TUZLA-RAVENNA "A SYSTEMIC INTEGRATION"

L.84/2001 – Ministero Affari Esteri

STRATEGIC ORIENTATION FOR THE ECONOMIC DEVELOPMENT OF TUZLA and NORTH EAST REGION OF BiH
AND
COOPERATION OPPORTUNITIES AMONG TUZLA, NE REGION of BiH AND RAVENNA PROVINCE BUSINESS ENTITIES.

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By DELTA 2000 soc. cons. a r.l.
In collaboration with:
Province of Ravenna (IT,) NERDA Agency (BiH), Municipality of Tuzla (BiH) and Chamber of Commerce of Italy-Bosnia and Herzegovina (C.C.I-B.)

SUMMARY

INTRODUCTION AND METHODOLOGICAL NOTES

THE PROJECT 'RAVENNA – TUZLA: A SYSTEMIC INTEGRATION'

The project 'Ravenna – Tuzla: a systemic integration', funded under law 84/2001 of the Ministry of Foreign Affairs, has the main aim of setting up institutional cooperation and technical-administrative assistance relationships between the Ravenna Province and the Tuzla Municipality, in order to foster the definition of a development strategy for the economic system of the Bosnian region and the constitution of an SME network in the Bosnian region and in the province of Ravenna which may be connected to the district network of the Emilia-Romagna Region.

The project includes the implementation of a number of successive and interrelated stages:

Stage 1: Creation of a Steering Committee with a representative of each partner and a number of technicians and experts of the priority issues to be tackled within the project.

Stage 2: Analysis of the socioeconomic conditions of the Bosnian region and of the instruments and policies which support enterprises

Stage 3: Organization of a study workshop for public officers and drafting of recommendations/guidelines on the instruments and policies supporting the local social and economic development

Stage 4: Strengthening of IT knowledge and creation of an *institutional website* for the Tuzla Municipality

Stage 5: Preparation of a *pilot project* related to the designing of a manufacturing industrial area equipped with facilities for enterprises

Stage 6: Conclusion stage with the organization of a study tour aimed at defining and/or strengthening contacts between Italian and Bosnian enterprises, at presenting the guidelines of the LDP and of the pilot project on the designing of the industrial area, as well as a promotional tool for the Tuzla region: the '*Reasons for investing in Tuzla*' brochure

METHODOLOGY

This work is basically the outcome of the implementation of the abovementioned Stages 2 and 3.
In particular, from the methodological standpoint the following activities were carried out:

a) Definition of a methodology for a local socioeconomic analysis, using as reference parameters the standard criteria and indicators provided by the European Union (Eurostat)

b) Analysis of the existing documentation, in particular as regards statistical and socioeconomic studies, in order to identify the features of the Bosnian economic and social system: the sources were the following:

- Regional Economic Development Strategy Northeast BiH Economic Region, NERDA, November 2004
- Regional Strategy of the Tuzla Canton Bosnia and Herzegovina, 2002-2004, Volume I : Summary Report, Government of the Tuzla Kanton in co-operation EG Tuzla, February 2002

- Review of economic situation in Tuzla Canton, role of the University in entrepreneurship development and justification for setting up the Business Centre at the University of Tuzla, Ministry of Foreign Affairs, Republic of Austria, May 2004

For more completeness, the local area considered for the socioeconomic analysis (and the subsequent SWOT analysis) includes the North-Eastern region of Bosnia, the Canton and the Municipality of Tuzla.

c) Analysis of the economic-productive situation with a sample analysis on a panel of manufacturing enterprises, in order to integrate the macroeconomic quantitative data with data from the economic-productive world. Such a survey allowed to integrate the available economic and social data.

