

ECONOMIC BENEFITS AND LIMITATIONS ARISING FROM VOLUNTARY FOREST CERTIFICATION

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Abstract. Forest certification can be in general perceived as a market stimulation and support of sustainability of forest lands and forest economy. Economic perception of generalization divides certification into several aspects. These are expenses and real consumer buying behavior on one hand and support of environmental management, prevention of trade with illegally harvested timber and preservation and protection of the countryside and nature, on the other hand. Given these facts, the aim of the paper is to present the expert knowledge and opinions concerning economic benefits and limitations of voluntary forest certification to producers and customers of wooden products.

Key words: consumer behavior, economic contributions, forest certification, forest economy.

Introduction

Forest certification is ideologically perceived as a voluntary mechanism that was introduced because of concerns about sustainable economy of forest resources. Primary goal of the certification is confirmation, that behavior of particular forest area is corresponding with the standards set by third party organizations. Opinions on certification among individual subjects divide considerably, taking different economic impacts of this voluntary mechanism into subject (Vlosky et al. 2015).

A lot of forest owners, especially in the private sector, consider PEFC and FSC systems in combination with C-o-C consumer chain as discriminating and restrictive. Some of them consider it as a reason of their exclusion from the markets, as its implementation is very expensive. Important aspect of certification for a lot of countries is its significance and influence on the small forest owners. This is important question especially in the countries, where a big share of forest lands is owned by big number of owners, many of which own

just a small area of the forest – often less than 10 ha (FAO CDR 2005). The biggest economic impact of voluntary certification appears to be increase of the costs – especially for the small forest owners, for whom these costs act as an inverse proportion against the earnings and become counter-productive.

As Innes and Hickey (2005) state, fees for acquiring the certification paid to third party auditors represent considerable part of the costs. These fees represent direct costs and may differ considerably among particular jurisdictions, depending only partially on the nature and size of the certified administrative units. As a result, costs for the actual audit per one hectare may differ. They are considered to be „commercially sensitive“ and are rarely publicly available, therefore it is difficult to define the real economic burden coming from the particular managed area. Given these facts, the aim of the paper is to present the expert knowledge and opinions concerning economic benefits and limitations of voluntary forest certification to producers and customers of wooden products.

1. Economic contributions

There are many proofs that non-market benefits of certification (such as commitment to social improvement and ecological responsibility) are the main reasons for businesses to implement it. But certification also brings concrete defined market benefits, such as:

- potential access to new markets,
- improvement of public image,
- price bonus,
- research in dynamically changing industry.

Forest companies tend to use certification as an opportunity to maintain existing markets and expanding to lucrative holes in the market (Nelson, Vertinsky 2005). Most importantly, it can be considered as one of the most effective and also one of the easiest ways to enter one of the ecologically sensitive holes in the market (Vidal et al. 2005). Ecologically sensitive hole in the market is often created by the government institutions and public officials in the cooperation with the policy of public procurement. Potential access to new markets is in its way question of the approach to certification and a lot of subjects implement it as a result of request and demand from other businesses and also some public institutions, trying to build environmental reputation.

Improvement of environmental reputation is almost exclusively part of the building of environmental concepts of marketing and environmentally prestigious brand. Even though the original idea comes from considerable intention to preserve nature and countryside, but the determining benefit is a marketing strategy oriented to increasing the customer and consumer interest.

The most important thing in practice appears to be application of the price bonus, especially in the case of the commodity products, such as pulp and

structural lumber. When considering the real buyers behavior, only minimum proofs describing the willingness to pay more for the product originating from sustainable forest activity (Chen et al. 2010). Problem with price bonus arises with the question of how much are the consumers really willing to pay for the environmental products.

