organizational and technological changes, a process of restructuring PE "Srbijasume" has started, with the following activities:

- privatization of branch enterprises;
- separation of non-core activities;
- renting forest mechanization with the right of buying to make employees into business partners;
- optimizing and reducing the number of employees through social program;
- reorganizing the parts of PE that have created losses.

Reorganization of PE "Srbijasume" intended to reduce the number of employees through a program allowing employees to become contractors and eventually business partners of PE while utilizing the forests.

⁵⁶ The forest management plan prescribes silviculture, protection and utilization of private forests by, municipalities. The Plan is valid for the year in which it is approved. First, the board of directors of PE approves those plans and then they must be approved by the Directorate of Forests ..

In 2006, 342 SMEs signed a contract with PE “Srbijasume” for forest utilization, and their structure is very heterogeneous⁵⁷.

Basic **characteristics** of SMEs in forestry are:

- large number of competing enterprises;
- almost all of their business is contracted with PE “Srbijasume”;
- they rely on moderate financial and technical means;
- enterprises are rapidly adapting to market changes;
- SMEs perform some activities for which they are not registered⁵⁸;
- family members usually manage and work in these enterprises;
- they do not usually have employees educated in forestry⁵⁹.

Regarding **other activities** in forestry, there are SMEs registered for:

- gathering and processing of non-wood forest products (charcoal, medicinal herbs, turpentine oil, mushrooms, wild berries, fruits, honey, etc.);
- services in tourism and recreation;
- hunting and fishing.

The most pressing **problems** of the SMEs are institutional and financial:

- a need for a clear definition of roles and models for establishing partnerships between the public and private sector in financing SME needs;
- a lack of the necessary financial means for direct and indirect support of the SMEs; a lack of institutions and human resources for coordinating supporting activities toward SMEs;
- a lack of adequate communication and information exchange between the Government and SMEs; need for raising awareness about innovations for enterprise competitiveness, and a need for promoting entrepreneurial activities in rural areas.

Institutions established in a model derived from the socialist period, were directed to perform services for large state enterprises, and as such, they are not capable to adjust to changed conditions of the market economy and orientation toward needs of small-scale forestry and SME, in a short period of time.

A typical example is the **Chamber of Commerce** and branch associations within it. All state enterprises and cooperatives along with state wood processing enterprises participated in this organization in the past. Today almost all production units are privatized (especially in the wood industry), and it is illogical that such a huge and rich institution maintains so much infrastructure just to provide services for a few state enterprises.

5.3. OVERVIEW OF PROPOSED LEGISLATION AND ORGANISATION

For a new law on forests is necessary to implement a Forestry Development Strategy. *The draft has been worked on since 2004.*

5.3.1. Private forest owners

In the draft forest law, some existing regulations on private forestry are maintained such as tree marking, compensation for cuttings, timber and fuel wood marking and licenses for their transport (2007/a, Art. 43; 45; 84). However, forest owners, and forest owners associations or their companies

⁵⁷ Internal data of PE “Srbijasume”.

⁵⁸ eg. have unregistered sawmills and charcoal facilities.

⁵⁹ Most employees in SMEs in forestry are not educated on forestry, meaning not qualified for the work which they perform (e.g. don't have license for forest mechanizational works).

can perform tasks of **public interest**. In that sense the new law, will give the owners the option to decide between service providers and specifies measures to support private forests owners (2007/a, Art. 79; 80).

A further new proposition is the establishment of the **Agency for Forests**, which will act as a public forest service (2007/a, Art. 69).

The proposed activities of the agency for forest related to private forests are (2007/a, Art. 70):

- professional and coordinating tasks⁶⁰;
- an advisory service for private forest owners;
- conducting measures of direct support for private forest owners through procurement of subsidies, coordination of work on forest infrastructure, and indirect support for private forests owners.

The new law prescribes that owners do the harvesting and protection of their forests and that advisory and technical tasks must be done by registered companies (2007/a, Art. 79).