d) Targeted meetings within an on-site (Tuzla Canton) study tour/mission in order to identify and define together with the stakeholders the social, economic, environmental and productive indicators which characterize the area, also in order to complete the survey with qualitative aspects, perceptions and evaluations. In particular one mission was scheduled (May 21st – 26th 2006) and through targeted meetings with entrepreneurial associations, trade unions, universities, as well as through meetings of the project partners (Nerda Development Agency, Tuzla Municipality, DELTA 2000 and Ravenna Province) a global socioeconomic analysis of the Tuzla area and Canton (described in the following chapters) was carried out

e) Sector SWOT analysis, aimed at identifying strengths and weaknesses, opportunities and dangers of the Canton economic development. It is possible to identify a range of **main variables**, intended as strengths and weaknesses, related to both structural and cyclical factors, which characterize the area of Tuzla Canton and Municipality.
In such a context we also considered **variables** which might be defined as **partly exogenous**, related to the socioeconomic situation of the North-Eastern part of Bosnia-Herzegovina, the region of the Tuzla Municipality, being aware that a development process is strictly related to the context where it takes place, i.e. the whole region in a general sense.

f) After a joint analysis of the results there was the *definition of guidelines and recommendations for the definition of a Local Development Plan* of the Tuzla area.
Such guidelines and recommendations are the outcome of a further mission/study tour (July 3rd – 6th 2006, Tuzla, BIH) in which a concerted procedure was adopted, through the involvement of all the social and economic players, both public and private.

TOWARDS THE DEFINITION OF A STRATEGIC PLAN

The Strategic Plan is a process of concerted programme elaboration aimed at generating decisions and actions which may be defined as fundamental in order to produce the vision of the desired future. It basically consists of closely integrated and interrelated socioeconomic actions.
The hereunder document does not mean to be a proper strategic plan, but rather a range of guidelines and recommendations.
We therefore considered it appropriate, taking into account the future community planning cycles which more deeply involve Bosnia-Herzegovina, to start a first evaluation of the current situation, identifying a range of recommendations and guidelines related to the main local, social and economic action fields, which may possibly be implemented also in actions to be carried out within joint projects.

METHODOLOGY

- Definition of indicators for a socioeconomic analysis (Eurostat)
- Analysis of existing documentation and studies

  - Regional Strategy for Tuzla Canton – Government of the Tuzla Canton and EG Tuzla, February 2002
  - Regional Economic Development Strategy, NERDA, November 2004
  - Direct Interview, mission in Tuzla, May 2006

- Questionnaires of statistic surveys on a sample of Bosnian enterprises working in the industrial-manufacturing sector
- Targeted meetings and study tours with representatives of associations and enterprises, trade unions, local Chambers of Commerce, development agency, public bodies.

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SWOT analysis – issues/sectors and perceptions

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Structural conditions
Trends underway

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Definition of guidelines and recommendations for a Local Development Plan of the Tuzla area

PART I – ECONOMIC AND TERRITORIAL SYSTEM

TERRITORIAL CONTEXT

In accordance with the Washington, and then Dayton accords, Bosnia-Herzegovina has been organized as a composite state comprising two administrative and jurisdictional systems (entities): the Federation of Bosnia-Herzegovina and the Republic of Srpska. The constitution of the Federation of Bosnia-Herzegovina defines it as a decentralized community of ten cantons that is administrative and territorial units with a high degree of autonomy. In this way, a powerful centralized government has been established at the level of the cantons, to which municipalities have been subordinated.

Tuzla municipality is administrative and economic center of Tuzla Canton.
In the same time Tuzla is economic center of North – East region.

REGION NORTH-EAST SOCIO ECONOMIC ANALYSIS

Overall Territory Situation

Region north-east (Region NE) consists of the north-eastern part of Bosnia and Herzegovina with 34 municipalities in two entities, the Federation of Bosnia and Herzegovina and Republic Srpska, including Brčko District. From RS, there are 17 municipalities (Bijeljina, Bratunac, Lopare, Milići, Modriča, Osmaci, Pelagićevo, Petrovo, Srebrenica, Srpski Brod, Srpsko Orašje, Šamac, Šekovići, Ugljevik, Vlasenica, Vukosavlje and Zvornik) and from the Federation BiH there are 13 municipalities belonging to Tuzla Canton (Banovići, Čelić, Doboj-Istok, Gračanica, Gradačac, Kalesija, Kladanj, Lukavac, Sapna, Srebrenik, Teočak, Tuzla and Živinice) and 3 municipalities from Posavski Canton (Odžak, Orašje and Domaljevac-Šamac).