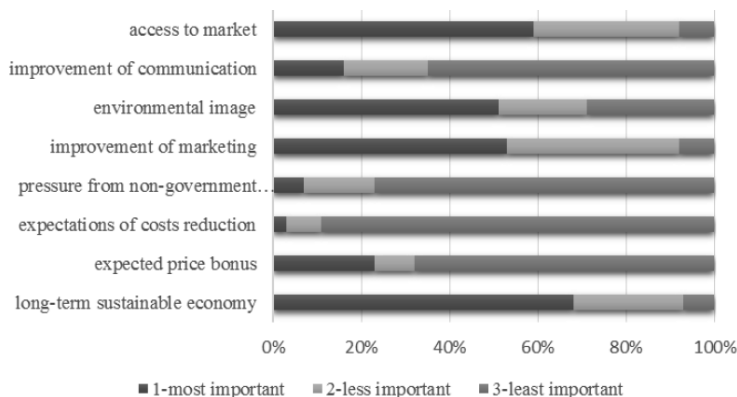
Another significant benefit is a research in dynamically changing industry, which certification certainly is. Constant changes contribute to quick development in this area. Portion of the wood from certified forests used in the production of wooden products marked as certified, went through such change lastly. Political organizations are lobbying for legal timber harvesting, which brings certain benefits for owners and processors. One of the market benefits (or opportunities) is a rapid change of nature of global forest production in connection with raising supply of timber harvested from plantations (Chen et al. 2010).

However, primary changes could not only affect forest economy and research in the area of certification. Certification is also indirectly influenced by research in other areas. One of the options for raising the demand for certified products is American certificate LEED (Leadership in Energy and Environmental Design), which is one of the most spread certification systems in the world. It is governed by U.S. Green Building Council. Growing demand for more ecologically friendly buildings leads to increasing demand for green wooden products.

There are many studies on actual benefits of voluntary certification, but it is very difficult to accurately quantify the economic efficiency of such approach. However, there are many ways to qualitatively evaluate the benefits and simplify possible pros and cons of certification.

Based on Paluš's research (2009), executed in the years 2005-2008, we can come to the conclusion, that questioned representatives of forest economy from Slovakia consider „long-term sustainable forest economy“ to be the deciding motive for joining the process of certification (Figure 1.). The second motive is an access to market and the third is an improvement of marketing and business relationships (we can also add the motive of better environmental image). Based on this research, we can deduce an assumption, that the most significant benefits can be considered to have same level of importance for owners and consumers of forests, even though environmental image is little bit behind. It is demonstrably acceptable, that opinions of the owners and consumers of forests in countries of Central Europe don't differ from researches executed in Scandinavia, Eastern Europe and America.

Figure 1. Analysis of opinions of owners and users of forests



Source: Paluš et al. (2009).

2. Economic limitations

Studies, that analysed impacts of certification on forest owners, were carried out in Northern America, where majority of drawbacks and restrictions are the costs, which are more significant than public, social and forester problems of both systems (Moore et al. 2012). Therefore these costs can be considered not only as economical limitation, but also as a big device of whole certification system, as it should apply compromise solutions between owners of the forest and third party as a representative of certification systems. Problem persisting quite a long time in countries like Finland, France and even United States is ratio of state-owned property and property of small private owners.

To illustrate the factuality and justness of this claim, 62% of forests in Finland belong to private owners and average area of forest economy is around 26 ha. France is similar in this matter, as 10 million hectares are owned by 4 million owners, which amounts to around 2.8 ha per owner. These numbers are similar in United States, where around 60% of forests are a property of 10 million small farmers and land owners (FAO CDR 2005).

It is mostly a problem of general principles, that do not have specifically defined scope and impact, based on which we can review small subjects before applying the certification and so distinguish their financial load from big owners. A lot of private owners consider purpose of certification systems to be designed for big owners and not accepting special needs for reviewing small owners. This claim can be partially backed by publication of Innes and Hickey (2005), who also said, that costs are inversely proportional to the size of the certified unit. Generally, costs per certified hectare should be considerably lower for bigger companies (Vidal et al. 2005).

