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MARKET RESEARCH AND BUSINESS MODELS FOR SUSTAINABLE FOREST MANAGEMENT IN BULGARIA

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ABSTRACT: To be competitive and to be able to support sustainable forest management forest enterprises need effective business models to offer certified products. The article analyses the results of marketing research carried out in two important forest regions in Bulgaria. It aims to identify and characterize potential markets for certified wood. The current status of forest certification in the country is presented. Business models are developed to meet the market needs.

Keywords: sustainable development, forest certification, marketing research, economic analysis

1 INTRODUCTION

Forests are multifunctional, serving economic, social and environmental purposes. Of all nature resources in Bulgaria the forests present the biggest share and primary importance. They offer habitats for animals and plants and play a major role in mitigating climate change and other environmental services. The societal benefits of forests, including for human health, recreation and tourism, are high, but often underestimated. Bulgarian forests have essential contribution to rural development and for many regions they are the only source of financial revenues. Forest biomass is currently the most important source of renewable energy for the country. Forests also provide a large range of other products, such as cork, resins, mushrooms, nuts, game and berries.

To deliver these benefits in a balanced way it is necessary to ensure sustainable forest management.

For the purposes of this paper we use the definition for sustainable forest management, developed by Forest Europe in 1993 and subsequently adopted by the Food and Agriculture Organization (FAO) of the United Nations: "The stewardship and use of forests and forest lands in a way, and at a rate, that maintains their biodiversity, productivity, regeneration capacity, vitality and their potential to fulfil, now and in the future, relevant ecological, economic and social functions, at local, national, and global levels, and that does not cause damage to other ecosystems."

Forest certification is a voluntary instrument, which uses a set of standards to evaluate and validate the practices of forest management. It ensures and promotes economically viable forest management, in compliance with social standards, while protecting the environment. Forest certification is a direct economic instrument to ensure the sustainable use and management of forest resources.

European market for wood products is becoming increasingly sensitive to consumer demand for certified products. There are clear market opportunities in this direction for Bulgarian companies. Since the certification requires the practices in forest management to meet regulatory requirements, this could become an important addition to the supervisory and regulatory functions of the state. Moreover, it will improve transparency and governance in the sector.

At the same time to be competitive and to be able to support sustainable forest management forest enterprises need effective business models to offer certified products.

The here presented paper analyses the results of marketing research carried out in two important forest

regions in Bulgaria. It aims to identify and characterize potential markets for certified wood. The current status of forest certification in the country is presented. Business models are developed to meet the market needs.

2 FOREST CERTIFICATION IN BULGARIA

In Bulgaria the forest territories are around 37% of the country's territory. Approximately 67 % of them are broadleaved forests. Bulgaria is the third richest in biodiversity country in Europe. There are 3 National parks, 11 Nature parks and more than 700 protected areas in the country.

Forest certification in Bulgaria is a voluntary instrument, which is administered by the evaluation and validation of the practices of forest management using a set of standards.

Forest certification system aims to ensure and promote economically viable forest management, in compliance with social standards, while protecting the environment. Forest certification is a direct economic instrument to ensure the sustainable use and management of forest resources.

The certification verifies that the management of forest territories is carried out in an open manner, balancing environmental, economic and social benefits.

Lately worldwide users of timber and forest products began to look for evidence that the timber and forest products on the market are certified. In this sense, forest certification occurs as a potential market mechanism to promote better forest management. Forest certification gives an opportunity for product differentiation based on reduced product impact on the environment. In the future we could expect steadily growing demand of products from well-managed forests.

In this respect sustainable management will improve competitiveness and will create jobs, particularly in rural areas, and at the same time will ensure the protection of forests and the provision of ecosystem services.

In Bulgaria there are two forest certification systems offered on the market – FSC and PEFC. Currently FSC is the preferred one and with more than 130 users. PEFC is still not very well known and spread as there are only 3 companies certified according to it for chain of custody.

FSC shares the EU Commission's broad goals of setting up a better global timber trade and governance system. It promotes sustainable forest management, improves forest governance and supports sustainable consumption.

Certification bodies award forest management (FM) certification to those forest managers or owners whose

practices meet FSC Principles and Criteria. As it is shown on the figure below FM certification rose from 1,084 certificates in 2012 to 1,462 certificates in 2017. This is a significant 35 per cent rise over five years.

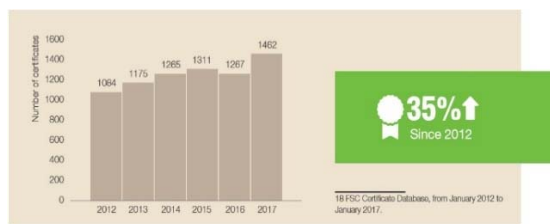


Figure 1: Evolution of FSC FM certificates, 2012–2017

There are 19 forest management enterprises, which have received the FSC forest management certificate in Bulgaria. There are 807 833, 80 ha of certified forest territories which represent 19% of the total forest territory of the country. On fig. 5 is shown how the FSC certified territories are growing during the years. The first two certificates were awarded in 2006. As it could be seen on the graphic there is a tendency of growing interest to the certificate over the past few years. At least another three forest management enterprises are under certification procedures.