The area of the Region NE is 7,263.6 km^2, which is 14.18% of the total territory of Bosnia and Herzegovina.

In comparison with the average size of regions in the developed European countries (somewhere between 3.3 thousand km^2 in Belgium and 25 thousand km^2 in France), the Region NE (7.3 thousand km^2) can be categorized as a medium-size region.

From the global point of view, the region is situated in a relatively favorable geographic position within the wider area of ex Yugoslavia (it is the middle part) as well as in the northern part of the Balkans. The Region NE is in the vicinity of key traffic arteries (motorways and railroads), which connect this area with countries of western, central, and south-east Europe.

The economics, natural and geographic resources

Area of the Region NE is the area with a heterogeneous structure, where very differentiated longitudinal zones, significantly different from each other provide various possibilities for economic utilization. Northern, low-lying part (height above sea-level up to 300 meters) covers the river basins of rivers Sava, Drina and Bosna in the lower course, and is the area of Posavina and Semberija, and areas in valleys of rivers Tolisa, Tinja, Brka, Gnjica and Janja. In this area there are 10 municipalities (with approximately 29% of the total area of the region) with the most favorable conditions and factors for production. This is the most important grain-bearing area of Bosnia and Herzegovina.

The middle, hilly part (average height above sea-level 300 to 700 meters), where there is the biggest number of municipalities from the region (20), covers the area of 4,260 km2 (or 55%) and it is very rich with various minerals and water-power potential as important resource for industrial production. Due to the configuration of terrain, extensive part of arable land in this area is on slopes, subject to erosion, which makes the use of modern mechanization more difficult. Therefore, this land is more suitable for the development of fruit growing and cattle breeding, while climate factors are also in favor of this.

Development possibilities of the Region NE, considering its position in the close and further surroundings**,** as well as its natural, geographic and resource characteristics are basically the following:

- Relatively big potential in agriculture (especially arable land) in the northern part of the region (rich fertile land of Posavina and Semberija), which is the largest land resource in Bosnia and Herzegovina. It is also important, long-term basis for the development of agriculture and food industry.

- Large portion of the middle part of the region is traditionally known (even in Europe) as a region for the fruit (plum) and berries growing. This is especially true for the municipalities of Gradačac, Gračanica, Srebrenik, Čelić, Lopare, Kalesija, Zvornik). Based on these industrial processing facilities have been constructed.

- Abundance and variety of mineral resources - coals, metal ores, and non-metal minerals (e.g. salt – the only source of the mineral in ex Yugoslavia) are an important basis and pre-condition for the energy production (coal mines in Tuzla, Banovići, Živinice, Lukavac, Ugljevik) and for the development of basic and processing industry.

- The southern part of the region is rich in forests, which are crucial for the development of wood-processing capacities in many of municipalities within the region (Kladanj, Zvornik, Vlasenica, Živinice, Gračanica).

- Region NE is rich in various natural attractiveness of the area (preserved flora and fauna, especially in the southern part of the region – thermal and mineral springs, artificial and natural lakes) with extensive cultural and historical heritage. Therefore, the region has a significant potential for the development of tourism.

Three processes had crucial influence on the foundation of the region. These processes are:

- industrialization,
- re-ruralization (transformation of rural, agricultural population into urban, non-agricultural)
- urbanization.

Amongst these, the industrialization has had crucial influence to the overall development. Depending on the influence of numerous factors (material, institutional and others) this process took place during the past period (1971 to 1991), with various intensity.

The region's productive and economic structure developed under the influence of the above mentioned processes.

Natural resources have a special place in the structure of general conditions of development. Their multiple significance in processes of production and development is reflected, first of all, in the fact that as basis of development, they can directly influence the choice of production orientation of certain area. Besides, greater wealth in a certain resource can play an important role as a factor for generation of capital and faster economic development. The area of the Region North-East has at its disposal variety of natural resources (coals, metal ores, non-metal minerals, arable land, forests etc.) where more significant aspect is quantity than quality. However, with rational exploitation, these resources represent a significant basis for the future development of this region.
Climate is also one of the determining preconditions when choosing production orientation in agriculture and other parts of economy. Geographic position and relief have influenced the basic climate characteristics of the area. The area of the Region North-East, taken as a whole, is in the

belt of temperate continental climate, with accented yearly variations of temperatures and precipitation.

