



## УНИВЕРЗИТЕТ "Св. КИРИЛ И МЕТОДИЈ" ВО СКОПЈЕ Ss. CYRIL AND METHODIUS UNIVERSITY IN SKOPJE

## ШУМАРСКИ ФАКУЛТЕТ ВО СКОПЈЕ FACULTY OF FORESTRY IN SKOPJE



Online ISSN 1857-9507 www.sf.ukim.edu.mk/sumarski\_pregled.htm

УДК / UDC 630 УДК / UDC 635.9 УДК / UDC 674

# ШУМАРСКИ ПРЕГЛЕД FOREST REVIEW

МЕЃУНАРОДНО НАУЧНО СПИСАНИЕ INTERNATIONAL SCIENTIFIC JOURNAL



Шум. преглед (Šum. pregled) For. review Год. 48

Бр. 1

Стр. 1-18

Скопје, 2017

Vol. 48

No. 1

Pag. 1-18

Skopje, 2017

ШУМАРСКИ ПРЕГЛЕЛ FOREST REVIEW

 Меѓународно научно списание
 International Scientific Journal

 Год. 48, бр. 1 / Стр. 1-18
 Vol. 48, No. 1 / Pag. 1-18

Скопје, 2017 Skopje, 2017

Online ISSN 1857-9507 Online ISSN 1857-9507

УДК 630 UDC 630 УДК 635.9 UDC 635.9 УДК 674 UDC 674

Издавач Publisher

Универзитет "Св. Кирил и Матодиј" во Скопје Ss. Cyril and Methodius University in Skopje

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Излегува два пати годишно Published twice a year

Интернет-страница Web page (on-line)

www.sf.ukim.edu.mk/sumarski\_pregled.htm www.sf.ukim.edu.mk/sumarski\_pregled.htm

Адреса на издавачот Publisher's address

УКИМ-Шумарски факултет во Скопје UKiM Faculty of Forestry in Skopje

Редакција на Шумарски преглед Editorial Board of the Forest Review Ул. "16 Македонска бригада" бр. 1 Ul. 16 Makedonska brigada br. 1

(П. фах 235) (P.O. box 235)

1 000 Скопје MK-1000 Skopje Република Македонија Republic of Macedonia

www.sf.ukim.edu.mk www.sf.ukim.edu.mk

 Шум. преглед (Šum. pregled)
 Год. 48
 Бр. 1
 Стр. 1-18
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Online ISSN 1857-9507 Online ISSN 1857-9507

УДК 630 UDC 630 УДК 635.9 UDC 635.9 УДК 674 UDC 674

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#### Адреса на издавачот

УКИМ-Шумарски факултет во Скопје Редакција на Шумарски преглед Ул. "16 Македонска бригада" бр. 1

(П. фах 235)

1 000 Скопје Република Македонија

E-пошта: sumpregled@sf.ukim.edu.mk www.sf.ukim.edu.mk

#### Publisher's address

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### FORESTRY SECTOR IN BULGARIA BEFORE AND AFTER THE REFORM IN 2011 MAIN CONSIDERATIONS AND INTER-SECTORIAL RELATIONS

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ABSTRACT: After the reform in 2011 the economic base for forestry functioning changed. Sector was split in six autonomous enterprises. They do their businesses like any other enterprise in the private economy. This gave capabilities to enterprises to gain profits as a result of efficient managerial decisions. All these features determine the future improvement of the entire forestry and consequent problems and the need of their solving. Current paper aims to reveal the differences and similarities of the economic base between forest sector before and after the reform in quantitative manner. To generalize the imperfections of the system and to outline the directions for diminishing their negative effect.

#### 1 INTRODUCTION

The forestry sector of the Republic of Bulgaria is an economic branch that provides the raw material base for the wood processing and furniture industry. Wood and other products extracted from the Bulgarian forest are an important source of energy that is renewable, but at the same time a scarce resource. That is why, in the transition years, forestry underwent a radical reform whose ultimate goal was the establishment of a market economy in the forestry sector.

The purpose of this study is to assess the results associated with the operation of the forestry system following the 2011 reform.

The scientific object of the survey is the forestry system of the Republic of Bulgaria, and the subject includes selected indicators of efficiency in static and dynamic manner.

The main tasks of the study are:

- A brief overview of forestry developments in the country before and after 2011.
- Summarizing a methodology including indicators for the static condition and the growth and improvement itself.
- Comparing the current status profile to the previous one.
- Giving guidance on the future development of the sector.

