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SURVEY OF ATTITUDES TOWARDS FOREST AND CHAIN OF CUSTODY CERTIFICATION IN THE SLOVAK REPUBLIC

The main aim of this paper is to examine the attitudes towards forest certification and certification of chain of custody in Slovakia. It presents the existing situation and analyses the potential development of certified wood and wood product market from the viewpoint of forest owners and wood industry representatives. A questionnaire was used to collect data on general attitudes as well as specific factors influencing present and future development of certification in the SR.

Keywords: forest certification, chain of custody, questionnaire survey, certified wood market

Introduction

Sustainable forest management

Forests represent an important element within the conception of sustainable development. They fulfil essential ecological, economic and social functions and create environment for people, flora and fauna. They contribute to the rural development and globally play an important role in the global carbon cycle. As forests cover almost one third of the Earth's surface, ensuring sustainable forest management is necessary if global sustainable development is to come true.

The state forest policy of the Slovak Republic defines forests as national wealth that needs to be protected and maintained. Sustainable forest management has a long-term tradition in Slovakia dating back to the imperial period of Mary Therese. The present principles of forest management are based on those historical roots. The principles of sustainable forest management are related to

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forestry legislation, protection of forest ecosystems, nature protection, protection of gene resources of forest trees, support and protection of biological diversity, rational use of multipurpose forest functions for the development of social, cultural and other needs of society.

The present principles of sustainable forest management (SFM) are based on the strategic objectives and aims defined in the global and Pan-European processes. The Ministerial Conferences on the Protection of Forests in Europe (MCPFE) have been held regularly since 1990 when the first conference was organised in Strasbourg. The last Ministerial Conference on the Protection of Forests in Europe "Forests for Quality of Life" was held on 5–7 November 2007 in Warsaw, Poland. The Conference highlighted the importance of contemporary challenges and decisions to assure that Europe's forests continue to be managed sustainably and provide benefits to the best of their potential. The Ministerial Declaration and two Warsaw Resolutions embraced requirements for political response to and decisions on the issues of promotion of wood as a renewable energy carrier and the role of forests in water protection in the context of climate change [MCFPE, 2008].

The Council Resolution of 15 December 1998 on a Forestry Strategy for the European Union established a framework for forest-related actions in support of sustainable forest management. The strategy is based on co-ordination of the forest policies of the Member States and Community policies and initiatives relevant to forests and forestry and it takes into account the commitments made by the EU and its Member States in the relevant international processes such as the UNCED and MCPFE conferences.

The forestry strategy in Slovakia is based on the principles of sustainable forest management following the conclusions of the MCPFE and the Improved Pan-European Indicators for SFM adopted in Vienna in 2003. The Slovak Republic as a signatory state has committed itself to [Novotný et al., 2003]:

- implementing criteria and applied indicators as a basis for elaboration of international reports on the state and development of the forests,
- supporting elaboration of the national criteria and indicators considering the specific conditions,
- assessing the complexity, importance and financial significance of indicators, assuring their continuation and improvement mainly in the connection with the assessment of forest functions that are not sufficiently covered by the indicators,
- assessing the ongoing progress of SFM for a certain period of time using the national criteria and indicators

All forests shall be professionally managed according to the principles of sustainable forest management. The forest management plans represent the main tool of implementation of those principles.

Following the vision and strategic objectives of the EU action plan for forests a Conception of agriculture development for the years 2007–2013 – part: Forestry was elaborated. This document defines the basic strategic objectives, aims and priorities of the agricultural sector in the middle term till 2013. The following strategic objective is formulated for forestry: Ensuring sustainable forest management based on the appropriate use of economic, ecological and social functions of forests for the development of society and mainly for rural areas. In 2007 the Government of the Slovak Republic adopted the National Forestry Program, the conception which is an important tool of ensuring sustainable forest management.

Forest certification

In recent years forest certification has become a worldwide issue and one of the most frequently discussed topics on forests. It does not only affect producers of wood raw material but also buyers, processing companies and users of wood and wood products. According to Hansen and Juslin [1999] forest certification can be defined as a method by which an independent, third party performs a valuation to determine whether forest management satisfies pre-established ecological, economic, and social standards and verifies it through a written document. The certificate, awarded by an independent party, verifies that the forests are managed according to the principles of sustainability. From the customer's point of view, forest certification assures that certified products come from sustainably managed forests that have been subject to independent third party auditing.