It is planned to categorize forest owners based on the area of their forest property. Properties larger than 100 *ha* will be required to have a forest management plan. In addition, they are obliged to organize PFS or to have a contract with company registered for technical and advisory service in private forests (2007/a, Art.21). Owners of smaller properties must have a forest management program, and on their properties, technical services are to be performed by a registered company, which the state has appointed. Technical activities on small properties will also be financed by the State budget (2007/a, Art. 25).

The new law will also support organisations of private forest owners which can perform (2007/a, Art. 80).

- information activities in cooperation with the Agency for Forests, about programs, procedures, and possibilities for support to the private forest sector and rural development;
- direct coordination of support for private forest owners;
- technical and advisory activities in private forests;
- to represent the interests of private forest owners;

Associations of private forest owners, as well as the other forms of cooperation, and the implementation of forest policy measures, are important for achieving the goals of the Forestry Development Strategy of the Republic of Serbia.

However, realization of these measures, and the availability of finances, demands urgent legislative changes and building of institutional capacities.

5.3.2. Small and medium enterprises in forestry

The draft law recognizes existing entrepreneurial activities. **SMEs** can perform forest harvesting, silviculture, forest road construction, but they must be registered for these activities and must meet all conditions prescribed by the regulations (2007/a, Art. 44; Art. 99). It allows the establishment of consulting agencies in forestry, which can perform forest management planning, forest protection, silviculture, advisory and technical support to private forest owners and SMEs in forestry (2007/a, Art. 79). . Their employers must have a renewable license issued by the Chamber of Forest Engineers and Technicians (2007/a, Art. 94). These are regulations to further the development of SMEs in forestry. Basic regulations related to registration for businesses in forestry and licenses required for forest

⁶⁰ According to the Draft Forest Law, professional affairs consists of: 1) preparation of strategic and regional forest development and hunting planning; 2) analysis of efficiency of legislative articles, 3) preparation of legislative solutions; 4) preparation of other professional matters related to forestry sector; 5) formation and maintenance of informational system in forestry; 6) coordination and custody over forest management planning; 7) preparation and approval of annual financial programs; 8) coordination of the forest inventory and forest health monitoring and 9) control over performed activities on forest protection (2008, Art.70).

employees working in SMEs and consulting agencies should ensure the quality demanded by sustainable forest management. An **MA&D** (*Marketing Analysis & Development*) plan has been chosen as a possible approach in the work of the advisory forest service.

The basic purpose of the MA&D is to identify possibilities of establishment and work of SMEs in forestry. The basic goal of advisory support is to increase the contribution of forestry in social development of the Republic of Serbia (Nicholson *et al*, 2006).

Goals should be achieved by the following measures:

- expanding of capacities of the public forest service for advisory affairs on the national, regional and local level (Directorate of Forests/ Agency);
- support to establishment and development of SMEs in forestry.

The first measures should be implemented through education and capacity building for planning, implementation and coordination of establishment and development of SMEs according to the MA&D plan on central, regional, and local levels. **The second measure** will be implemented to enable owners of SMEs to successfully development their business according to the MA&D plan.

Establishment of SMEs in forestry and financial support for private forest owners and their associations represents a priority for the development of services and production . in forestry and the development of private forest sector.

6. PRIVATE FORESTRY IN THE NFP/NFS PROCESS

The State has recognized the importance of the private forest sector and its role is emphasized in the *Forestry Development Strategy* (2006). Measures defined in the strategy provide for development of the private forestry sector and, improvement of forests' condition and economic situation of their owners. In addition, they give perspectives for development of rural areas.

NFAP private forest sector measures include the support for the establishment and development of forest owners' associations, based on experiences of the previous TCP. The first activities were providing assistance in registering of new pilot PFOAs and promoting the association of forest owners by a number of workshops. Possibilities for establishing of regional associations of forest owners were also presented, along with possibilities for obtaining financing from the budget, as direct support for private forestry. A few projects for obtaining funds for building of forest roads were also prepared. The next activity was a visit of the Serbian PFOA and SME representatives (private forest owners and small businessmen) to Slovenian colleagues and vice versa.

The promotion of associations of forest owners, through the FAO projects, successfully contributed to the establishment of a number of new private forest owners associations on a pilot scale.

