# "THE GAP ANALYSIS AND PORTER'S DIAMOND AS A TOOL TO IMPROVE THE COMPETITIVENESS OF METALWORKING SECTOR IN BEAR REGION (BUSINESS EXCELLENCE AREA), BOSNIA AND HERZEGOVINA"

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### ABSTRACT

This article provided a summary of the key factors related to the competitiveness of the metalworking sector in BEAR micro-region (Teslić-Tešanj-Žepče) as identification of gap analysis for that sector. The article is intended to provide a detailed model of production and export chains in BiH from metal made products stressed on automotive industry. Through the market analysis, the author gained a more in-depth understanding of the market opportunities for metalworking sector. The author developed a draft market survey instrument with the objective to develop a questionnaire that is short, concise and easy to complete but captures the critical data for the market survey.

During survey, it has been decided that Porter's 5 forces approach as well as Porter's Diamond model will be used for conducting the Analysis of competitiveness above mentioned sector in BEAR mico-region.

Gap analysis was conducted in order to determine points at which one or more interventions could help to significantly improve the competitiveness of the sector's small and medium enterprises (SMEs). This GAP Analysis assesses the status of Small and Medium-sized Enterprises (SME) in BEAR's metalworking sector, within the model of production and export value chains in metalworking and automotive sectors. The focus of this article also highlights the proposal for Point of Interventions (POI) within the pilot project.

Keywords: Gap analysis, metalworking sector, competitiveness, Porter's Diamond, BEAR.

#### **1. INTRODUCTION**

This article provided a summary of the key factors related to the competitiveness of the metalworking sector in BEAR micro-region (Teslić-Tešanj-Žepče) as identification of gap analysis for that sector carried out in November 2014. In November 2014, the Consultants conducted a special survey of metalworking competitiveness capacities in BEAR microregion Teslić-Tešanj-Žepče which expressed its interest for participation in GIZ Prolocal programme. The survey was commissioned by and for the use of the the Prolocal Programme which is carried out by GIZ [1]. During development of the methodology for this research, the author have tried to fulfill the following requirements:

- The metalworking sector is observed from the perspective of experts;
- To develop activity indicators which often go beyond the legal minimum of competencies and responsibilities of stakeholders, but they can be achieved without significant financial investment and it has been proved in practice that it facilitate the work of businessmen and affect the positive image of the metalworking sector as a good place for investment in Bosnia and Herzegovina;
- Criteria that do not discriminate smaller and poorer municipalities;
- To analyze the areas that have the potential to become, or are already the subject of cooperation between firms and development agencies and universities;

- To identify examples of practices that can serve as models for future solutions to other industrial sectors;
- To develop a methodology that can be applied in a short period of time and whose cost is not too high;
- Criteria that enable monitoring of metalworking sector over the time.

#### 2. RESULTS OF SURVEY

In order to evaluate business performance of metalworking sector, the Consultants used a questionnaire developed in cooperation of GIZ consultant and analyzed the resulting data.

The survey was predominantly qualitative in nature. The process started with a selection of industries with significant competitive potential, made during a well-prepared initial workshop. This was followed by in-depth interviews with the owners or representatives of the management of companies from the metalworking sector for the purpose of gathering information on competitiveness, environment and conditions under which the companies operate.

The analysis included 43 companies from the metalworking industry, including automobile parts manufacture, which illustrate the situation in this industry in BEAR micro-region in a representative manner. The structure of questions in interviews reflected Porter's model of five competition forces [2]. Information about competitiveness, suppliers, buyers, new competitors, support of government institutions and other supporting organisations, policies and regulations that had a positive or negative impact on companies and potentials for improving the performance of these companies was gathered by means of these interviews.



Figure 1. The Porter's model of five competition forces.

Belongs to BEAR micor-region, Tešanj is leading in terms of presence and competitiveness in the metal processing industry as compared to other comparable locations in Bosnia and Herzegovina, but also in the Western Balkans region. It is an industry with long-term development tradition, which started developing in the 1950s and key development impulse in the 1970s as a result of automobile parts manufacture for the German automobile industry. The experience acquired at large pre-war companies served as a generator for establishing a series of small and medium enterprises after the 1990s, so that there are more than 30 successful SMEs in the industry [3]. These are mostly family businesses, and the industry is also characterised by the presence of large international companies. The companies of the industry are pronouncedly export-oriented, so that five most important companies in the industry export 97% of their products, most of them to the most demanding German market [1].

Key advantages and disadvantages of the metal processing industry of Tešanj municipality, analysed from the perspective of the diamond model of competitiveness, see figure 2.

