

REDEVELOPMENT OF MINING FACILITIES OF THE FORMER COAL MINE 'LIPNICA'

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***Abstract:** The following policies to improve the economic development of Tuzla, especially in the field of improving the climate for development small and medium enterprises, the city of Tuzla has developed a project for the formation of a Development-Entrepreneurial Centre Tuzla - Incubator 'Lipnica' at the location of former mine 'Lipnica'. As unemployment has very serious economic and social implications of the post-war (1992-1995) economy, that solving of unemployment and job creation is a priority task of both the government and the community. Utilization of infrastructure resources of closed mines proved to be a good solution of the problems badly climate of business operations.*

***Keyword:** mine facilities, redevelopment, entrepreneurship, infrastructure, closed mine, sustainable development*

Introduction

Taking into account that a large number of companies in the world perish during the first or second year of operation, due to the inability to perform an adequate analysis of the market and the environment, in the world gain access to the organization 'incubator centers' that provide work space on favorable terms of lease, and provide business advice and services support, from planning a business venture, advice on marketing, and to support related accounting, legal issues and registration. Such is the case with Developmentally-Entrepreneurial Center (DEC) located at the site of the former mine

Former coal mine 'Lipnica' in Tuzla

Mine "Lipnica" was the biggest mine, both in terms of capacity and the number of employees, all of which are operated within the Mines "Kreka". After several years of exploitation economically interesting coal reserves at the site of the mining field 'Lipnica', 1991 was performed

complete and permanent suspension of all works related to coal exploitation in that area. After closure of the mine 'Lipnica', out of order remained the entire infrastructure that constitutes a large complex. The complex offers great opportunities for the development of different types of entrepreneurial activity with a high degree of flexibility of use of the available space. The complex 'Lipnica' contains 29 buildings constructed area of 14-3100 m² and a total area of around 10,933 m² and a land area of 158,770 m². Through complex flows unregulated stream Joševica. All facilities within the complex are connected by asphalt roads, so it's easier access from all sides.



Figure 1 Closed Mine 'Lipnica'

Redevelopment of the mine infrastructure 'Lipnica'

The advantage of using facilities of the mine is manifold, as for Coal Mine 'Kreka', because it will get to the prevention of deterioration of property that is already from the end of the war (1995) to this day lost more than 70% of the value, on the one hand, and for the city of Tuzla because it will get to create new jobs and reducing unemployment as the main problem that are facing.



Figure 2 Part of the Developmentally-Entrepreneurial Center Tuzla

Adaptation part of facility in Developmentally-Entrepreneurial Center Tuzla - Incubator Lipnica was carried out in order to strengthen the capacity of local service providers and creating opportunities for business incubation, in the framework of the project 'Innovative networking and economic cooperation between Tuzla and Vukovar' (InECo), which is financially supported by the EU and co-financed by Tuzla Municipality.

The primary goal of incubation center is better support to new and existing enterprises for accelerate the development of entrepreneurship, job creation, problem solving redundancy, increase the tax base, reconstruction and further use of existing facilities, improving infrastructure, and creating the image of the community as a center for innovation and entrepreneurship.



Figure 3 New jobs within the DEC

The improvement of conditions for accommodation small and medium enterprises in DEC Tuzla, through the construction of infrastructure (heating, water supply, sewage system, electrical supply, etc.) so far has invested 1,700,000.00 BAM, of which approximately 500,000.00 BAM from the Budget of the Municipality of Tuzla, and 1,200,000.00 BAM Tuzla Municipality has provided from international and other funds as evidence of the success of this model of development enterprise zone. Because of this, Tuzla Municipality will continue to develop the redevelopment of abandoned industrial facilities.

Apart from the good results achieved in the development of DEC, certain problems have become a limiting factor for the future development of the Centre. At this moment disabled any construction and expansion of existing facilities at the Centre, and thus the development of successful entrepreneurs. Capacities DEC will be significantly increased once the solve problems using all resources especially land resources.

The planning tasks, goals and activities of the DEC

Incubation center in general is, in the last three years provide continuity in terms of presence and the number of accommodated firms and employees in these firms. This statement is supported by the fact that the percentage utilization of available capacity ranges from 90% to 95%, which is evident in the work of the stability and development of the DEC Tuzla Incubator 'Lipnica'. Since the establishment in 2004 until today in the DEC operated 64 companies with a total of 546 employees (35 "incubator" companies and 29 "developed" companies). Figure 4 presents the distribution of the number of entrepreneurial companies and their employees for the period from 2004 to 2014.