Forest certification has been created as a tool of promoting sustainable forest management all around the world. It comprises requirements on sustainability in economic, ecological and social aspect. It is also a tool of satisfying the needs of customers in the market that can help them to make decisions about consumption supporting sustainable development. Finally, forest certification is a marketing tool. Companies consider certification as one of their values and integrate it with marketing decisions [Paluš 2000; Šulek, Šálka 2003].

Certification process is applied at two levels:

- 1. certification of sustainable forest management (SFM) aimed at assessment of forest stands (site of origin of forest based products),
- 2. chain of custody certification (C-o-C) aimed at supply chain from forests to end users (tracing the origin of forest based products).

For a couple of years forest certification has been broadly supported worldwide and several certification schemes have been developed to internationally accepted standards. Until May 2009 over 308 M ha of world forests (over 7.8% of the total forest area) was certified. Sustainable forest management and chain of custody certification is an issue that has a significant impact on the participating stakeholders. However, the motives for taking part in certification can significantly differ among the participants at different stages of certification process. While forest owners would probably certify their forest to gain some economic benefit, broaden their markets or improve forest management practices, wood processing companies would try to fulfil the needs of their consumers and to satisfy the increased demand for certified products, as well as to increase their good-will and reputation in the market. The consumers will probably buy certified products to support sustainable forest management and sustainable development [Kaputa, Paluš 2006].

Public demand for certified timber has significantly influenced forest product markets in some European countries, mainly in the UK, the Netherlands, Denmark, France, and Germany. Those countries have implemented public procurement policies with the objectives defining government requirements for suppliers of timber to declare its origin from legal and sustainable sources. The policies incorporate criteria that are in favour of procuring certified timber and thus allowing companies to gain preferences in public tenders [Paluš 2006].

In Europe, the development process and implementation of different national schemes as well as different structure of issued C-o-C certificates vary among the countries. In Slovakia, the recent forest certification activities are connected with certification of forests according to the requirements of the national certification scheme (Slovak Forest Certification System) endorsed by PEFC in 2005. In May 2009, the area of PEFC certified forest reached over 1 220 576 ha. In February 2009, the area of FSC certified forests was 174,083 ha. At present there are 33 FSC and 17 PEFC C-o-C certificates issued for trading and wood processing companies in the Slovak Republic (www.fscslovakia.sk, www.pefc.sk).

One of the important objectives of certification is to link environmentally and socially sensitive consumers with the forest product producers who try to satisfy the consumers' needs. Certified timber placed on the market represents a new product with the properties that can satisfy social and environmental needs of society under the conditions that:

- consumers can appreciate ecological and social properties of the products and they will be influenced by product differentiation,
- producers will react to positive market signals demanding environmental and social attributes of the products,
- new and differentiated products allow producers to charge differentiated price,
- there will be increased international efficiency and competitiveness due to the interest in environmental and social issues.

Certification process is closely related to the cost of certification. Even if participation in certification process is voluntary the related cost can significantly influence the decisions of stakeholders to participate in this process. In general, three kinds of cost connected with forest certification can be distinguished [Paluš 2004]:

- 1. fixed cost (e.g. initial audit fees),
- 2. variable cost (e.g. relating to certified area),
- 3. cost related to changes in forest management resulting from adaptation of forest management to certification requirements.

Methods

Forest certification is primary linked to the assessment of forest management processes while C-o-C certification is aimed at the assessment of product properties from the viewpoint of transfer of information on the origin of the raw material included in the final products. Owing to the different objectives on both levels it can be assumed that attitudes, motives and factors influencing decision making regarding certification will differ for timber producers and timber industry representatives. This assumption has been tested by means of a questionnaire survey carried out among forest owners and wood processing companies in Slovakia.

The research on the attitudes towards forest and chain of custody certification among forest owners and industry representatives in the Slovak Republic was carried out in the years 2005-2008. The representatives of forest owners and managers in all regions of Slovakia, regardless of the ownership category and their participation in certification process, were questioned. The timber industry was represented by respondents from companies dealing with primary and secondary wood processing. The research did not cover the category of end users of final wood and paper products. Non-probability sampling (purposive sampling) with the aim to cover as much forest owners and wood processing companies as possible and to cover all forest ownership categories and types of wood processing was used to collect data. The questionnaires were mainly distributed directly to the respondents at different seminars and expert events as well as sent out by e-mail. Totally there were 33 forest owners (representing over 70% of total forest land) and 20 companies dealing with primary and secondary wood processing (representing over 70% of total timber processed in Slovakia).

