

ANALYSIS AND ESTIMATION OF THE PROFITABILITY OF FOREST CERTIFICATION IN MODEL FOREST AREAS IN BULGARIA

*Authors: Emil Kitchoukov, Nikola Stoyanov,
Tsvetelina Simeonova-Zarcin, Todor Stoyanov*

University of Forestry, Sofia

Extended Abstract

Forest certification plays an important role in supporting and ensuring sustainable forest management. By March 2016, there are 19 forest enterprises in Bulgaria certified to the FSC for sustainable forest management. Certified forest areas are 807,833.80 ha, which represents 19% of all forest areas in the country. The first two Forest Management Standards (FSC) were obtained in 2006. The interest in certification has grown in recent years, as is the case for the past year. As of November 2017, the FM FSC certified hunting and forestry forest enterprises are 72 in number, part of which are included in group certificates of the respective state-owned enterprises in whose territory they are located. Certified forest area in Bulgaria in November 2017 is 1 315 594 ha. Issues related to forest certification and sustainable forest management and wood processing management in the country are gaining momentum.

The main objective of the study is to analyze and evaluate the profitability of introducing the FSC certificate for sustainable forest management at Yundola and Petrohan, which are Training forests at the University of Forestry - Sofia. These two forest enterprises and adjacent state forest and hunting forest enterprises are considered in this case as model forest areas, including certified and subject to certification forest enterprises and typical forest areas with coniferous and deciduous forests.

The following research objectives were fulfilled in order to achieve the stated goal:

1. Analysis and estimation of the profitability of the implementation of the FSC certificate for sustainable forest management in Yundola Training forests.
2. Analysis and estimation of the profitability of the implementation of the FSC certificate for sustainable forest management in the Petrohan Training forests.
3. Study and analysis of the demand for sustainable forest management products.

4. Exploring the possibilities for external financing for the certification of the two forest enterprises.

5. Elaboration of a methodology for assessing the profitability of the implementation of a FSC certificate for forestry forest enterprises.

Based on the study and the results obtained, conclusions and recommendations were made on the impact of FSC certification on the activities of certified FSC forest enterprises, in particular certified forest management.

On the basis of a developed model analysis of the profitability of State hunting enterprise Vitinya, a methodology for analysis and assessment of the profitability of forestry and hunting forest enterprises, certified and subject to FSC certification was developed.

The obtained results eloquently indicate that the profitability of the forestry activity in both forest enterprises is high, based on costs between 64% and 71% for the Yundola Training forests, and for the woodworking workshop is between 35% and 88%. Profitability on a revenue basis is naturally a bit lower, but it is still at relatively high levels above 39% for timber and 26% for woodworking.

For the Petrohan Training forests, village Barzia, the cost-based profitability is between 71% and 185% for the logging activity, but unlike the Yundola Training forests, at the woodworking works is too low, between 2.5% and 9.8%. Profitability on a revenue basis is naturally a bit lower, but it is still at a very high level above 71% in timber harvesting, while the woodworking is too low under 9%.

The results obtained from the marketing survey show that there is still a lack of awareness and lack of interest in the FSC certificate from the large number of small woodworking companies that are numerous in the area of Yundola Training forests. However, the study shows that 72% of the surveyed companies would buy certified wood from a nearby forestry. Most require the price of certified wood not to differ significantly from the uncertified. These enterprises work with the raw material offered by the forestry survey.

The main reason for the lower interest in the FSC certificate is due to the fact that the companies in the region are mainly manufacturing their domestic products and export to Turkey, where the certificate is not required. However, in the future, this can be expected to change and this fact is recognized by some of the companies.

In the area of Petrohan Training forests, Barzia village, Berkovitsa municipality and Montana district there is a marked interest in certified wood. Most of the woodworking enterprises in the area are working for the Western market, where the certificate is required and a large number of them are certified to track the production. The raw material that is mainly sought coincides with that produced by the forestry survey.

The study and comparative analysis of other forest enterprises with similar characteristics and location as the surveyed shows the following:

- Certified forest enterprises are right to evaluate their decision and are pleased with the results.
- The price of certified wood does not differ significantly from that of the uncertified.
- The main advantages of certification are the preservation of market positions and a competitive advantage as well as a better reputation and relations with the local population.

- In the future, an increase in the demand for certified timber in the region of Yundola and Petrohan may be expected. Training forests can benefit from this by going through the certification process.

The following marketing conclusions can be made to implement a successful marketing strategy for the implementation of certified wood:

- With regard to the product, certification will distinguish the timber offered by the forest enterprises and give it a competitive advantage over that offered by uncertified forest enterprises.

- In terms of distribution - the main market will remain the woodworking and furniture companies located in the region. Certification, however, will allow entry into nearby markets, where there is demand and reduced supply of certified wood.

- In terms of price - market conditions require certified wood to be offered at a price close to that of the uncertified.

- With regard to the communication mix - certification will improve community ties by creating a positive reputation on the forest enterprises and improving communication with the local population.

The final results of the analyzes and the quantitative estimates of the incomes with the introduction of a certified Sustainable Forest Management System show that the profitability of the forestry activity in both forest enterprises is high and on a cost basis is between 64% and 71% for the Yundola Training forests, and for the woodworking works is between 35% and 88%. Profitability on a revenue basis is naturally a bit lower, but it is still at relatively high levels above 39% for timber and 26% for woodworking.

For Petrohan, the cost-based profitability is between 71% and 185% for the logging activity, but unlike the Yundola Training forests, at the woodworking works is too low, between 2.5% and 9.8%. Profitability on a revenue basis is naturally lower, but it is still at a very high level above 71% in the timber industry, while the woodworking is too low under 9%.

The above gives us reason to offer forest managers in FSC forest certification decisions to take into account the profitability of the two main activities: sustainable forest management (logging) and woodworking and the results obtained should be used to search for suitable alternatives before to take the final decisions.

Key words: *sustainable forest management, forest certification, profitability, FSC, logging, woodworking.*