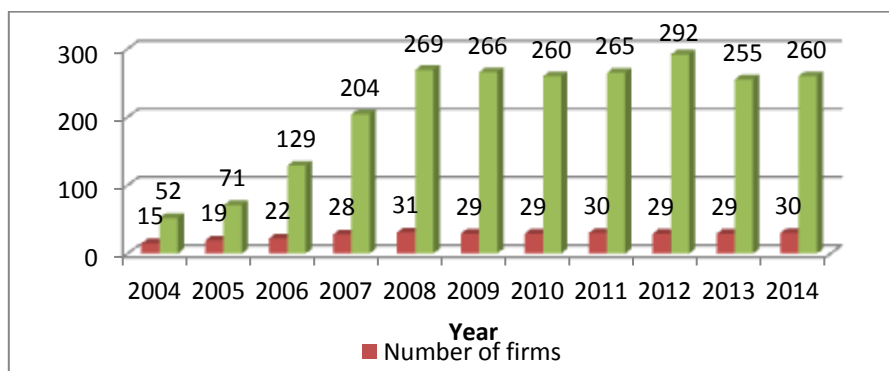


Figure 4 Relationship between number of firms and employees through the years

Users of the area DEC

As stated above, within the Centre operates 30 companies (Figures 2, 3 and 6) from different sectors and that despite that fact they have very good cooperation and persist for a long time with a positive performance, which can be concluded on the basis of a stable number of employees.



Figure 5 Map of DEC

Exactly a wide range of end products offered by this company provides a positive example of engagement of the authorities towards improving production and service activities. These products are to place in the area of Tuzla Canton and beyond. The products have gained recognition and influence the overall image of Bosnia and Herzegovina.



Figure 6 The entrepreneurial firm at DEC

Table 1 List of entrepreneurial firms located in incubation centers

Name of company	Activity
'ANCOMM'	Production of plastic containers, spices, flour and animal feed
'ATTIVO'	Production of disinfectants, insecticides, and pellets
'BEEMED'	Production, packaging and trade honey
'DONO'	Production of pellets and ECO pelets
'BHB cable TV'	Telecommunications services, cable systems
'Bosit industry'	Production of shoes
'Earth Tec'	Production of metal structures
'Elins komerc'	Repair and service of low voltage electric motors, pumps, hand tools, electromagnetic brakes, transformers
'Euro Box'	Production of pvc carpentry and fences
'FIP'	Production of paper tissues
'Fog inženjering'	Machine processing, construction, manufacturing parts
'Futura Multimedia'	Development and maintenance of web sites and portals; Production of replacement toner cartridges
'GAMUS'	Production, packaging and distribution of food products
'GANGI'	Production of kitchen units, furniture repair
'Global Proizvodnja'	Terminal reserve of raw materials
'Global Shoes Service'	Production of shoes
'Hidrofleks'	Supply and installation of equipment for the manufacture and repair of spare parts for pumps and electric materials
'Importal Diffusion'	Production and installation of AL and PVC carpentry
'Ivana'	Administrative work
'Kalibar'	Servicing small arms
'Plivač'	Printing, packaging and distribution of self-adhesive thumbnails
'Prestiž'	Production and installation of pvc carpentry and fences
'Samplex'	Locksmith-tin production and services
'TZ GAS'	Services filling gas for households and enterprises
'ELM adria'	Production of herbal products based on olive leaf extract,
'VALBIH'	Production and sales of industrial oils and lubricants

Conclusion

At a time when the entire world economy characterized by high volatility, rapid change, decision making under risk, requires a great help to local authorities in order to better support the development of the local business environment and improving support to entrepreneurship and entrepreneurs. Through the analysis of already developed European and world countries came to the conclusion that the only direction of development that will enable increase productivity, create new jobs and thus increase the welfare of the population is entrepreneurship. In already developed countries the share of private enterprises in the GDP (Gross Domestic Product) is over 70%, whereas in Bosnia and Herzegovina this value is only 30%. It is evident that after the war in Bosnia and Herzegovina (1992-1995) the economy was almost completely destroyed and that after that period many branches of the economy are neither recovered and others that did not return to the old forms of business. An obvious example is mine 'Lipnica' whose infrastructure resources were used for the redevelopment after the closure of coal mining. The mere redevelopment brought multiple usefulness, both for businessmen and for the wider community.

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