There were two kinds of questionnaires of identical structure: one for the forestry sector and the other for the wood processing industry. Structure of the questionnaires partially followed the methodology applied in a similar survey by Pajari, Peck and Rametsteiner [1999]. Questions were divided into four sections:

- identification and basic information questions for respective groups,
- questions regarding forest certification,
- questions regarding C-o-C certification,
- general questions regarding certification.

The following questions were used:

- a) i. Identification of forest owners:
 - ownership type,
 - region,
 - forest area,
 - annual felling,
 - ii. Identification of wood processing companies
 - sector,
 - region,
 - company size (number of employees),
 - annual production of the three most important products,
- b) Forest certification
 - motives influencing decisions about participation in certification process,
 - factors hindering the development of forest certification,
- c) Chain of custody certification
 - factors influencing procurement of raw material input by companies,
 - factors limiting certified product markets,
 - factors motivating companies to supply certified forest products,
- d) General questions on certification
 - drivers of forest certification / factors creating favourable conditions for the development of forest and C-o-C certification,
 - factors which supported process of forest certification in Slovakia,
 - forest and chain of custody certification as a market tool.

The data obtained from the survey was transformed into electronic form for further analyses. As the collected data was qualitative, it was necessary to convert it into quantitative form. Owing to the use of purposive sampling the methods of descriptive statistics were applied. The frequency analysis was used for primary statistical analysis of data. Frequency tables illustrated absolute and relative occurrences. In accordance with the defined research objectives the attitudes of both groups of respondents were analysed separately, and consequently a mutual comparison of attitudes between the two categories was evaluated (e.g. what is the opinion of forest owners on the needs of wood processing industry to buy certified raw material). This approach helped us to identify similarities and differences in the attitudes of timber producers and wood processing companies.

The percentage values illustrated in the result tables represent a share of respondents who defined the respective factor as the most important.

Results

The comparison of results of the two respondent groups enables the identification of forestry and timber industry sectors. Part of the obtained results can be used for comparison of responses of both groups to the same questions aimed particularly either at timber producers or timber buyers and thus identify crosssector attitudes.

Both groups of respondents have different motives to become certified. "Sustainable forest management" is the main factor influencing forest owners while the industry is influenced by possibilities to gain "market access". Over one half of respondents from each group consider "improvement of marketing and business relations" and "environmental image" to be important motivation factors. As it follows from the results, the term "sustainable development" is closely tied to the term "forest certification" as far as decisions on participation in certification process is considered (table 1).

Table 1. Comparison of opinions on a	motives influencing	decisions	about participa-
tion in certification process			

Factor Czvnnik	Share of respondents marking the respective factor to be the most important (%) Udział respondentów, zdaniem których poszczególne czynniki są najważniejsze (%)		
Czynnik	Forest owners Właściciele lasów	Wood industry companies Firmy drzewne	
Market access Dostęp do rynku	57.6%	75.0%	
Improved communication Lepsza komunikacja	18.2%	0.0%	
Environmental image Środowiskowy wizerunek firmy	57.6%	60.0%	
Improved marketing and business relations Lepszy marketing i relacje biznesowe	54.5%	50.0%	
Pressure of NGOs Nacisk ze strony organizacji pozarządowych	9.1%	0.0%	
Expected decrease in revenues Spodziewany spadek dochodów	3.0%	0.0%	
Expected price premium Oczekiwana premia cenowa	24.2%	0.0%	
Sustainable forest management Zrównoważona gospodarka leśna	69.7%	35.0%	

Tabela 1. Porównanie opinii dotyczących motywów wpływających na decyzje o uczestnictwie w procesie certyfikacji According to forest owners the main factors limiting the development of certification are "lack of forest owner interest" followed by "lack of mutual recognition" and "cost level" associated with certification of forest stands. "Lack of domestic demand", "lack of forest owner interest" and "lack of export demand" are considered by wood industry companies to be the most limiting factors. The most important limiting factors determined by both groups of respondents are interlinked as "lack of forest owner interest" originating from the "lack of domestic demand" from the wood industry. Respondents pointed out the mutual relations between the producers and buyers of certified wood. Weak activity of both sides can finally hinder the development of certification (table 2).