The financial policy, considered as an element of the financial system of the state, is an integral part of the economic policy and represents a scientifically based activity of the state and private bodies of management related to the development of principles, methods and forms for the organization of financial relations [1]. There is no comprehensive, unified and clearly formulated financial policy for the forest sector in Bulgaria so far. Partial attempts are being made to create financial strategies for the development of the sector, mainly through institutional changes in order to restructure it. However, most of the changes are in two directions ownership change and related ways of financing forestry, as well as enriching the range of forest products consumed. Until 1997, the state was the sole owner of forests. Revenues are from harvesting, hunting and offshore operations, and the management is carried out in three levels: the Forestry Committee, the Regional Forestry Directorates and forestry.

Institutional reforms in the forestry sector since 1997 will be provisionally divided into three sub-periods:

1. From 1997 to 2002 when, with the adoption of the new Forest Law in 1997, the previously functioning GHS 1958 statutes were repealed.

According to the BG, NFB bodies are:

- Regional forest management 16 on the territory of the country, directly subordinated to NFB.
- State forests authorities (SFA) local authorities of the forestry authority, major forestry entities, subordinated to NFB and RFB.

The economic relationship between farmers and users of forest products is changing. In the form of a timber deal, the state pays the service to the logging companies, but it can already organize the sale of wood itself [4].

2. From 2002 to 2008, when 39 Game Breeding Stations (GBS) were established in 2002 with the adoption of the Hunting and Game Conservation Law (HGCL). They are legal entities with the status of state-owned enterprises under Article 62, paragraph 3 of the Commerce Act. Unlike SFAs, GBSs are on their own economic account, through which they control the effectiveness of the advanced capital. The wood from the state forests located on the territory managed by the respective game breeding station is used by it against payment of a percentage of the selling price determined by a tariff.

The forcible deprivation of funds for production in the period 1997 - 2001 by the forestry enterprises and their centralization in 82 commercial companies led to a depreciation of the capital, to its plunder and finally to the bankruptcy of the commercial companies. Income-free timber-producing organizations have no capacity to accumulate financial resources for capitalization in forests and incentives for hired labor. At the same time, the harvesting organizations are deprived of such a financial resource for the renovation of their production equipment [4].

3. From 2008 to 2011 a major step in the reforms of the forestry sector is the adoption of the Act on Amendment and Supplement to the Forestry Law. (promulgated SG No. 49 / 29.04.2008) With this normative act the business activity is separated from the control functions of the State Agency for Forests, which carries out state policy in the field of forests, forestry, hunting and recreational fishing, as the primary budgetary spending agent. 144 State SFAs and 39 GBSs, which carry out economic and forestry activities in forests, are formed.

It creates conditions for significant changes in the use of forest resources. According to the law, the existing state forestry authorities were transformed into state-owned enterprises under Art. 62, para. 3 of the Commerce Act and For. review 48(1): 1-3. Skopje, 2017 Ss. Cyril and Methodius University in Skopje Faculty of Forestry in Skopje

are called state forestry holdings. This ensures the registration of SFAs and State Hunting Authorities (SHA)s under the Commercial Act as financially independent state-owned enterprises, managed on a commercial basis, but as state-owned companies, i.e. without being bankrupt. State forest holdings are entities for which the principles of budget funding are not applied. They will manage forests and land from the state forest fund as well as wildlife in their defined territorial scope. In the conditions of a competitive environment, these enterprises will self-finance their revenues, and from the realized profit they will be able to accumulate funds for investment in forests [5].

Some more recent researches [3] provide a closer look at the managerial opportunities and problems for the contemporary forest system. They outline the main characteristics of the new system:

- creating of 6 State Enterprises in field of forestry;
- creating the possibility for State Enterprises and their units (SFE and SHE) to implement management activities (harvesting and forestry works);
- dividing control functions and management functions between Executive Forestry Agency and State Enterprises;
- improvement of management of all property type of forests.

#### 2 MATERIALS AND METHODS

The current study implements statistical approach to outline the differences between previous and current system. Some recent [2] and not so studies investigate some indices for economic condition and growth. They give an information about the current condition and problems. Current study improve the analysis with assessment of the statistical significance of the quantitative result during the last few years after the reform.

The main approaches are following:

- Basic indexes for the period 2005-2010 and 2005-2011
- Basic indexes for the period 2011-2015
- Student and Fischer tests for mean equality and variances difference.

Testing is undergone through placing the null hypothesis that there are no statistically significant difference between means of the main economic indicators before and after the reform. The time subseries are tested for variances inequality.

Empirical data are derived from the Eurostat database. Some basic economic indices have been used in order to outline the situation and the economic efficiency of the sector.

#### 3 RESULTS

The overall state of the Bulgarian Forestry can be comprehensively presented by the profitability and relative indicators for the results per output produced. Indicators are shown on fig.1.