However, in order to successfully promote the interest in associating, direct support to PFOA should be provided. This should include the establishing of the associations opportunities for joint forest management and joint marketing of forest products. In addition, public financing should be assured and made available to FOA.

These measures were based on hiring of international and national consultants for coordination of SME activities in forestry extension; economic issues of SMEs, market research of SMEs and rural development activities of SMEs, on establishment, training and work of a core group for market analysis and development (MA & D) of SMEs, on experiences obtained from study tours, and exchange of experiences with a selected foreign partners, as well as on other project support.

During the FAO project "*Forest Sector Development in Serbia*", the following activities were concluded:

- training of the core group of professionals for implementation of all phases of Market Analysis and Development (MA & D) for SMEs, and training of potential new businessmen in their aspects of the methodology, performed. A number of workshops were organized at

central and local levels. As a result of the capacity building process, a number of candidates (7) were finally qualified as MA & D trainers. They also received certificates of attendance.

- local level workshops, with selected FOAs and their potential SMEs, were organized in order to identify needs and possibilities for establishing and development of new forest-based SMEs.
- technical support for pilot SMEs, based on the MA & D Plan (phase I - III) provided to all pilot SMEs (9) and concluded by finalization of five business plans for the most promising businesses (sawmill, tourism, two nurseries and production of mushrooms). Assistance was also provided in preparation of their documentation for obtaining initial state budget financing.
- Serbian translation of the complete version of the MA & D plan and descriptions of selected Serbian examples were prepared for publication and use.
- organizational and financial support for the visit of the Serbian FOA and SME representatives to Slovenian partners, and vice versa.
- two new SMEs (nursery and tourism) obtained funds from the Ministry of Agriculture, Forestry and Water Management, to start and develop their new business activities.

The results of the capacity building activities based on the use of the MA & D plan, showed that the support was very successful on the pilot scale. The first two SMEs have also registered their activities and received funds from the state budget. However, such an extension support for a large number of individual SMEs could not be assured from the public forest service. The MA & D plan should be used as teaching material for extension officers or as a guide to potential entrepreneurs for their business development.

Although the forestry extension service did not have much capacity for SME extension and specialized institutions for SME support already exist in other sectors, the forestry service could only coordinate and support the use of planned public funds (for forest-related SMEs), and eventually, collaborate in the identification of promising products.

Propositions for the articles of the **National Forest Action Program**⁶¹ related to private forests, private forest owners, their associations and small and medium enterprises in forestry will be presented, along with policy and legislative requirements for their implementation.

Due to problems of private forest management and the fact that forest resources have helped preserve the social peace, reduction of migration from rural areas, improvement of unfavourable demographic structure and overall improvement of living conditions in rural areas, private forestry development was set as priority in the strategy (2006/b). *The Strategy* commits the government to procure long-term financial support and adjust tax policy in order to improve forest conditions and aid development of the forestry sector by the following measures (2006/b):

- increasing of forest area;
- increasing of forest productivity;
- establishment of an efficient system of forest protection;
- construction, maintenance and optimal density of forest roads;
- encouragement of establishing and development of private forest owners' associations;
- support for establishment and development of small and medium enterprises in forestry.

Two basic principles were set for private forests, increasing public interest in principles of sustainable forest management and achieving of the owners' personal interests.

The most serious problems of the private forestry sector are:

- insufficient financial means for achieving of goals defined by the Forestry Development Strategy;

⁶¹ According to the first presentation of selected institutions of NFAP, held at The Faculty of Forestry in Belgrade 23rd of April 2008, organised by the Directorate of Forests and FAO/GCP/FRY/003/FIN Project: "Forest Sector development in Serbia".

- management companies lack funds for realization of sustainable management principles;
- lack of support for private forest owners;
- annual financing policy is not based on strategic programs.

Solutions proposed by NFAP are:

- establishment of a Forest Fund;
- annual policy of financing forestry activities based on NFAP;
- existing financial means differently defined and used;
- procuring new sources of money;
- concrete support for development of private forestry;
- and connection with rural development funds.