The results of year-long research (covering the period of two decades: 1959-1978) of basic climatic characteristics confirm certain specific characteristics of some areas within the region:

- The northern, flat area of the region has a temperate climate, long and warm summers, short and cold winters, and a relatively low quantity of precipitation. Average yearly temperature is 11.2 C°, and the amount of precipitation is about 800 mm/ m^2
- The middle, hilly area (300 to 700 meters) is characterized with a continental and sub-mountainous climate. Average yearly temperature is 10 C°, and the quantity of the precipitation is about 900 mm/ m^2.
- Southern, mountainous area (above 700 m high) is characterized with a sub-mountainous and mountainous climate, average yearly temperature is 9.5 C°, and the amount of precipitation is about 1100 mm/ m^2.

Population and labour market

The Region North-East is the most populated in Bosnia and Herzegovina, and during pre-war period it had the quickest growing population in the country.
Today, the region has a population of 1,003,921, which is 26.56 % of the total population number in Bosnia and Herzegovina.

Significant difference between the share in the total territory (14.18 %) and in the total population number (26.20 %) emphasizes constantly bigger population density than the average in Bosnia and Herzegovina (140.1 people per km^2 in the region; 75 people per km^2 in Bosnia and Herzegovina). In comparison with the pre-war period (as of 1991), region has 3.5 % inhabitants less, but its' share in the total population number has increased to 1.62%.

Population density varies significantly per municipalities, and it goes from very high, which is characteristic for cities (462 inhabitants per km^2 in Tuzla municipality) to very low (less than 40 inhabitants per km^2 in Srebrenica, Milići, Pelagićevo, Vlasenica and Šekovići).

The region has the workforce potential comprising of 271,609 persons, and this potential is increasing at the average rate of 4.3%. Utilization of the workforce is very low and in the recent years it has had a decreasing tendency.

The greatest number of the employed (86,742) is concentrated in 6 municipalities in two sub-regional areas: two municipalities of Tuzla basin (Banovići, Lukavac, Tuzla and Živinice) and two biggest municipalities in Posavina-Semberija area (Bijeljina and Brčko), which is about 58.6% of the total number of the employed in the Region NE.
From individual municipalities, the greatest number of employed persons is in Tuzla (29,737) and Bijeljina (24,337).

Critically low employment rate, in comparison to the total population, have the following municipalities: Srpsko Orašje (2.5 %), Sapna (2.6 %), Osmaci (4.1 %), Vukosavlje (4.8 %), Ćelić (5.0 %) and Teočak (5.3 %).

Infrastructure

Internal traffic in the region and connection with the neighboring regions are realized in various ways: equipment and buildings of roads, railroads, air traffic, river traffic, electrical-power and telecommunication infrastructure.

Road network in Bosnia and Herzegovina, as well as in the Region NE, has been developed during a relatively long period of time. Its largest portion has been built in 1970s and 1980s, during a period of more extensive economic development. Road network in Bosnia and Herzegovina, based on the conditions from 1991, is about 21,000 km long. Out of this, 17.6% are motorways, 17.5% are regional roads, and 59.9% are local roads.

The main road network in the Region NE is 1,200 km in total. This figure refers to motorways and regional roads. Out of the total roads length in Bosnia and Herzegovina, the roads in the region are about 16%.

- Trafic and road net

The roads network in the Region NE consists of local roads, regional roads and motorways. It is estimated to approximately 3,000 km in total, which is 14.8% of the roads network in Bosnia and Herzegovina.

Backwardness. On 100 km^2 there are 16 km of regional roads and motorways (in developed countries this number is 100-150 km/ km^2). Inside the region, there are significant differences in the development level of the network, among other things determined with the level of economic development in the given area, characteristics of terrain (Kladanj 16.6 km/km^2, Banovići 27.3 km/km^2, Kalesija 59.5km/km^2, Tuzla 105 km/ km^2 etc.).

