

**“THE ADULT EDUCATION CENTER TEŠANJ AS PRECONDITIONS  
FOR COMPETITIVENESS OF LEADING INDUSTRIAL SECTORS IN  
BEAR REGION (BUSINESS EXCELLENCE AREA), BOSNIA AND  
HERZEGOVINA”**

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## **ABSTRACT**

The Centre for adult education Tešanj is established in December 2013, and functions as organizational unit within TRA-Development agency of Tešanj Municipality. Operating of the Centre since its beginning is related to implementation of specialized programmes of training and education of labour force according to needs of business sector. An analysis of the existing workforce on the territory of six municipalities in BiH, in terms of qualification, skills and future workforce and training needs are presented in this article. Quantitative field research was performed through surveying, using prepared questionnaire of 102 enterprises in BEAR micro-region and its three neighbouring local communities. The primary research sample were based on registration of companies activities. It was assumed that they produce export oriented products. Out of 102 companies for which it was established that they are wood processing oriented 85 of them gave the required data and the other 17 companies refused to give data on their activities. The project framework achieves mapping employers' needs for skilled labor force. Research has shown that in the next two years, metal processing companies on the territory of the six municipalities need to employ a significant number of qualified CNC operators. Based on the evaluation of implemented training programs has been established that it is necessary to better adapt curricula and training programs to actual needs of companies in the metal processing sector, and special emphasis is placed on training module learning that relates to the measurement and control.

**Keywords:** *Analysis*, workforce, Life Long Learning (LLL), The Centre for adult education, training, BEAR.

## **1. INTRODUCTION**

According to available data from Federal office for statistics in 2014, in the territory of Tešanj municipality is registered 2132 business subjects (from where is: 811 legal entity, 440 units and 881 crafts). This positions Tešanj municipality to the second place in ZE-DO Canton, after Zenica, according to the number of registered legal entities. This is of special importance if we bear in mind that according to the surface that Tešanj municipality has puts it to ninth place, and to the second place according to the number of inhabitants in ZE-DO Canton. This positions Tešanj municipality to

the areas which have very well developed entrepreneurship in BiH and high level of developed economy activities. According to statistics from Agency for employment of ZE-DO Canton Tesanj municipality has high rate of unemployment. Rate of unemployment of Tesanj municipality is close to average rate of unemployment in Federation of B&H. At the end of January 2015 there were registered 7.823 unemployed persons, which is quite high rate comparing to 10.463 employed. In comparison with rest of the 11 municipalities in ZE-DO Canton, Tesanj municipality as second municipality according to number of inhabitants has highest number of employed, just after Zenica. Attention is given to development of its own human resources as well. Special attention is given to school development and providing of scholarships for students. There are three secondary schools in Tesanj municipality with 2500 students. Secondary Vocational School Tesanj, on the basis of enquired results, is ranged as best vocational schools in BiH. Development of modern technology, which is used over 30 years in the companies of the Tesanj municipality, has got additional meaning by opening of Centre for adult education in Tešanj as well as Wood Technology Centre ARTECO [1].

## **2. THE IMPORTANCE OF REGIONAL AND LOCAL DEVELOPMENT**

Regionalization is one of the fundamental notions of regional development. BiH is not the only country with this problem, although some of its characteristics (historical, political, transport infrastructure, ethnic etc.) give this problem special significance [2].

In Bosnia and Herzegovina there is no official classification of economic regions. According to historical, economical, social and cultural relations in BiH, five economic regions are identified. An Economic Region is a single economic space, consisting of a number of local units, which have common economic relations. The RDAs are essentially non profit-making organizations, founded by the public, private and non-governmental sectors, to contribute to overall economic development. They are instruments to support economic regeneration, job creation and human resource and infrastructure development in the different regions [3].