Table 2. Comparison of opinions on factors hindering the development of forest certification

Tabela 2.	Porównanie	opinii	dotyczących	czynników	utrudniających	rozwój	certyfikacji
lasów							

Factor Czynnik	Share of respondents marking the respective factors to be the most important (%) Udział respondentów, zdaniem których poszczególne czynniki są najważniejsze (%)		
С2уннк	Forest owners Właściciele lasów	Wood industry companies Firmy drzewne	
Lack of domestic demand Brak popytu krajowego	33.3%	65.0%	
Cost level Poziom kosztów	39.4%	25.0%	
Lack of mutual recognition Brak wzajemnej uznawalności	45.5%	10.0%	
Lack of forest owner interest Brak zainteresowania za strony właścicieli lasów	54.5%	55.0%	
Conflicting interests Sprzeczne interesy	27.3%	10.0%	
Lack of institutional frameworks Brak ram instytucjonalnych	15.2%	10.0%	
Practical difficulties Trudności praktyczne	30.3%	20.0%	
Lack of export demand Brak popytu eksportowego	12.1%	30.0%	
Inability to promote SFM with certification Niemożność promowania zrównoważonej gospodarki leśnej wraz z certyfikacją	27.3%	0.0%	
Government attitudes Poglądy rządu	0.0%	10.0%	

Both groups of respondents are convinced that purchasing of certified wood by wood processing companies can contribute to the "enhancement of image" of a company. Nearly half of the forestry respondents believe that buyers gain a "competitive advantage" by purchasing certified wood. Interestingly, the same share of buyers assume enhancing "options for consumers". "Social responsibility" and other factors are of little importance to the respondents (table 3).

Factor Czvnnik	Share of respondents marking the respective factors to be the most important (%) Udział respondentów, zdaniem których poszczególne czynniki są najważniejsze (%)		
Czynnik	Forest owners Właściciele lasów	Wood industry companies Firmy drzewne	
Image enhancement Poprawa wizerunku	57.6%	55.0%	
Options for consumers Opcje oferowane konsumentom	39.4%	45.0%	
Competitive advantage Przewaga konkurencyjna	48.5%	40.0%	
Social responsibility Odpowiedzialność społeczna	9.1%	20.0%	

 Table 3. Comparison of opinions on drivers of demand for certified forest products

 Tabela 3. Porównanie opinii dotyczących czynników napędzających popyt na certyfikowa

 ne produkty drzewne

Both groups of respondents consider the possibility of gaining "market access" to be the most important factor for selling certified products. "Creating credibility" and "environmentally responsible image" are among the other important factors. All those three factors are considered by more than a half of respondents to be important for supplying certified products (table 4).

A "lack of premiums" is the main factor limiting the certified wood market. Forest owners are also convinced that market is limited by "limited industry involvement" in relation to "limited demand" for those products (table 5).

According to the forest owner representatives the fact that "certification is important in SFM" is the factor most favourable for certification development. This fact is closely related to the strategic objectives of forestry that aim at sustainable development and require other non-production function to be fulfilled by the forests. "Well arranged stakeholder participation" is also considered to be important. The representatives of wood processing industry are focused on selling possibilities as "export demand" is considered to be the most important for favourable development of forest certification (table 6).

Table 4. Comparison of opinions on reasons for supplying certified forest products
Tabela 4. Porównanie opinii dotyczących powodów dostarczania certyfikowanych produk-
tów drzewnych

Factor Czvnnik	Share of respondents marking the respective factors to be the most important (%) Udział respondentów, zdaniem których poszczególne czynniki są najważniejsze (%)		
Czynnik	Forest owners Wlaściciele lasów	Wood industry companies Firmy drzewne	
Market access Dostęp do rynku	66.7%	80.0%	
Environmentally responsible image Wizerunek firmy odpowiedzialnej środowiskowo	54.5%	50.0%	
Credibility creation Budowanie wiarygodności	57.6%	50.0%	
Differentiation of the products Zróżnicowanie produktów	30.3%	25.0%	
Intention to get premiums Zamiar pobierania premii	33.3%	30.0%	

Table 5. Comparison of opinions on factors limiting the development of market in certified forest products

Tabela 5. Porównanie opinii dotyczących czynników ograniczających rozwój rynku certyfikowanych produktów drzewnych