- Low permeability of roads in the most populated region in BiH
- Unfavourable structure of roads. Local roads make 60% of the network, while regional roads make only 23%, and motorways even less (17%).
- The quality of the network (roads as they are) is unsatisfactory.

The railroad network in the region is about 300 km long.

Main characteristics of the railroad system in the Region NE can be reduced to the following:

- the fact that there is 4 km of railroad on 1 km^2 says enough about the underdevelopment of this sub-system of traffic
- Connections with certain countries (Croatia, countries of central and western Europe) are enabled through railroad Tuzla-Brčko, through Vinkovci railroad hub and railroad Ploče-Sarajevo-Šamac through Doboj railroad hub. On the eastern side, connection with Serbia and Montenegro is enabled with the building of Tuzla-Zvornik railroad.
- Railroad system is worn-out. Railroads are *unelectrified*, and their present technical condition allows maximum speed of 50 km/h.
- The system is inefficient, especially because of insufficient connection capacity within the region.

- Air and River Traffic

In the Region NE there are air traffic capacities and facilities. International airport Tuzla, located in Dubrave-Živinice, 8 km south-east of Tuzla has been opened (partially) for traffic in 1998.

The airport is working with civil traffic and it has four runways.

Airport has a navigational equipment, control tower, fuel warehouse and other buildings.

Extremely favourable climate (small number of rainy and foggy days) and location of the airport opens up new possibilities for its utilisation.

Significant possibilities for utilisation of river traffic in the system of the Region NE are related to the Sava river. Pre-war research has shown that there is a need and a possibility for integration of traffic (roads, railroads and rivers) in the area.

The key river harbour on Sava is Luka Brčko District, the only quay which was operating with boats and mechanical manipulation of merchandise before the war.

During 1980s and at the beginning of 1990s Port Brčko was also producing construction materials based on the resources from the river (gravel and sand).
Today, Port Brčko District is facing infrastructure and other problems. In other words, it is necessary to invest in it in order to enable it to reach European standards with regards to docking, warehouses and equipment.
The function of Port Brčko District in the future, in the overall development; should be looked at from a wider point of view, not strictly from the transportation side only. Brčko District has comparative advantages in the Region NE and its surroundings – south-east Europe. In this context, at the end of 2002 General Agreement on Posavlje (area of Sava river) was signed on at the ceremony in Kranjska Gora (Slovenia). This contract, together with the Protocol on Navigation, is a step forward in normalisation of navigation on Sava river, through Port Brčko.

- Water supply and liquid waste:
Water management is very complex and also very important because it is integrated in immediate life activities of people and society in general.
Potable water supply is not organised in some higher form (such as regional or sub-regional form of organisation). There is irrational, partial approach (from the levels of local communities, municipalities, or several municipalities in a joint system) and the resources at hand do not correspond to the needs of population (and economy). Water deficit for Tuzla and surrounding municipalities is stimated at 1.5 m^3/sec in 2005, and 2.3 m^3/sec in 2020.
In resolving of the issue, artificial lakes such as Modrac, Sniježnica and Hazna gained a great importance.
Another problem is the issue of liquid waste. With the development of economy and towns (i.e. with the growth of population) in the last period, parallel to the growth of water consumption, was the increased volume of liquid waste. Tuzla valley was one of the worst areas in ex-Yugoslavia from the point of ecology.
According to the research and measurements that were necessary for polluters, and the estimate of unregistered and uncontrolled polluters, rivers in the region are polluted with approx. 250,000 m^3/day and the weight of pollution is between 1,500,000 and 1,700,000 ES/day.
In the region there is no regional sewage system, i.e. there are a number of individual systems in municipalities.
In the whole area it is obvious that the water supply networks are developed to a greater extent than the networks of liquid waste disposal. Sewage system exists mainly in municipal centres, with incomplete networks.