Despite current regionalisation in BiH, three municipalities from both entities in BiH (FBiH and RS) has signed of inter-municipal cooperation agreement on the implementation of the project "Promotion of location advantages of Tešanj, Teslic, and Zepce micro region" (September 2012.) financed by the German Society for International Cooperation - GIZ, with the aim of strengthening inter-municipal structures for effective and sustainable local economic development of these local communities so called BEAR area (Business Excellence Area). BEAR area is an informal form of organizing three units of local government and covers the area of the three municipalities. The ProLocal Programme in Bosnia and Herzegovina implemented by GIZ, provides support to local development agencies and other actors and partners in selected business locations for the purpose of boosting local economic development and improving competitiveness of companies in the targeted sectors. Now, the cooperation of three municipalities advanced that their representatives in partnership seek EU support for the project that includes joint activities to create a more favorable business environment and increase the competitiveness of its SME sector. Since November 2014. TRA Tesanj Development Agency in collaboration with its partners is implementing the project co-called "Competitiveness of Business Excellence Area - COBEAR". This project will support the implementation of the following main objectives: to stimulate a favorable business environment in the BEAR area; increase the level of competitiveness of export-oriented enterprises in targeted sectors and BEAR area; increase the number of employed persons in the BEAR area [4].

## **3. CASE STUDY FROM TESANJ MUNICIPALITY**

The most important findings of mentioned Analysis were as follows [1] :

- number of unemployed 20.271 ;
- out of 35 surveyed companies from area of Teslic and Zepce, there is 31 company expressed need for additional training of the workforce;
- 50 companies surveyed from the areas of Tesanj, Usora and Doboju-jug, there will be needed 601 in the next 3 years;
- most wanted occupations: tailor, designer/editor, CNC operator, technician of mechatronics; welding, etc.
- perspective occupations in the future: toolmaker, food processing technologist, energetics technician, shoemakers, etc.

This Analysis suggested forming of Adult education centre Tešanj as unit of TRA Agency which should be in charge of improvement current situation on local work force market. Opportunities to obtain the necessary skills and knowledge through formal education were also assessed as occasionally satisfactory and the average grade was 2.6. Centre for adult education Tešanj is established in December 2013 and functions as organizational unit within TRA-Tešanj Development Agency. Operating of the Centre since its beginning is related to implementation of specialized programmes of training and education of labour force according to needs of business sector. Further operation and development of the Centre is defined by Cooperation agreement signed in November 2014. among following partners: TRA, Development agency of Tesanj Municipality; Secondary Technical school Tešanj; Secondary Vocational school Tešanj and Gymnasium Tesanj. Based on above mentioned facts, the area “Training of the workforce according to the local economy needs” became one of the top priorities of TRA Agency’s issues. This article outlines results of successfully implemented projects regarding work force training and the Situation and need analysis for additional training of the workforce from five municipalities (Tesanj, Usora, Teslic, Doboj-Jug and Zepce). This Centre implements specialized training programme for labour force in fields of metalworking, wood processing, textile and leather processing, food processing, construction and in service sector. Education and training programmes enable and provide with:

- Competencies management;
- Advancing education, competencies and skills;
- Business consultancies;
- Additional training, retraining and capacity building of labour force;
- Specific courses, seminars, workshops, and conferences.
- Business consultancies;
- Analysis, studies and researches;
- Support to technological development;



Figure 1. Signing of Contract concerning Center forming. Center in Tešanj.



Figure 2. Opening ceremony of Center in Tešanj.

#### 4. RESULTS OF SURVEY

Based on conducted analysis about available and demanded labour force in Tesanj Municipality and wider region it is noticed that there are serious absence of specialized knowledge and skills in working active population. Establishing Centre for adult education (LLL) TRA Agency intends to contribute to:

- quality adult education;
- improvement of situation on labour force market;
- providing business sector with qualified labour force;
- technical support to technological development of local community.

This report outlines results of the Situation and need analysis for additional training of the workforce from five municipalities in Bosnia and Herzegovina (BiH), carried out between January and March 2014. In January 2014, the Consultant conducted a special survey of 85 companies in the four industrial sectors (metalworkig, woodprocessing, textile and foodprocessing) in B&H which expressed their interest for participation in Centre for adult education Tešanj. The survey was commissioned by and for the use of the the USAID/Sida FIRMA project.

