Research Article

Wood Industry is an Important Factor for the Kosovo's Development-The Role of Higher Education

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Abstract

Kosovo is relatively small place with 10870 km² where 44.7% of its territory is covered with trees. To date, Kosovo has passed through three important phases of economic development; the first phase was the emergency one after war, the second phase was privatization of social enterprises and the third phase was sustainable development. The after war period was very important for this sector because it has passed through a reconstruction process, privatization and development and become part of the internal and foreign markets. Positive developments in the field of wood industry led to the number of work places offered in this field are increasing; also requirements for specialized workforce and qualification workers are increasing. This is the reason why today's study programs of wood industry are addressing these issues. One of the study programs that is applied in many European Universities and beyond in the wood program at The University of Applied Sciences in Ferizaj. The University of Applied Sciences in Ferizaj is the only high institution in Republic of Kosovo that for 40 years offers Kosovo's students, and widely, opportunity to study in wood industry. Based on high expertise of this institution and the achieved results, together with experts of this industry, along with relevant Kosovo institution and private enterprises as well as in cooperation with western universities, the faculty presented a new study offer. This offer meets the highest contemporary needs and is compiled together with wood processing enterprises in Kosovo, and with Kosovo Wood Processing Association. Also this study project is fully equivalent with European Universities and is comparable to University of Applied Sciences Salzburg, Austria and University of Applied Sciences Rosenheim, Germany. This curriculum offers students to built new competences, combining scientific and technological knowledge for industrial management, communication knowledge and creative work. Furthermore, during studies a special time will also devoted to building management competences as: project management, team work, etc. However, the scientific work and research methods, working with projects from the start of study, means that students not only that will study but they will also gain the ability for practical projects, and this fact makes these practical projects to be very complexes and more interdisciplinary in high study semesters. Orientation of this curriculum in projects is focused in a way that the study process should be more closely with industrial practices and scientific analyses of all practical parts in economical context. The fact that Kosovo approximately has 44.7% of all area that are covered with trees represents a relatively good potential for development of this sector domestic market, and on the other side potential for exports of wood products. This sector can be very attractive for foreign investments and can generated new jobs.

Keywords: Wood industry, development, curriculum, forest.

Introduction

Located in the heart of the Balkans, Kosovo represents a bridge between the several countries of South Eastern Europe. Through its unique geographical position and its liberal trade regime, Kosovo offers instant access to the interesting and growing markets of the Balkans and Central Europe, compromising 100 million potential customers. Currently the harvesting potential of Kosovo is to a large extent under-utilized. Not only are the various types of wood in Kosovo easily accessible in terms of quantity, but they are also available at competitive prices.

Taking into consideration that wage levels in Kosovo are below the regional average and that the costs of inputs are competitive, one of the main advantages of the wood processing industry in Kosovo is its low cost. In addition to basic labor available at

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low rates, there is also a large pool of highly skilled workers available at a reasonable cost.

Given its central position in the Balkans and its liberal trade regime, Kosovo offers potential investors a favorable place from which products can be exported, free of any customs duties to the CEFTA and EUmarkets. In particular, the wood industry therefore represents a good investment opportunity for those companies wishing to offer wood products to the regional market, manufactured at reasonable production costs.

Currently Kosovo enjoys a higher demand for finished wood products than local businesses can satisfy. In addition to export opportunities therefore, fulfilling local market needs offers a huge potential.

Forests and related areas cover approximately 44.7% of the total surface of Kosovo and represent a resource of special importance for the Kosovo economy (Bajraktari, A *et al.* 2011) (Figure 1).

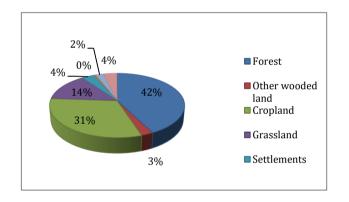


Figure 1 Land of Kosovo in percentage (%)

The annual value of wood products and other benefits arising from forests and related areas is estimated to be between approximately 50 and 75 million Euro, resulting in a contribution by the wood industry of between 1.8 percent and 2.6 percent to GDP. The wood sector is also an important employment provider in Kosovo. The livelihood of between 8 and 10 percent of the population depends upon the forestry and wood industries (EICIKS, Investment Promotion Agency of Kosovo. 2008).

Apart from its use solely for heating purposes, forestry represents an important input for the domestic wood processing industry. Until 1989, this sector was rated among the most significant export sectors. Kosovo used to export wood products as far away as the US and several European countries, in addition to its traditional markets in the former Yugoslav republics.