Factor	Share of respondents marking the respective factors to be the most important (%) Udział respondentów, zdaniem których poszczególne czynniki są najważniejsze (%)		
Czynnik	Forest owners Właściciele lasów	Wood industry companies Firmy drzewne	
Lack of premiums Brak premii	78.8	55.0	
Limited demand Ograniczony popyt	51.5	15.0	
Limited industry involvement Ograniczone zaangażowanie przemysłu	75.8	30.0	
Lack of supply Brak podaży	39.4	30.0	

Factor Czynnik	Share of respondents marking the respective factors to be the most important (%) Udział respondentów, zdaniem których poszczególne czynniki są najważniejsze (%)		
	Forest owners Właściciele lasów	Wood industry companies Firmy drzewne	
Favourable government Sprzyjający rząd	18.2	30.0	
Certification important in SFM Certyfikacja istotna dla zrównoważonej gospodarki leśnej	69.7	55.0	
Well arranged stakeholder participation Dobrze zorganizowany udzial interesariuszy	57.6	25.0	
Export demand Popyt eksportowy	51.5	60.0	
Benefits exceeding costs Korzyści przeważające nad kosztami	45.5	45.0	
Domestic demand Popyt krajowy	21.2	10.0	

Table 6. Comparison of opinions on drivers of forest certification
Tabela 6. Porównanie opinii dotyczących czynników napędzających certyfikację lasów

Table 7. Comparison of opinions on factors which supported process of forest certification in Slovakia

Tabela 7. Porównanie opinii dotyczących czynników, które wspomogły proces certyfikacji na Słowacji

Factor	Share of respondents marking the respective factors to be the most important (%) Udzial respondentów, zdaniem których poszczególne czynniki są najważniejsze (%)		
Czynnik	Forest owners Właściciele lasów	Wood industry companies Firmy drzewne	
Government of the SR <i>Rząd Słowacki</i>	24.2	0.0	
Forest owners Właściciele lasów	45.5	40.0	
Domestic retailers Detaliści krajowi	45.5	20.0	
Environmental groups Ugrupowania środowiskowe	57.6	20.0	
Domestic industrial customers Krajowi odbiorcy przemysłowi	18.2	30.0	
Domestic final consumers Krajowi użytkownicy końcowi	21.2	10.0	
Export demand Popyt eksportowy	66.7	75.0	

The most important factor stimulating the development of forest certification in Slovakia preferred by all respondents is the "export demand". This is because the export markets for the Slovak products are more developed as far as certification is considered, which, on the other hand, stimulates domestic supply of certified products. However, over a half of respondents believe that development of forest certification in Slovakia was supported by environmental groups (table 7).

There are differences in the views of both groups on SFM and C-o-C certification once certification as a tool ensuring certain objectives has been taken into account. Forest owners consider forest certification to be primarily "economic" and secondary "environmental" tool, while wood processing companies believe that certification is primarily "environmental" and then "economic" tool. The opinion that certification is a "social" tool is insignificant (table 8).

Factor Czynnik	Share of respondents marking the respective factors to be the most important (%) Udział respondentów, zdaniem których poszczególne czynniki są najważniejsze (%)		
Czynnik	Forest owners Właściciele lasów	Wood industry companies Firmy drzewne	
Environmental Środowiskowy	42.4	50.0	
Economic Ekonomiczny	51.5	35.0	
Social Społeczny	6.1	0.0	

 Table 8. Comparison of opinions on certification as a tool

 Tabela 8. Porównanie opinii dotyczących certyfikacji jako narzędzia

Both respondent groups prefer development of PEFC certification to FSC and other certification schemes. Neither respondent showed negative attitude towards forest and chain of custody certification.

Discussion

Based on the research results and published information on the attitudes towards forest and chain of custody certification, it is possible to state that there are two main and at the same time opposite attitudes towards certification. Those attitudes relate to the economic and environmental aspect of certification. The environmental aspect is supported by opinions pointing out the feature of certification as a tool needed for ensuring sustainable development through its contribution to the sustainable forest management. As follows from the research results, some of the respondents considered environmental aspect being a part of their social responsibility policies to be an important factor of their participation in certification process. It is generally known that the environmental approach is one of the main pillars of social responsibility policies.