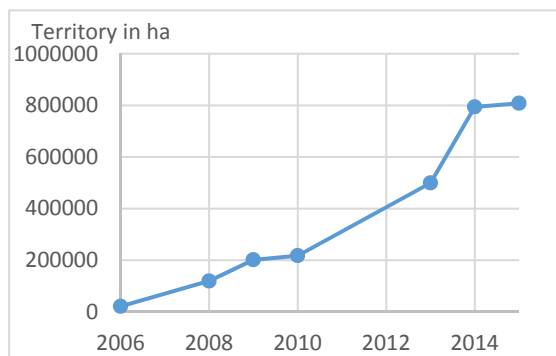


Figure 2: Changes of FSC certified forest territories

On fig. 3 is shown the distribution of FSC territories according to ownership. Most of the forest management enterprises are state owned forest territories - 98%. There is only one certified municipality. The private sector is represented only with one company, which owns relatively small territory of forest plantation. In this respect the forest certification is considered as a state policy in Bulgaria at the moment.

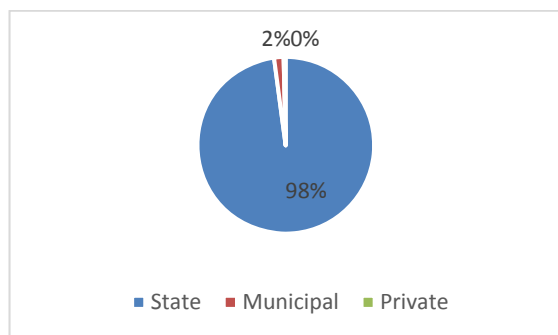


Figure 3: Distribution of FSC certified forest territories according to ownership

Table I shows how in terms of CoC certificates European countries show significant growth, with Romania adding over 225; this was followed by Russia (more than 130), Latvia (89), Ukraine (82), and Bulgaria (70). The percentage increase in CoC certificates in Bulgaria is 49% and only in Ukraine we could see a higher increase.

Table I: FSC CoC certificates: Countries with highest growth, 2015–2017

Country	FSC CoC certificates 2015	FSC CoC certificates 2017	Percentage increase in CoC certificates (%)
Ukraine	66	148	50
Bulgaria	61	131	49
Thailand	63	117	37
Romania	297	523	33
Russia	295	428	21
Latvia	217	306	19
India	255	354	18
Mexico	93	128	17
Lithuania	197	270	17
Serbia	104	141	17
Viet Nam	396	532	16
Portugal	162	217	16
Turkey	190	249	15
Estonia	186	242	14
China	3,799	4,841	13
Slovenia	171	216	13
Poland	1,186	1,466	11
Spain	696	844	10
Bosnia and Herzegovina	258	312	10
Indonesia	203	241	9

Source: A review of Forest Stewardship Council® (FSC®) market developments, statistics, and trends. January 2017

FSC has commissioned two studies to collect data and develop deep insight into the market needs of their stakeholders. Collectively, these studies show that certificate holders and members believe the brand does offer consumers a clear sign that their organizations are serious about responsible forest management, with 80% saying that FSC creates a positive corporate image. They also show that 85% regard FSC certification as credible proof of timber legality, giving them confidence that the timber they source really is from responsibly managed forests. The staff knowledge in the same survey is also rated highly.

The authors have made a market research among 15 (79% of all) of the FSC certified forest management enterprises in Bulgaria. The main aim of the research was to determine the grade of satisfaction of the users and the main benefits which the certificate brings.

Market access is the key direct financial benefit of certification. It is closely linked to the recent phenomenon of market globalization. Only 47% of Bulgarian certified forest management enterprises recognize this benefit. The certificate brings new customers to 60% of the interviewed companies. In 40% among the researched cases there is a sales increase among current customers. The most valued benefit is the improved reputation and company status. 87% of the participants in the research share that they feel better attitude among society and partners. FSC has given the opportunity for price increase of certified products only to 20% of the enterprises. 60% of the interviewed report employee satisfaction. The others share that they

have experienced difficulties to implement the new procedures among the employees. The FSC certification has secured a constant market share during the market shrinkage over the past few years for 73% of the companies.

3 MAJOR FINDINGS FROM MARKETING RESEARCH AMONG POTENTIAL BUYERS OF FSC CERTIFIED WOOD

There is an evidence that market strategies for certified forest products need to be developed at national level to support and encourage sustainable forest management.

The authors have carried out a marketing research to determine the demand of certified wood. The research was part of a scientific project funded by Forestry University, Sofia. Two regions were selected in which the two forest enterprises owned by the Forestry University operate – Pazardzhik and Montana regions. The main aim of the research was to help the forest enterprises to successfully position their products and support a decision making regarding FSC certification.

The selected regions are important forest regions for the country. The major findings from this research could be used by any forest enterprise.

The research is made by interviews with woodworking companies from the selected regions, which were essential timber buyers. The interviews were carried out with the help of questionnaire.