The draft forest law, proposes the establishment of the Forest Fund (2007/a, Art. 82): „...with the purpose of realization of public interest and long-term objectives determined by National Forest Action Program”, and funds will be accumulated in a special account of the ministry responsible for forest resources. By the proposition of the Forest Law it is planned that funds for the Forest Fund will be procured from following sources (2007/a, Art. 83):

- fees for utilization of forests and forestland in State property;
- fees for conducting tasks of Public Forest Service in private forests;
- rental fees of state forest property;
- contributions for forestation and improvement of forest functions;
- incomes from selling state forests and forestland;
- budget of the Republic of Serbia;
- money procured by selling illegally obtained benefits from forests⁶²;
- fees for clear-cut in changing forest use;⁶³
- and other sources.

According to proposition of Forest Law (2007/a, Art. 90), funds of the Forest Fund, are to be used on the basis of the annual Government program, based on proposals from the Agency for Forests, for support in implementation of mid term and annual programs, and projects defined by NFAP.

And those programs refer to the following:

- forest reproduction⁶⁴;
- construction and maintenance of forest roads;
- development work and support to project implementation;
- promotion of sustainable management.

It is planned that forest owners will be able to receive money from the Forest Fund for improvement of forest conditions through direct support in co-financing work. The planned share of the state in co-financing of certain activities is:

- for forestation: 40-90 %;
- for regeneration of forests: 0-80 %;
- for silviculture: 25-90 %;

⁶² e.g. finances obtained by the Forest Administration from selling wood from illegal logging, when perpetrators receive court sentences and wood is confiscated.

⁶³ After clear cut and change of land use of forests there is compensation. This is to be paid directly into the Forest Fund.

⁶⁴ **Forest reproduction**, as proposed in the Draft Forest Law consists of: 1) establishment of new forests, silviculture, forest protection, sanitation of damaged and degraded forests, forest regeneration, conversion of coppice forests, conservation, protection and utilisation of genetic fund of rare, endangered and valuable tree species and production of forest reproductive material.

- for reconstruction of degraded forest stands: 40-90 %;
- for indirect conversion of coppice forests: 90 %;
- for direct conversion of coppice forests: 50 %;
- for sanitation measures: 50 %;
- for construction of forest roads: 0-40 %.

According to the NFAP about 40 % of funds aimed for forest reproduction⁶⁵, is intended for **private forest owners**.

Support for **private forest owners' associations** is planned, financed from the Forest Fund, through advisory support for establishment of interest organizations on regional and national levels and direct support for establishment of new associations on the local level.

Funds for forest management and labour protection will be available for organized forest owners. Approximately 1.4 % of the total ten-year funds for implementation of NFAP⁶⁶ are planned to be directed as support to private forest owners' associations.

Support from the Forest Fund is planned for development of **small and medium sized enterprises in forestry**, as advisory support, and support for the establishment and development of SMEs. Study trips and professional training will be also included. Direct support in co-financing work and procurement of necessary equipment is planned. Approximately 0.7 % of the total ten-year spending for implementation of NFAP is planned to be directed as support to the development of small and medium enterprises in forestry.

Planned measures of support for private forest owners and small and medium enterprises in forestry as well as the funds intended to this purpose can be a significant encouragement for the development of private forestry. However, realization of those measures depends on preparation and passing of necessary documents, especially the new forest law and the National Forest Action Program. National political issues and the willingness of certain interest group and decision-makers to support the reform of Serbian forestry and development of private forest sector primarily are also important.

⁶⁵ By the professional basis of NFAP, ten-year needs for finances for forest reproduction are 450 million euros, which is 50 % of total financial needs for implementation of NFAP.

⁶⁶ Estimations for the total of the ten-year implementation of NFAP are 912 million euros.

7. SUMMARY

Based on the results of the National Forest Inventory forests cover 2.2 million *ha* in Serbia (2008). This corresponds to 29.1 % of the state territory. The total timber volume is approximately 362 million m^3 and the total annual increment exceeds 9 million m^3 .