The Situation and need analysis for additional training of the workforce from five municipalities (Tešanj, Usora, Teslic, Doboj-Jug and Zepce), in terms of qualification, skills and future workforce and training needs are presented in this article. Quantitative field research was performed through surveying, using prepared questionnaire of 85 enterprises in four industrial sectors in the territory of five municipalities. The primary research sample included 102 companies from the project area for

which, based on registration of their activities, it was assumed that they produce export oriented products.

According to statistics from Agency for employment of BiH analyzed five municipalities have high rate of unemployment. Rate of unemployment of five municipalities is close to average rate of unemployment in B&H. According to the data of the Federal Statistics Bureau, in October 2014, there were more than 175.000 workers employed in the five leading industrial sector in BiH. There is cca. 10.000 SME's in following five sectors: metalworking, woodprocessing, foodprocessing, construction and tourism [5]. Adult education center in Tešanj was stressed above mentioned five sectors as main topics of its work. The Adult Education Centre in Tesanj and companies from the metalworking industry will intensify mutual communication and cooperation 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. Adult education centre in Tesanj possesses specialized resources, equipment, tools, and machines necessary for education and training process. "On-the job training" cabinets equipped with machinery for education and training are as follows: MAG and REL welding process workshop cabinet; CAD/CAM cabinet; Multimedia classroom; Cabinet for mechatronics and; Cabinet for modelling and prototyping. All cabinets are located in complex of secondary schools building Tesanj, in the annex space of Secondary Vocational school.

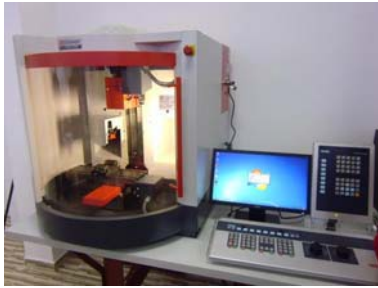


Figure 3. CNC EMCO Concept Mill 55.



Figure 4. Mechatronics equipment.

Lecturers in the Centre are outstanding experts with long experience and high professionalism in teaching and training. Some of them work long time in education sector and others are successful entrepreneurs. Altogether make a team of professionals that offer theoretical and practical education and training in different fields of knowledge. They are certified lecturers and trainers who acquired training and teaching knowledge locally and internationally. Centres' focus of interest are SME's which use modern technology in production process and which are predominantly export oriented.

## 5. CONCLUSION

Adult education centre in Tesanj implements programmes of informal education which are approved by Ministry of education, science, culture and sport, Government of Zenica-Doboj Canton. Programmes of education are in consistence with regulations of Law on informal education of Zenica-Doboj Canton. In the period from 2011 to 2014, TRA Agency successfully implemented four project regarding work force training financial and technically supported various international organisations as well as domestic donors. Results of the implemented project were as follows: -157 participants;-37 retained employees; -104 new employees; -14 participants increased level of specialised knowledge and skills.

## 6. REFERENCES

- [1] Alagić I.: The Situation and need analysis for additional training of the workforce from five municipalities (Tešanj, Usora, Teslic, Doboj-Jug and Zepce), USAID/Sida FIRMA, 2014.
- [2] Osmanković, Jasmina et al: Analiza potencijalnih modela statističke regionalizacije u skladu sa NUTS kriterijima u BiH. Zbornik radova Ekonomskog fakulteta u Sarajevu, 2008.
- [3] Petković D.: Tehnološki parkovi – Više od mjesta za tehnološki transfer i razvoj MSP, 2003.
- [4] xxx: COBEAR-Competitiveness of Business Excellence Area, EU Support to Local Economic Development in BiH, Reference: EuropaAid/134-688/L/ACT/BA, Delegation of EU to BiH, 2014.
- [5] xxx: Strategy of export growth in BiH – Draft 2012-2015., B&H Export Council, 2011.