- Electric-Power Infrastructure
The Region NE has at its disposal great reserves of primary sources of energy in solid fossil fuel – coal. Geological reserves are estimated to approximately 3.5 billion tons. Based on this, capacities for production of secondary kinds of energy, such as electrical energy, heating, and steam have been constructed. There are two big power and heat production facilities: Tuzla power plant (capacity 779 MW) and Ugljevik power plant and mine (capacity 300 MW) with total power production capacity of 1,079 MW.
Significant producer of water-power is the water-power plant in Zvornik. Power is transported through transmission lines of 400, 220 and 100 kV. Electricalpower network in area of the Region NE has the total length of 970 km.
The power market in the Region NE is regulated by the Memorandum on Understanding between the Regional Power Market in South-East Europe and Integration into International Power Market in EU, signed in 2002 by Bosnia and Herzegovina. Memorandum aims at setting up integrated power market in south-east Europe by 2005 and securing the integration into the international EU market.

-Communication infrastructure

Telecommunication infrastructure is an important factor for development of every region. In the Region NE operate three state owned enterprises: BH Telekom Sarajevo, Telekom Srpske Banja Luka and HT Mostar.

In the field of mobile communication, part of the region in the north (Posavina) is covered with two Croatian operators as well: HR Cronet and HR VIP.

Characteristics of the telecommunication service market in fixed phones area in the Region NE are the following:

1. Physical spatial division of market per entities and cantons (by nationalities) BH Telekom operates in municipalities that belong to Tuzla canton (mainly Bosniak populated) and partially in Brcko District BiH (in villages with Bosniak majority). HT Mostar covers Posavski canton (with Croatian majority) and partially Brčko District BiH (in villages with Croatian majority). Telekom Srpske operates in municipalities that belong to RS (Serb majority) and the northern part of Brčko District BiH (which until the Dayton Peace Accord belonged to RS).

2. Monopolistic position of fixed phone providers

Even though three providers offer their services in the region, competition is completely out of the picture. Customers do not have the possibility to choose which phone provider they would like to use, because this is pre-determined by the region where they live.

3. Increased costs

Irrationally organised system of cable telecommunication in the region necessary increases the prices of services. However, bearing in mind that the existing three providers are companies that operate in a much wider area, the consumers accept the situation as it is.

4. Decreased quality of service

The existing telecommunication network in urban centres has modest opportunities for the increased traffic of fixed phone communication services without major investments. In rural area and suburbs the conditions are somewhat better.

Characteristics of the mobile communication market in the Region NE are the following:

1. Market is divided per entity-lines and cantons. Similar to the fixed phone line communication, market is divided amongst three GSM operators. Only near the border and in Brcko District BiH it is possible to connect to more networks.
2. The providers enjoy monopoly benefits
3. Mobile communication services are too expensive
4. Services offered are not of a satisfactory quality

Previously underlined characteristics of fixed and mobile communications reflect to the quality of internet services in the region. Number of internet users in the region is about 10 % of fixed phone line connections, which is very unfavourable.

Number of internet users in comparison with the total number of inhabitants is very low and it can be concluded that IT illiteration is very high.

Education

There are 146 central **primary schools** and 285 regional primary schools, with approximately 94,920 pupils. Number of children from 7 to 14 year-old who do not attend primary schools is very high according to European standards and it is about 10% (out of 104,000, only 95,000 attend primary schools). In the region, there are approximately 9.6 pupils per 100 inhabitants.
Abstinence from primary school is characteristic for rural areas and is connected with economic and cultural reasons, mostly affecting female children. Besides girls, gypsies, the biggest minority in BiH, are also particularly discriminated part of population.

Secondary schools are attended by 41,448 pupils in 59 schools. There is a high percentage, 30-40%, of the young population which does not attend secondary school. Average number of secondary school children per 100 population is 4.2. This number is the highest in following municipalities: Tuzla (8.3), Milići (6.0), Teočak (5.0), Gračanica (4.9), Vukosavlje and Banovići (4.8). The majority of secondary schools are located in Tuzla (15) and Bijeljina (7). The number of secondary schools is a good indicator of the size of given municipalities (over 50 % of work force in the region has secondary school certificate).

Higher education in the Region NE is organised in the University of Tuzla (with 11 faculties), University of Srpsko Sarajevo (with 5 faculties) and at the College of Foreign Trade in Bijeljina. There is another private university – Slobomir University in Bijeljina, which has just been founded. Number of university students has, in comparison with pre-war condition (1989-90), increased by almost 6 times.