Based on the research of Cubbage et al. (2003), costs of audit in North Carolina varied between 2 and 3.6 USD per hectare. Later research of Cubbage et al. (2008) focused on comparing the median of costs between big owners (more than 400 000 ha of land) and small owners (less than 4 000 ha of land). This research showed major difference between costs, i.e 0.07-0.49 USD per hectare compared to 6.45-39.31 USD per hectare, respectively.

Important output of these and other researches is a fact, that considerable amount is the initial cost of acquiring the certificate. Therefore, it is important to investigate the relationship of initial and continuous costs. As Cubbage et al. (2003) state, costs in following years after certification are only 1/5 of the initial costs during first year. It is not surprising, that small owners especially fear the initial phase of certification. These are the main concerns of the small owners:

- vast amount of rules and criteria do not reflect principles of forest administration for small owners;
- a lot of social and environmental requirements are not suitable for small owners (in fact, these are important for big forest areas or countries as a whole);
- monitoring of timber movement from small forests is difficult;
- requirements for certification discriminate planting forests, especially small planting forests;
- certification process and control of certification processes restrict freedom of choice about alternative ways of using the land;
- certification of small forests is unbearably expensive. Initial costs of certification per year for small forests monitoring per one hectare are considerably higher than in case of big forest areas.

Mostly these concerns lead to effort in above mentioned and other countries with similar forest and agricultural-regional division to development of certified systems, so they take requirements of small forest owners into consideration.

One of the applicable options solving problems of small forest owners is model of intrastate system of voluntary certification, developed in Finland. Proposed model consists of three-level certification: certification of individual forest owners, group certification in the areas of forest economy associations, which covers around 80 000 ha on average and has around 1 500 owners and the last one is group certification on the level of Finnish Forest Centre, which covers around 1,5 million ha and has around 30 000 owners. Registration office in Finland should be Finnish Environment Institute, based on the model, while accreditation institution should be Finnish Accreditation Service (FAO CDR 2005).

System of intrastate certification should be based on needs of the particular country and state of regional division of forest owners. However, it is not possible to standardize the system on European platform, because the ratio of state-owned and private forests differs considerably in every European country.

Same applies for the global implementation of the system. Not solving problems of the small owners can of course elevate the price of the timber material and retroactively cause problems to wood-processing businesses, which would prefer the certified wood on express terms.

Another element, which can be limiting in some way, is „Edict about wood (EUTR)“. It requires proving of origin of the certified timber material conducting business on the markets of EU. It can be viewed as a controlling mechanism, which restricts putting illegally harvested wood and products from such wood into circulation in the countries of EU. Another aspect of this mechanism are obligations, which raise costs for production and also importing subjects. These costs are mostly tied with obligations of business subjects to fulfil the obligations brought by the edict, such as: proving origin of the wood, implementing system of the appropriate care and system of reviewing the controls. Same obligations apply for production and importing business subjects, but practical compliance and filling is different (Dudík 2015).

One should also mention misunderstanding and poor awareness about certification brands, which lead to lack of interest from consumers. The reason is that it affects a demand for certified products and therefore demand for certified timber material.

According to Paluš at el. (2014), it is demonstrable, that awareness about certification brands is negligible, but information, with what are consumers associating these brands with usually do not have the character of the brand, but rather knowledge, that these brand are associated with ecological properties of products and protection of the environment. This could not evocate the benefit of buying such product. Deciding factor for buying should be association of the brand with good image of the brand and something specific, not offered by other brands.

Conclusions

This article is based on knowledge and data coming from various researches executed in 2003-2014 and debates past and current problems and also benefits of voluntary certification. Even though many studies examine and examined economic aspects of forest certification, there is still a lot of misinformation. One of them is an actual consumer behavior in the case of willingness to pay the higher price for environment-friendly products. Deciding factor of buying should be association of brand with good brand image and condition of diversification from other brands with something special.

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