Real labor costs are significantly increasing. In the sector, since the beginning of the reform, the view is that wages are one of the few emerging indicators. The problem is that they outstrip the other indicators. Gross value added per cubic meter follows the long-term trend, so any change cannot be considered to have occurred in that direction. In the previous forest management systems, wood was used for own consumption - heating, etc. Now

it's all about the market. It is significantly lowering the FTA per cubic meter. The industry is deprived of means of production. Multiple intangible assets with indirect production were purchased. Proof of this is the increase in fixed capital formation at the expense of buildings and facilities.

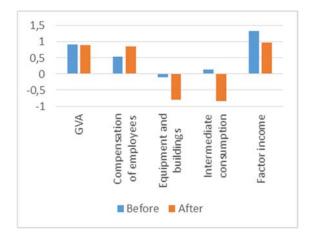


Figure 1: Main economic indicators per m<sup>3</sup>

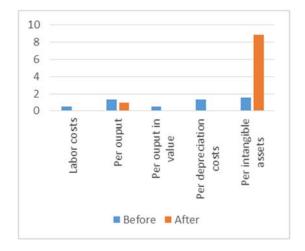


Figure 2: Profitableness, %

Profitableness indicators (fig. 2.) are some of the best to characterize what is happening in a business system. Although they sometimes require further clarification, they show in depth the relationship between the factors of production and the economic result in the country's forestry. Again, a significant drop in results over previous periods. Exporting most of the activities outside the forestry system has led to a decline in economic performance.

After being informed about the profitability is crucial to assess whether the processes are independent. The process of economic earnings, investments or costs can be treated like independent processes if the reform really contributed to the changes. Otherwise the reform has done nothing but forcing the forestry authorities to do the best they can in the situation year by year.

Data in (Table I) reveal that in fact nothing has changed significantly. Despite the transformations of the system it remains in inner essence the same. Scarce investments in new equipment has leaded to nothing new, but the worsening the profitability. Mechanisms for value

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adding are the same. Many of the indicators have risen but this is the result of the external factors not the system ones. Taxes increased which made sector more dependent on the government policies. From state-owned companies, forestry enterprises have become pseudo-private ones fighting on the free market and paying taxes like private enterprises. With one great difference – entrepreneurship is not a feature of the main managers. They remain only bureaucratic-like employees.

**Table I:** Statistical significance and connection to the last year's transformation-improvement or not

	t_tast (n	-values)		
Processes - results	New state of old process es	Creatio n of new process es	F-test (P - values)	Impr ove ment
Changes in inventories	0,1196		0,8964	No
Compensation of employees	0,0010		0,0947	Yes
Consumption of fixed capital	0,0004		0,4734	Yes
Factor income	0,0130		0,5040	Yes
GFCF - equipment and buildings	0,6357		0,0721	No
Gross fixed capital formation (excluding deductible VAT)	0,5265		0,0825	No
Gross value added	0,0139		0,4820	Yes
Intermediate consumption	0,0052		0,7379	No
Net entrepreneurial income	0,0296		0,4323	Yes
Net fixed capital formation (excluding deductible VAT)		0,277	0,0279	No
Net operating surplus and mixed income	0,0592		0,6513	Yes
Net value added	0,0156		0,4649	Yes
Other gross fixed capital formation	0,3892		0,5422	No
Other taxes on production		0,055	0,0034	No
Output of forestry and connected secondary activities	0,0071		0,6373	Yes

#### 3 CONCLUSION

The forestry sector, and in particular forestry, needs to reform the "reformed" with a focus on productivity. The lost link between the quality of the factors of production, the payment of the costs of their use and the results of the same must be restored. The study confirmed the thesis that real reforms in the economic sense were not actually made. Investments in own primary assets are of direct importance and should be increased. The inclusion of all extraction, transportation and subsurface functions into the woods to the forestry business will provide higher margins,

revenues to cover current costs and reserves for future investments.

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**FOREST REVIEW** 

#### ШУМАРСКИ ПРЕГЛЕД

International Scientific Journal Меѓународно научно списание Год. 48, бр. 1 / Стр. 1-18 Vol. 48, No. 1 / Pag. 1-18 Скопје, 2017

Skopje, 2017 Online ISSN 1857-9507

Online ISSN 1857-9507 УДК 630 **UDC 630 UDC 635.9** УДК 635.9 УДК 674 **UDC 674** 

#### Издавач **Publisher**

Универзитет "Св. Кирил и Матодиј" во Скопје Шумарски факултет во Скопје Декан

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#### Интернет-страница

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Шум. преглед (Šum. pregled) For, review

Год. 48 Vol. 48 Бр. 1 No. 1

Стр. 1-18 Pag. 1-18

Скопје, 2017 Skopje, 2017