Private forests are most abundant covering approximately 52.2% of the total forest area, followed with state forests, covering 39.8 % of the total forest area. About 8 % of forests are not yet determined in terms of ownership by the National Forest Inventory 2008.

Development of property rights in Serbian forestry and their organization must be viewed historically (Nonic, 1993). The property types and their changes are closely related to the social-economic conditions experienced in different ages of development. The development of forest ownership went through the stages of forest as a public source of welfare owned by the society in mid of 19th century. Different forms of forest ownership (private, communal, rural) were then formed by the end of 19th century and defined in the first Serbian Forest Law from 1891. After W W II, the process went on in the opposite direction, and social attention was drawn to state or public forest sector. However, it should be emphasized that private forest ownership existed in former Yugoslavia throughout the whole period after W W II, unlike most of “the Eastern European Block” socialist countries, although the usage of private forests was limited.

In 2008 the structure of private forests in Serbia shows a large number of forest owners, with corresponding small average forest properties in small parcels. The private forest sector in Serbia is characterized by high fragmentation of properties, a large number of parcels and owners, and by insufficient organization of forest management. Consequently, small sized private forests under today’s forest policy circumstances are a significant problem for efficient forests management therein. Whatever, their size, significant timber volume, and annual increment, which are similar to those of the state forests, stress their importance as resource.

Two models of forest owners’ organizations exist at the moment in Serbia - community forest model aiming at joint forests management and private forest owners’ associations aiming on representation of members’ interests.

The forest community (*Sumska zajednica*) in Beocin was established in 1903 by 79 owners. The goal of the Association was to help members, who were mainly poor peasants, to secure some additional income and satisfy their needs for wood for their households through common management of the forests (Nonic, 2004). The forest community has predominated as the only one in the region many historical changes (changes of state and their administrative requirements) and therefore presents a unique value even on the European scale.

During 2006, several private forest owners’ associations (PFOA) were formed. The associations are NGOs and their statutes and overall goals are very similar (Milijic, 2007). They aim to represent the interests of their members and not on joint forest management. Every owner manages his own forests, while the association coordinates joint works like forest infrastructure, and joint marketing activities. Training and cooperation with other associations and institutions is carried out jointly. Even though all existing PFOA have been formed in the past two years, some of them like PFOA Podgorac presents a good example to other associations and unorganized forest owners. The example of PFOA Podgorac clearly shows that establishment of a well-organized system of state support (financial, advisory and technical), can encourage activities of associations and stimulate unorganized forest owners to associate. However this process needs more time to develop.

Although there are ten PFOAs, a **national umbrella organization** of forest owners in Serbia has not yet been established. This can be explained because most of the local associations are not working strongly and members are not willing to support them or do not see clear interest and benefits from such a national level organization. The present forest legislation is not supportive enough for that while the local members do not have capacities and defined clear interests to succeed. However, some initiatives exist to establish an umbrella organization which deserves further support of the state administration.

One can see that many private forest owners manage their forests. The public forestry enterprises are entrusted with performing so-called professional and technical tasks in private forests the area they manage (PE “Srbijasume” and Pe “Vojvodinasume”). However, the current organization of extension and technical services for private forests and the lack of an organized advisory service do not satisfy either owner’s needs nor the State demands for sustainable stewardship and improvement of private forests. The biggest lack of the current system of organizing professional and technical tasks in private forests is a clear **conflict of interest**. Since the major task of PE is state forest management, private forest issues cannot be in the first line of their attention. Performing services for private forest owners can cause conflicts of interest, since foresters cannot be independent in technical activities and advising (Begus, 2006). Reorganization of professional and technical service and the foundation of an advisory support service are seen as priority for further improvement of private forests as well as profits for the owners (Nonic *et al*, 2007). At current, the Law does not even mention indirect and direct measures of financial support for private forest owners. Also the **constitutional status** of private forests is controversial, since private and state ownership rights are equal and have equal legislative protection but all natural resources are goods of public interest and therefore are owned by the state. This does not adequately define the status of private forests, since they are not considered as good of public interests. Moreover, support for private forest owners in Serbia is in initial phase and it is implemented through the FAO project, and its activities on capacity building of public forest administration and support for forest owners’ associations. Activities are performed through workshops and education of forest owners.