The purpose was to determine the following:

- FSC recognition
- FSC certified wood consumption
- Interest in buying certified timber
- Willingness to pay the price

Altogether were made 15 interviews. The results from the two regions differ significantly. The main reason is in the different characteristics of the companies operating there.

In the region of Pazardzhik operate numerous micro to small enterprises. Their main market is Turkey where the quality requirements are relevantly low. The main species used in this region are conifers as spruce, fir and pine. The interest in timber coming from sustainably managed forests is low and it was very difficult to find companies willing to participate in the research.

In the region of Montana operate less but bigger enterprises. The main species used is beech and seldom conifers and poplars. Most of the companies export into EU. A clear interest towards FSC certified timber is defined.

On fig. 4 is shown how companies recognize the FSC brand.

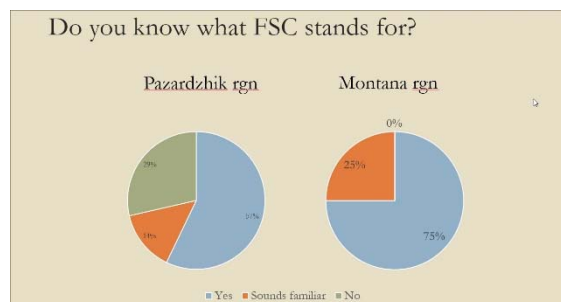


Figure 4: FSC brand recognition in the studied regions

A little more than 30% of the studied companies are certified to FSC CoC and are already buying certified timber.

On fig. 5 is shown the willingness of the studied companies in buying certified timber.



Figure 5: Willingness to buy FSC certified wood

In the region of Pazardzhik there is still lack of recognition of FSC brand and low interest in FSC certificate showed by big part of the companies, which are numerous. At the same time over 70% of the studied enterprises declared willingness to buy certified wood. Most of them are not ready to pay price which differ significantly to the current prices.

The main reason for the low interest in FSC certified wood in this region is the fact that the major part of the companies work for the Turkish market where the certificate is not required. In the future is expected this situation to change and the companies realize that.

In the region of Montana there is a clear interest in the certified timber. A major part of the woodworking companies are exporting to EU where a certificate is required.

Overall around 75% of the studied enterprises are showing willingness to buy certified timber, most of them on the condition that the price does not change significantly.

The bellow business model could be suggested based on the results of the marketing research.

Table II: Business model how successfully to market FSC certified timber

MARKETING MIX ELEMENTS	BUSINESS MODEL
PRODUCT	FSC brand should be use to distinguish the timber products and gain market advantage.
PLACE	While the local enterprises remain the main market, new markets should be defined and entered where there is a lack of certified wood supply.
PRICE	For the moment only small price increase could be accepted.
PROMOTION	Public relations should be used to promote the certification and to foster positive reputation. Campaign among local citizens is important to raise awareness about the certificate.

The main marketing strategy of the forest enterprises adopting the FSC FM certificate should be to use the FSC brand to distinguish their products, which will give them a competitive advantage and will help them in case of market shrinkages.

Furthermore they should enter new markets where there is a demand of products from sustainably managed forests and not enough supply.

Regarding the price, it should not differ significant from the market price of not certified products as the companies would not be ready to pay it.

Important part from the successful business model is to use actively public relations to demonstrate to the local public sustainable forest practices and build positive reputation.

4 CONCLUSION

Currently FSC is the preferred forest certification system in Bulgaria. FSC shares the EU Commission's broad goals of setting up a better global timber trade and governance system. It promotes sustainable forest management, improves forest governance and supports sustainable consumption.

Market access is the key direct financial benefit of certification. It is closely linked to the recent phenomenon of market globalization. The research shows that only 47% of Bulgarian certified forest management enterprises recognize this benefit.

There is an evidence that a marketing research is needed to determine the specifications of certified wood market and to develop strategies for certified forest products to support and encourage sustainable forest management.

An official survey of FSC shows that the percentage increase in CoC certificates in Bulgaria for the last two years is 49% and worldwide only in Ukraine we could see a higher increase. This suggests that the demand of certified timber will increase in the country.

As a part of scientific project, commissioned by the Forestry University in Sofia, the authors have carried out a marketing research among woodworking companies in two important forest regions in the country.

The results show that the recognition and the interest in FSC certificate in the two regions differ significantly. The main reason is in the different characteristics of the companies operating there. In the one, where there are working numerous small companies processing conifers and operating on the Turkish and domestic market nearly 30% of the examined enterprises do not even recognize the FSC brand.

The main reason for the low interest in FSC certified wood in this region is the fact that the major part of the companies work for markets where the certificate is not required. In the future this situation is expected to change.

In the other region there is a clear interest in the certified timber. A major part of the woodworking companies are exporting to EU where a certificate is required.

The research show that overall around 75% of the studied enterprises are showing willingness to buy certified timber, the majority on the condition that the price does not change significantly.

The main marketing strategy suggested by the authors to the forest enterprises adopting the FSC FM certificate is to use the FSC brand to distinguish their products, to enter new markets and to offer the certified products at price

similar to the market price, which the companies are ready to pay. An important part of the suggested business model is to use actively public relations to promote the impacts of the certification and to foster positive reputation.

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