According to the enrolment plans, 4,800 students will enrol in the next school year. Although the interest for higher education has significantly increased (from 1999 to 2003 the number of students has raised by index 136.2) there is only 1.6 % of the total population in the Region NE who attend institutions for higher education, which is much lower than the standard in the developed countries.

Research and development is very modestly organised, mainly in universities and institutes (Economics, Construction, Chemical and Mining institutes in Tuzla). Currently, the pre-war public funds for financing of scientific research do not exist anymore. Research institutions have been destroyed during the war and nobody was involved in investments into their post-war reconstruction.

Welfare, Health, Social Infrastructure and Quality of Life

Capacities of **health services** in the Region NE are composed of the networks for tertiary, secondary and primary level of health protection, and they are structured in hospital and out-of-hospital protection.
Tertiary level includes: Cantonal Institute of Public Protection in Tuzla , University Clinical Centre Tuzla, cantonal institutes for health insurance (Tuzla canton) and Health Security Institute in Bijeljina.
Secondary level includes: General Hospital «Sveti Vasilije Veliki» in Brčko, General Hospital in Gradačac, Medical Centre in Gradačac, mineral springs «Ilidža» In Gradačac, Medical Centre in Ugljevik, General Hospital «Sveti vračevi» in Bijeljina, Health Centre in Maoča, Cantonal Hospital in Orašje. Consultation specialist services are also included in this level, which operate in 180 locations and almost 200 offices throughout the region.

Primary level of health care is organised in health centres and pharmacies. Primary health care is realised within 21 health centres (Brčko, Banovići, Bratunac, Domaljevac-Šamac, Čelić, Lopare, Lukavac, Odžak, Orašje, Sapna, Srebrenica, Srebrenik, Srpski Brod, Milići, Šekovići, Šamac, Tuzla, Ugljevik, Vlasenica and Živinice). There are 32 public pharmacies, and another 60 pharmacies in the private sector; there are 42 private general medical practices and 49 private dental practices. On the average, there is one health protection point on every 9.5 - 13 km2.
There are the following mineral springs (spas): «Dvorovi» in Bijeljina, »Ilidža« in Gradačac, «Guber» in Srebrenica and »Slanja banja« in Tuzla.
Per 10,000 inhabitants, it is estimated that there are: 4-6 unspecialised medical doctors, 6-10 specialised medical doctors, 0.5 – 1 dentists, 0.2 – 0.7 masters of pharmacy, 2-3 higher medical technicians, and 35-42 medical nurses.
(2) Social security in achieved through immediate executors organised into social – public institutions. There are centres for social welfare in most of municipalities, which are multi-functional social institutions.
Centres of social welfare exist in Brčko, Banovići, Bijeljina, Bratunac, Kladanj, Lukavac, Milići, Srebrenica, Tuzla, Ugljevik, Vlasenica, Zvornik, Živinice.
There is also the Information Centre for Handicapped Persons «Lotos» in Tuzla and «Jakeš» Institute in Modriča.

The region is in a social crisis, with the living standard below the BiH average. Until 2002, average salaries were lower than the average consumers' basket, where the salaries covered only 45 % of the consumers' basket in 1996. and 98% in 2001. The crucial year was 2002, when average salary was 104 % of the average consumers basket. The following data illustrate the above facts: GDP per capita on the region is less than two thirds of the average BiH GDP per capita, unemployment rate of 45.9% is higher than the average unemployment rate of BiH (41.7%), average net salaries are also lower (by 15%).