Forest policy and organization of forestry in Serbia during the last 15 years has been built on a centralized institutional framework, as laid out in the 1991 *Law on Forests*. After the political changes in Serbia, the Serbian forest sector is not fully reformed, especially in deregulation and privatization. Significant steps were made in establishing a strategic framework for the development of forestry in general culminating in the formulation of the National Forest Program of Serbia.

In July 2006 the **Forest Development Strategy of the Republic of Serbia** was prepared and adopted. This document represents a basic strategic and development document of the Serbian forest sector, and by it, the State has determined the principles, development goals and the measures of implementation. It set the framework and demands for intuitional reform and redefining of relations, roles, and responsibilities within the complete Serbian forestry sector. The State has recognized the importance of the private forest sector and its role is emphasized in the *Strategy*. Measures defined therein provide for development of the private forestry sector and, improvement of forests’ condition and economic situation of their owners. The Strategy emphasizes the need for the development of small and medium-sized enterprises in forestry (SME). The traditional significance of forests for residents of rural regions, primarily for satisfaction of their basic needs for firewood and timber, determined the forms of business in forestry and related branches.

The basic goal of establishment and development of small and medium-sized enterprises in forestry is to increase the contribution of forestry to economic and social development of the Republic of Serbia

The **National Forest Action Program (NFAP)**, of the Republic of Serbia according to the Forestry Development Strategy is the action plan for implementation. The NFAP was passed in the Parliament of the Republic of Serbia and it is valid for a period of ten years.

Two basic principles were set for private forests, increasing public interest in principles of sustainable forest management and achieving of the owners’ personal interests.

The most serious problems of the private forestry sector got identified during the preparation of the NFAP and solutions to those problems are foreseen. It is planned that forest owners will be able to receive money from its financial source, the Forest Fund, for improvement of forest conditions through direct support in co-financing work. According to the NFAP about 40 % of funds aimed for forest reproduction⁶⁷, is intended for private forest owners. Support for private forest owners’

⁶⁷ By the professional basis of NFAP, ten-year needs for finances for forest reproduction are 450 million euros, which is 50 % of total financial needs for implementation of NFAP.

associations is planned, financed from the Forest Fund, through advisory support for establishment of interest organizations on regional and national levels and direct support for establishment of new associations on the local level. Support from the Forest Fund is planned for development of small and medium sized enterprises in forestry, as advisory support, and support for the establishment and development of SMEs. Funds for forest management and labour protection will be available for organized forest owners. Approximately 1.4 % of the total ten-year funds for implementation of NFAP are planned to be directed as support to private forest owners' associations.

Planned measures of support for private forest owners and small and medium enterprises in forestry as well as the funds intended to this purpose can be a significant encouragement for the development of private forestry. However, realization of those measures depends on preparation and passing of necessary documents, especially the new forest law and the National Forest Action Program. National political issues and the willingness of certain interest group and decision-makers to support the reform of Serbian forestry and development of private forest sector primarily are also important.