At the same time it is necessary to mention that the demand for certified wood and wood products principally does not originate from the end users but mainly from the initiatives of environmental and other stakeholders that create pressure on individual elements of the chain of custody within the entire supply chain. Many companies try to utilise the environmental aspect of certification in order to build environmental image for their consumers, partners, and public and other stakeholders. The economic aspect principally is expressed through the opinions on certification as a marketing (in a broad sense economic) tool. Certification is perceived as an additional mechanism in trade activities based on the premise of improvement of the company's position in the wood and wood products market. It is a market aspect of certification that is emphasised. By participating in certification companies make effort to improve market access and communication with stakeholders, build image etc.

The comparison of selected attitudes of respondents pointed out some interesting conclusions. On the one hand, representatives of wood processing companies consider "market access" to be the main incentive for participating in certification process, while certification is considered as an "environmental" tool. On the other hand, forest owners believe that certification principally is an "economic" tool; however "sustainable forest management" is the main factor deciding their participation in certification. Based on that it is possible to conclude that the term "sustainable forest management" is closely linked with forest certification; however certification itself is considered to be an economic tool, i.e. forest certification is not necessary to ensure sustainable forest management in Slovakia, but rather it is considered to be a marketing tool supporting sales of wood on the market. Results also show that sustainable forest management and export demand are the most important factors pointed out by the respondents and they are significant in relation to further development of forest certification in Slovakia.

Price premium is the most important factor limiting certified wood product market. It represents a financial addition to wood raw material or wood products incurred by the producer. This additional charge is a voluntary tool and producers can utilise it to include the cost related to certification process or wood origin tracing in the product price. Once it is applied, one has to decide whether to include the complete cost or a proportional part of cost in the price. The final decision depends on producers' awareness of consumer preferences and on the availability of information on their willingness to pay a higher price. The certified entities may also decide not to include cost in the price calculation. In this case the motives for certification include company image, green marketing, and competitive advantage of certified products (in case there is a demand for those products) or there may be no willingness to accept a higher price in the market [Kaputa, 2008]. The survey results show that price premium is not accepted in the market, so there is no stimulus to spend additional amount of money on certification in the supply chain. There is a sensitive perception of price premium in the market. Kozak et al. [2004] states that a majority of surveyed respondents were willing to pay a certain price premium under the condition that products would have an appropriate quality and design. The author also points out that there is a certain end user segment creating demand for certified wood products even if this segment is considered by companies to be very weak. However, some export oriented companies exporting their products to "environmentally sensitive markets" can apply price premium to some extent.

In many aspects the results point out a connection between sustainable forest management and the role of forest and chain of custody certification. The information on certified origin of wood is transferred through different stages of processing to the end users. Finally, the consumers' interest in purchasing certified products should decide the success of certification in the market. Consumers consider sustainable development as a general term linked to the influence of society on the environment. Based on the research carried out among the American consumers of wood products, Teisl et al. [2002] indicated an influence of environmental labelling of wood products on purchasing decisions of respondents. The environmental labelling plays a significant role in paper products, where the strongest connection between the high level of consumption and environmental impacts was identified.

Once the attitudes of respondents towards consumers of certified products are taken into account, factors such as weak domestic demand and willingness to accept a price premium were identified in the research. Kozak et al. [2004]. Bigsby and Ozanne [2002], Spetic et al. [2005] point out a willingness of part of consumers to pay a price premium for those kinds of products. Such consumer segment in the market has a potential to grow if it is supported by an appropriate form of communication on the value which certified wood products bear. Forest owners and representatives wood processing companies do not consider the intention to gain a price premium to be a significantly motivating factor, but it is rather considered to be a limiting factor for development of certified wood market. Some foreign studies show similar results. Hrabovsky and Armstrong [2005] indicated that over a half of the guestioned export oriented companies were sceptical about acceptation of any price premium by their consumers, which, in connection with low demand, poses problems for chain of custody certification. The main markets in certified wood products are concentrated in the Western Europe (mainly UK, Germany, the Netherlands, and Denmark).

Hubbard and Bowe [2005] show that companies do not link a possible benefit of price premium to the chain of custody. Similarly there are no links between C-o-C certification and productive and managerial improvements, market share increase, and improved market access. On the other hand, results of research carried out in Slovakia show that improved marketing and trade relations as well as market access represent important factors influencing decisions about participation in certification process.