Currently the wood products made in Kosovo include doors, window frames, furniture and various wood construction materials, while the manufacture of other products, such as fencing material, pallets, boxes, dimension and prefabricated components, is still limited. Although the domestic production currently caters solely to the Kosovo market, with a limited (and insignificant) number of products being exported to Albania and Macedonia, the industry has enough capacity not only to meet the domestic demand, but also to expand into export markets. Owing to its vast experience and expert knowledge in wood processing, the Kosovar wood industry is particularly well suited to the manufacture of hand-made luxury products. In addition, most sawmills in Kosovo only saw logs into rough, mixed grade lumber, and do not appear to recognize, or have not yet explored, the potential value of waste products from lumber production, i.e. sawdust and wood chips.

Faculty of Technical Applied Sciences in Ferizaj is academic part of the University of Prishtina, its objectives are advanced studies and scientific researches in applied academic disciplines of Mechanical Engineering with profile: Artificial Processing Materials Techniques (plastic masses), and discipline of Design and Wood Technology with profile: Interior Design and Wood Technology.

Academic studies of the Faculty are concentrated in Bachelor studies with practical work, based on concept of European Universities for Applied Sciences. The curriculums are based and implemented according to Bologna System, where every course is estimated on credits attained by student. The number of credits and individual work is presented on the table of curriculum of corresponding departments.

The Faculty goals are concentrated on country work force needs, training, and study of professionals all the time, giving the best offers for local partners. Practical work in the Faculty support and create advanced standards in scientific researches for effective utilizing self-funded revenues, having effective cooperation on studies in national, regional, and international level, adapting to international standards, and finally integration to European Higher Education, which is represented by European Community.

The mission of our institution is alongside teaching students during studies, having cooperation with local and international partners, through mobilization of students and professors by utilizing of material resources, comparing with local economical needs and gradual advancing of teaching quality

Industrial policy in the forestry sector

Forests and related surfaces in Kosovo are managed by the Kosovo Forests Agency, part of the Ministry of Agriculture, Forestry and Rural Development. According to the principles of the Law on Forests, this agency is responsible for preserving the biodiversity of forests while providing a valuable yield. The Kosovo Forest Agency is therefore the sole authority in charge of compiling and implementing long-term forest development plans, carrying inventory, assigning annual harvesting allowances and issuing permits and licenses in order to undertake harvests. Another body, the Kosovo Association of the Private Forest's Owners, promotes its members' interests, facilitates the trade of wood, and provides assistance to others to ensure the development of the private forests.

Last but by no means the least important is the Association of Wood Processors of Kosovo, a trade association which fosters the development of the processing industry by helping the wood processors to implement new technologies and know-how, as well as to find new markets and expand exports.

Through the efforts and engagement of the members of this rich institutional environment of the wood Industry, Kosovo has started to implement various incentives to further promote and facilitate primary and secondary wood production. Recently, the Government of Kosovo approved a zero tariff rate for the imports of machinery and capital goods related to this sector, while further negotiations for the exemption of wood raw material from VAT and customs policy are currently taking place. Furthermore in cooperation with several international institutions, the Government is implementing various programs to increase the quality, know-how and economic results of this industry (EICIKS, Investment Promotion Agency of Kosovo. 2008).

Primary wood production

The primary production of wood in Kosovo is dominated by public forests. Of a total forest area of 464,800 ha, as much as 278,880 ha (or 60 percent) is under public ownership, while the remainder of 185,920 ha is split between approximately 120,000 private forest owners (FAO. 2003).

The total standing volume of wood is estimated at 53 million m³. Of the total volume, 40.4 million m³ of trees have a diameter greater than 7 cm. Broadleaved forests predominate, covering 90 percent of the area. Oak and beech are the main species (FAO. 2003) (Figure 2).

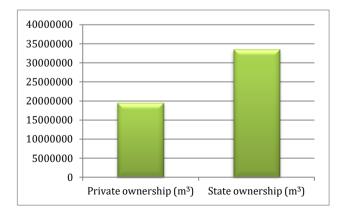


Figure 2 Forests volume by ownership

The annual increment of forests is calculated to be 1.30 million m³. Thus, based on international standards, the annual felling allowance is 900,000 m³, corresponding

to 77 percent of the annual increment. Of this figure, about 700,000 m³ can be harvested in high forest and about 200,000 m³ in low forest areas. These figures are gross and additionally include tops, bark and larger branches (Bajraktari, A. *et al.* 2011) (Figure 3).