LITERATURE

- BEGUŠ, J. (2006): *Report of International Consultant for Capacity Development of Public Forest Service and Private Forest Owners' Associations*. FAO/GCP/FRY/003/FIN Project "Forest Sector development in Serbia", www.forestryprojectserbia.org, Belgrade. (40 p.)
- (2006/a): *Constitution of the Republic of Serbia*. Official Gazette of the Republic of Serbia, № 83/06, Belgrade.
- DAMNJANOVIC, S. (1986): *Social and economical status of Private forest sector in Serbia*. Proceedings of the Conference: „Consulting about private forest management improvement and realization of social agreement of forestry development for the period of 1986-1990”. Associations of forest and wood processing engineers and technicians of the Republic of Serbia, Gornji Milanovac. (103-116)
- (2007/a): *Draft of Forest Law of the Republic of Serbia (version 5.0.)*. FAO/GCP/FRY/003/FIN Project "Forest Sector Development in Serbia", www.forestryprojectserbia.org, Belgrade (41 p.)
- DRAŽIĆ, M. (1991): *Analysis of situation and possibilities for improvement and enlargement of forests in private property*. Proceedings from symposium "Past, present and future of Serbian forestry as a factor of country development", Associations of forest and wood processing engineers and technicians of the Republic of Serbia, Belgrade. (51-63)
- (1996/a): *Forestry Development Program 1996-2000*. Public Enterprise for Forest Management "Srbijasume", Development and research centre, Belgrade. (135 p.)
- (2002): *Forestry Development Program 2001-2005*. Public Enterprise for Forest Management "Srbijasume", Development and research centre, Belgrade. (111 p.)
- (2006/b): *Forestry Development Strategy of the Republic of Serbia*. Official Gazette of the Republic of Serbia №. 59/06, Belgrade.
- (1926): *Forests in the Kingdom of Serbs, Croats and Slovenians. An annex to forest statistics*. Ministry of Forests and Mines, General Directorate of Forests, Belgrade. (29 p.)
- ILLYÉS, B., NIESSLEIN, E. (1997): *Új erdészeti politika piacgazdasági alapjai Magyarországon = Neue Forstpolitik in Ungarn auf marktwirtschaftlicher Grundlage*. Kiadványai/Erdészeti Tudományos Intézet 6, Hillebrand Nyomda Kft, Sopron. (368 p.)
- (1983): *Inventory of the forest fund 1979*. Statistical institute of the Republic of Serbia, Belgrade.
- JEKIĆ J. (1928): *Annexes for forestry history of Serbia*. Printing "Davidovića, Pavlovića and others", Belgrade. (367 p.)
- (1920): *Law on Forests*, from 30th of March 1891. – with amendments from 2nd of August 1898, 26 of January 1900 , 16th of May 1902. and 23rd of March 1904. Geca Kon publishing, Belgrade.
- (1930): *Law on Forests*. Ministry of forests and mines, Official Gazette No. 307-CXXX, from 31.12.1929, Belgrade.
- (1991): *Law on Forests*. Official Gazette of the Republic of Serbia, 46/91, 46/91, 83/92, 53/93, 54/93, 67/93, 48/94, 54/96, Belgrade
- MARINOVIĆ, M. (1923): *Forestry of our country*. Croatian printing company, Zagreb.
- MILJIĆ, V.(2007) *Structural and Social Characteristics of Private Forest Owners' Associations*, Forestry № 3-4, Association of Forest and Wood processing Engineers and Technicians of the Republic of Serbia, Belgrade. (119-128)