Pajari, Peck and Rametsteiner [1999] state that a majority of companies incorporate ecological aspects of their activities in the long-term strategic objectives. Their research proves that the attitudes of companies to environmental certification is one of the possibilities of gaining competitive advantage, even if environmental awareness of consumers does not significantly influence behaviour of companies in the market. The results also proved that environmental issues affect management and activities of a prevailing part of companies. This is mainly connected with pulp and paper plants where C-o-C certification is often combined with other certifications (EMAS, ISO 14 000 etc.). From the marketing point of view, environmental issues are the main tools used in marketing communication. Once a company invests in the implementation of certification systems, it has an ambition to inform its consumers. Similar research was carried out in the EU countries with significant role of the forest sector in their economies (Finland, Germany, and the UK). In general, no significant differences between the results of surveys carried out in those countries and in the SR were identified

An analysis of the present needs and implementation of certification schemes in Slovakia proved the importance of chain of custody certification for companies if they want to improve their performance in the domestic market and foreign markets and develop further. The companies are aware of weak demand on the local markets, hence they look for opportunities abroad where certification can play a role of important marketing tool.

Conclusion

A growing number of consumers is seeking evidence of environmentally sound business practices. Public authorities and corporate procurement policies more and more often demand from the paper and wood-processing industries reassurance and proof that the wood they use for their products comes from sustainably managed forests. It is generally agreed that wood-based products have a better overall environmental record than competitive materials, but questions have arisen about the management of forests from which the wood originates. Therefore businesses need a reliable and credible mechanism to prove to their customers where the wood used in their products comes from. According to the development of recent social and political structures in Europe as well as worldwide the growing significance of forest certification could be expected. With the growing international market in certified wood products and the importance of this market to the Slovak exporters there can be further development of certified area and number of C-o-C certificates issued in Slovakia.

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ANKIETA DOTYCZĄCA POGLĄDÓW NA CERTYFIKACJĘ LASÓW I POCHODZENIA PRODUKTU NA SŁOWACJI

Streszczenie

Głównym celem było pozyskanie informacji na temat poglądów właścicieli lasów oraz firm drzewnych na Słowacji na certyfikację lasów i pochodzenia produktów drzewnych. Ankietyzacji poddano właścicieli lasów reprezentujących wszystkie kategorie własności niezależnie od ich zainteresowania certyfikacją lasów oraz przedstawicieli przedsiębiorstw zajmujących się pierwotną i wtórną obróbką drewna. Analizę zebranych danych przeprowadzono z zastosowaniem opisowych metod statystycznych, w tym analizy częstotliwości. Każdą kategorię respondentów analizowano indywidualnie, a następnie dokonano porównania opinii z obu kategorii. Celem porównania było określenie różnic i podobieństw pomiędzy producentami drewna i jego przetwórcami w zakresie poglądów na certyfikację lasów.

Wyniki badań wskazują, że środowiskowe i ekonomiczne aspekty certyfikacji lasów wpływają na poglądy na certyfikację. "Dostęp do rynku", "popyt zagraniczny" oraz "poprawa relacji marketingowych i biznesowych" to kluczowe czynniki ekonomiczne wpływające na decyzje respondentów w sprawie uczestniczenia w certyfikacji. "Niska lub zerowa premia cenowa" uważana jest za główny ograniczający czynnik ekonomiczny. Poglądy użytkowników końcowych na certyfikacje, niski popyt krajowy na certyfikowane produkty oraz brak akceptacji premii cenowej postrzegane sa jako czynniki utrudniajace rozwój certyfikacji lasów. "Rola certyfikacji w zrównoważonej gospodarce leśnej" uważana jest za najważniejszy czynnik środowiskowy wpływający na decyzje respondentów odnośnie do uzyskania certyfikatu. Wyniki ankiety porównano z wynikami podobnych badań przeprowadzonych przez zagranicznych autorów. Nie znaleziono istotnych różnic pomiędzy pogladami respondentów zagranicznych i respondentów słowackich. Przedsiebiorstwa, których celem jest preferowanie wartości środowiskowych są dobrze przygotowane do włączenia aspektów środowiskowych do marketingu, aby zyskać przewagę konkurencyjną na rynku. Istnieją perspektywy dla przyszłego rozwoju certyfikacji lasów i pochodzenia produktu. Jednakże tempo rozwoju zależy od ogólnego zainteresowania społeczeństwa oraz popytu na produkty certyfikowane w ramach łańcucha las - użytkownik końcowy.

Slowa kluczowe: certyfikacja lasów, łańcuch kontroli, ankieta, rynek drewna certyfikowanego