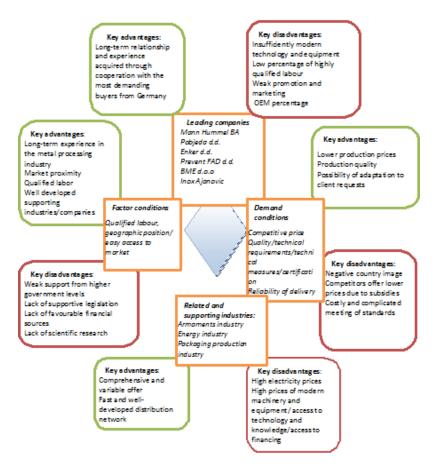


Figure 2. The diamond model of competitiveness in case of metalworking sector in BEAR microregion.

If we were to identify a factor that has had the greatest impact on the development of competitiveness of companies in the sector, most arguments are included in the conclusion that the cooperation with the extraordinarily demanding German economy has had the greatest impact on the intensive industry development and significant level of competitiveness of companies. On the other hand, it may be concluded that supporting institutions, especially at the cantonal, Federation and state-level, have had a negligible or insufficient impact in terms of competitiveness of companies in the sector [4].

The communication and meetings between representatives of public sector institutions and interested companies will be intensified over the coming period in order to identify effective and feasible interventions that may contribute to an improvement of the competitiveness of the industry and subsequently development of joint action plans. A priority will be activities that may contribute to strengthening of mutual links between companies and mutual cooperation, by combining the resources of the public and private sector as well as the relevant international project support.

An overview of the situation and key identified problems as compared to key potential focuses of interventions is given in the table 1.

Focus:	Situation and challenges:
Labour/ staff	<ul> <li>Insufficient number and quality of available employees, both engineers and metal processing technicians and master craftsmen as compared to development needs of companies in the metal processing industry</li> <li>A great generational replacement and transfer of management experiences and professional skills in metal processing lie ahead</li> </ul>
Supporting export and business networking	<ul> <li>Most companies in the industry export their products and have business cooperation with companies from Germany, Switzerland, Austria, etc.</li> <li>Most of the companies are interested in increasing imports and expanding the business cooperation to the most demanding markets of the EU</li> </ul>

Table 1. An overview of the situation and key identified problems in metalworking sector [1].

	- Companies do not devote sufficient attention and do not allocate sufficient
	resources to marketing and new linkage channels (Internet)
	- Better supporting services at the municipality are needed for the accommodation
	and stay of business partners
Access to capital	- Insufficient and unfavourable sources of turnover and investment capital
Product development	- Lack of capacities for design and development of new projects at SMEs
	- Technology transfer is left only to companies (which makes it lengthier and more
	expensive)

#### **3. CONCLUSION**

An overview of potential interventions resulting from the conducted survey in metalworking sector in BEAR micro-region is given in the table 2.

Table 2. An overview of potential interventions in metalworking sector [1].

Focus:	Potential interventions:
	- Intensifying communication and cooperation between the Adult Education Centre in Tešanj and companies from the metalworking industry for the purpose of ensuring better trainings, acquisition of practical skills and facilitating the transfer of knowledge and skills of master craftsmen as part of the generational replacement
Labour/ staff	- Strengthening and expanding the already started in-house training initiative implemented by companies Medena Commerce and Saračević; later on ensuring the transfer of relevant knowledge to the formal education system
	- Analysing, specifying and consolidating labour-related needs of companies in the metalworking industry over the short and long term; timely professional orientation of secondary school students towards professions in demand
	- Using cooperation potentials provided by the Delegation of German Industry and Commerce in Bosnia and Herzegovina (AHK), including also specialized export management training
СЕ	- Assisting companies in developing high-quality business profiles and web portals for networking with partners and strategic investors, through AHK and European linkage and networking bases
	- Preparing joint promotion materials and organising attendance at specialised fairs, primarily in Germany (including also discussions with potential partners)
A gauge to equital	- Presentation of innovative models for ensuring investment capital (equity capital, etc.) and potential assistance to companies in the preparation of relevant business models
Access to capital	- Organisation of discussions between companies from the industry and bank representatives (including also the Development Bank of the Federation of BiH) in order to ensure better support for further industry development
Product	- Analysis of possibilities for supporting the Project/Development Office in Tešanj that has already specialised in product design and development
development	- Selection and organisation of presentations of new technologies and equipment used in metal processing in cooperation with local companies

#### 4. REFERENCES

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