- MILJIĆ, V., NONIĆ, D., RADOSAVLJEVIĆ, A., GRUJIC I. (2007): *Associating Private Forest Owners as a Contribution to Rural Development of Serbia*. Proceedings of the International Conference „Integral protection of forests, Scientific technological platform“, Forestry Institute of the Republic of Serbia, Belgrade. (35-36)
- NICHOLSON, K., RADOSAVLJEVIĆ, A., ZARIĆ, V. (2006): *Mission Report on Development of Small and Medium Enterprises in Forestry*. FAO/GCP/FRY/003/FIN Project “Forest Sector Development in Serbia”, www.forestryprojectserbia.org, Belgrade. (50 p.)
- NIKOLIĆ, D., RAKOČEVIĆ, V. (1992): *Legislation in Forestry*. Monography “Forestry and Wood Industry through Centuries”, Association of Forest and Wood processing Engineers and Technicians of the Republic of Serbia, Belgrade. (159-182)
- NONIĆ, D. (1993): *Development of property rights in Serbian forestry*. Forestry № 3-5, Association of Forest and Wood processing Engineers and Technicians of the Republic of Serbia, Belgrade. (155-166)
- NONIĆ, D. (2002): *Rechtliche Regelung und Organisation in der serbischen Forstwirtschaft*. Experiences with New Forest and Environmental Laws in European Countries with Economies in Transition, Forstwissenschaftliche Beiträge Nr. 26, ETH, Zürich. (115-123)
- NONIĆ, D. (2004): *Organization of Forestry in Transition: Relations of State Forestry Institutions and Private Forest Owners*. Doctorate dissertation, Faculty of Forestry, Belgrade.(232 p.)
- NONIĆ, D., HERBST, P. (2005): *Fragen des Privatwaldsektors in Serbien*. Forstzeitung 7, Österreichischer Agrarverlag, Wien. (32-33)
- NONIĆ, D., RANKOVIĆ, N. (1997): *Ownership Transformation and Organisation of Management in Private Forests in Serbia*. 3rd International Conference on the Development of Forestry, Wood Science and Technology, Faculty of Forestry of Belgrade University, Belgrade & Mt. Goč. (569-575)
- NONIĆ, D., BEGUS, J., MILJIĆ, V., RADOSAVLJEVIĆ, A. (2007): *Development of an Organizational System of Support for the Private Forest Sector in Serbia*. IUFRO Division VI Symposium: Integrative Science for Integrative Management, Extension Working Party 6.06-03, Sarriselka, Finland.
- NONIĆ, D., MILJIĆ, V., MARKOVIĆ, J., RADOSAVLJEVIĆ, A. (2008): *Organisation of Private Forest Sector (Private forest owners & Small and medium enterprises) in Serbia: Legal and Political Aspects*. Proceedings of the 10th International IUFRO Symposium on “Legal Aspects of European Forest Sustainable Development”, Faculty of Forestry, Sarajevo.
- NONIĆ, D., PODUSKA, Z., MEDAREVIĆ, M., PETROVIĆ, N. NEVENIĆ, R.(2007): *Country Reports on Private Forest Ownership: Serbia*. Inter-cathedra Meeting of Forest Policy, Economics and Organization in South-east Europe, Faculty of Forestry University of Sarajevo, Sarajevo.
- NONIĆ, D., TOMIĆ, N, MARKOVIĆ, J., HERBST, P., KRAJČIĆ, D. (2006): *Organization of private forest owners in Serbia compared to Austria, Slovenia and other Central European countries*. Forstwissenschaftliche Beiträge Forstpolitik und Forstökonomie, Nr. 35; ETH, Zürich. (95-106)
- (2000): *Options for the Organization of Small Forest Owners in Central and Eastern Europe for Sustainable Forest Management*, FAO, Rome. (47 p.)
- (2003): *Our Century (Nas vek)*. Special Edition Prepared for 100th Anniversary of Establishment of Forest Community in Beocin: 1903-2003. ABM Economic, Novi Sad (24 p.)
- (1996/b): *Program for Protection and Improvement of Forests 1996-2000 with long term projection to 2050*. The Republic of Serbia – Forest Fund, Belgrade. (91 p.)

- RATKNIĆ, M., NONIĆ, D., RANKOVIĆ, N. (2000): *Models for organizing private forest owners*. Monography “*Condition, problems and management improvement in private forests*”, Ministry of Agriculture, Forestry and Watershed Management, Belgrade. (218 p.)
- SEEP, C. (2006): *Mission Report on National Forest Action Program*. FAO/GCP/FRY/003/FIN Project “*Forest Sector development in Serbia*”, www.forestryprojectserbia.org, Belgrade. (30 p.)
- SIMEUNOVIC, D. (1961): *Genesis and legal regulations on forest property in 19th century*. Herald of forestry and hunting museum, Book 1, Belgrade.
- (1940): *Statistic of forests and forest commerce for 1938*. Ministry of Forests and Mines, Belgrade. (151 p.)
- (2005): *Strategy of Agriculture Development of the Republic of Serbia*. Official Gazette of the Republic of Serbia 78/05, Belgrade.
- (2003): *Strategy of Development of Small and Medium Enterprises and Entrepreneurship in Republic of Serbia*. Official Gazette of the Republic of Serbia № 45/03, Belgrade.
- (2007/b): *Study on Forest Valuation and Financing the Forest Valuation Sub-study*. University of Helsinki, FAO/GCP/FRY/003/FIN Project: “*Forest Sector development in Serbia*”, www.forestryprojectserbia.org, Belgrade. (44 p.)