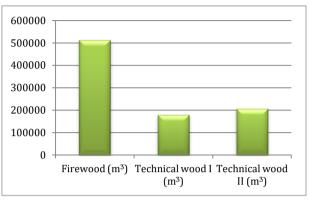


Figure 3 Annual harvesting in m³

Depending on the quality of the harvested wood, a relatively high percentage can be used by the processing industry. Of the total annual felling allowance, 43 percent is categorized as technical wood (class1 and 2), while the remainder is used for heating purposes (FAO. 2003).

With a high capacity for supply, the Kosovo wood primary production can, to a certain extent, cover the demands of the local processing industry. Furthermore, owing to low wood prices per mi wood produced in Kosovo will become an important item in foreign trade.

In addition to wood, the Kosovo forests are well endowed with non-wood products such as mushrooms, berries and herbs. The growth of these species is continuously increasing, mainly due to the low degree of environmental pollution and adequate treatment by the rural population.

Wood types in Kosovo are: beech (fagus), oak (quercus), other broadleaves, abies alba (fir), pinus abies, pinus ssp, other coniferous (FAO. 2003).

Wood processing industry

According to the Ministry of Trade and Industry, 1480 enterprises are registered as wood processors in Kosovo. The Association of Wood Processors accounts for some 80 of the most important companies, employing more than 3,000 workers (EICIKS, Investment Promotion Agency of Kosovo. 2008).

According to the data available, six (6) companies have turnover ranging from 1 to 6 millions \in . All other companies have declared a turnover under 1 million \in ... Of the 80 companies who are AWPK members, 50% are manufacture furniture and the remaining 50 % make doors and windows.

Finished products represent more than 75 % of production while semi – finished products make up less than 25%.

Owing to a sufficient availability of inputs, Kosovar wood processing companies mostly use beech (Fagus), Oak (Quercus) and other broadleaves in their production. The majority of these processors produce furniture, doors, and windows. As a subset of the secondary manufacturing sector, there are also several enterprises engaged in cutting or milling lumber.

During the past eight years, Kosovo's wood processing industry has experienced some significant changes. Owing to better organization and satisfactory service-providing clusters, producers were able to increase the quality and product range, and expanded into foreign markets. Currently, Kosovar wood processors supply home and hotel furniture to companies in Germany, Netherlands, Switzerland, as well as other neighboring markets (Kaciu S. Jahanica, V. Aliu, F. 2008).

According to the Kosovo Customs Service, the total amount of imported wood products from 2005 till 2010 is presented (FIGURE 4). In the next figure is presented also the export of wood products (Figure 5) (Kosovo Customs Service Reports. 2006-2011).

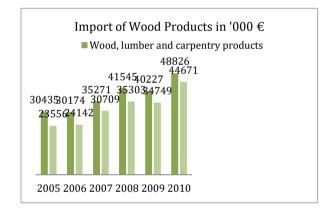


Figure 4 Import of wood products from the year 2005 till the year 2010

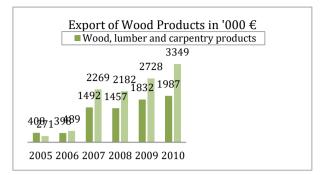


Figure 5 Export of wood products from the year 2005 till the year 2010

Conclusion

This represents a relatively good potential for development of this sector within the country, and on the other side generated exports of wood products. It can be very sustainable sector for drawback of invested assets and can generated new jobs.

References

- Bajraktari, A, Thaci B, Zejnullahu A, Cukaj K. 2011. Kosova's Forestry Statistics. Report to the Ministry of Agriculture, Forestry and Rural Development. September 2011. Prishtina, Republic of Kosovo.
- FAO. 2003. Kosovo's Forests Inventory Report. Food and Agriculture Organization of the United Nations. April 2003. Prishtina, Kosovo.
- Government of Kosovo. Ministry of Finance. Kosovo Customs Service Reports. 2006-2011
- Kaciu S. Jahanica, V. Aliu, F. 2008. Forest Industry Challenges of Development and Balanced Use, Kosovo Cluster and Business Support Project. United States Agency for International Development. Prishtina, Republic of Kosovo.
- Bajraktari, A. Thaci B, Zejnullahu A, 2011. Kosovo's Forests, Report to the Ministry for Agriculture, Forestry and Rural Development. September 2011. Prishtina, Republic of Kosovo.
- Ministry of Trade and Industry of Kosovo, EICIKS, Investment Promotion Agency of Kosovo. 2008. Primary Wood Production and Wood Processing Industry. June 2008. Pristina, Republic of Kosovo.