The economic system and indicators

Gross domestic production from 1999 to 2003 grew at an average rate of 7.9 %, and gross domestic product (GDP) grew at the rate of 7.1 %. In the same period, average employment rate was 1.6%. In this period there has been a consolidation in the structure of GDP. »
The region NE with over a million of inhabitants in 2002, had a total **GDP** of KM 2.05 billion, which is KM 2,063 per capita. The Region NE has 17.5 % share in the total GDP of BiH.
The largest share in GDP have the following municipalities: Tuzla, Brčko, Bijeljina and Zvornik (over the half of GDP of the Region NE, i.e. KM1.13 billion or 54.9% of GDP of the region, or 10% of GDP of BiH). The weakest municipalities in the region, with regards to GDP, have the following municipalities (with the joint GDP of less than KM 10 million): Čelić, Teočak, Vukosavlje, Pelagićevo, Srpsko Orašje, Osmaci, Šekovići, Srebrenica and Petrovo.
Measured by pre-war and post-war GDP per capita, the Region NE is behind the level of development in BiH. Before the war, in 1990, the Region NE had reached 96.4 % of BiH GDP per capita, and in 2002 even less, 88.7 %. Out of 34 municipalities that belong to the Region NE, 33 of them have not yet reached their pre-war GDP per capita. Only Brčko municipality has a higher GDP per capita (index 114.5). Drastic lagging behind from the pre-war GDP per capita (pre-war level=100) have the following municipalities: Srpsko Orašje (12.3), Vukosavlje (14.2), Čelić (18.8), Pelagićevo (19.5), Vlasenica (24.5), Srebrenica (25.5), Lopare (34.5) and Modriča (36.4).
The growth of GDP per sectors is extremely discontinuous. There is a continuous growth only in the sectors of trade, traffic and communications. Processing industries and financial services have the strongest growth.

Total **investments i**n the Region NE have a tendency of growth. In 2002 they were KM 403.5 million (estimate for 2003 is approx. KM 430 mil). Indices of growth in comparison with previous years are: 2002/2001=139.4 and 2002/2000=153.4 The most investments go to the following sectors: power, gas and water supply (25.3 %), processing industry (19.5%) and wholesale and retail trade (12.2 %). The greatest trend of investments growth is recorded in: agriculture, hunting, forestry and fishing, which is noticeable through the growth of investment into agriculture husbandries. Other sectors with the largest investments are the following: mining, construction, processing industries and power, gas and water supply. There is concern because of a drop in investment in education (from KM 11.7 million in 2000 to KM 7.7 million in 2002). In the technical structure of investments, equipment has 52% of share, construction works 44%, and the rest 4%.

Inflow of **Foreign Direct Investment** in BiH is still above the modest. Total value of FDI from May 1994 to the end of 2002 was USD 756 million. Out of this, it is estimated that the Region NE received only about USD 140 million. Somewhat higher inflow of FDI in BiH was in 2002, in the amount of USD 229 million, and a greater portion of it went to the Region NE (about USD 70 million). Privatisation of cement factory in Lukavac by an Austrian buyer (approx. 50 million, including cash and investment So far, FDI mostly went to the sector of production (55%) and the banking sector (16%). Most of FDI came into the Region NE from Austria, Slovenia, Croatia and Serbia and Montenegro.

Trade Balance –Export/Import

Contrary from the pre-war period characterised with a sufficit, in the post-war period there is a deficit in external trade. In 2003 this deficit, according to the estimate, was KM 563.9 million, coverage of imports with exports was 42.0%.
In total exports (KM 423.8 mil.) dominant share have *processing industries* (78.6%). Out of this percentage, *wood industry* has 33.7 %, and *production of textile and clothing* 29.8 %.
In total imports (KM 987.7 mil.) the highest share, as well, have *products of processing industries* (92.2 %). Out of this percentage *machines and vehicles* (36.6 %) and *chemical products* (28.9 %) are mostly imported. Compared to the previous year, in 2003 there was growth of 4.8 % in exports and 5.6 % in imports.

Companies

By the end of 2003, the Region NE has had 9,261 registered companies and 12,592 businesses, and over 160,000 individual agricultural estates. The majority of business subjects is either wholesale or retail trade (35.2 %) or processing industries (14.7 %).
Increase in the number of small businesses in the last decade was the result of the change in the economic structure. Although their number has almost quadrupled in comparison with the pre-war period (1991), when compared with the dynamics of small businesses growth in the surrounding countries, situation in the Region NE is still not satisfactory.
Although entrepreneurs, small and medium businesses form an integral part of a dynamic economy, this sector is underdeveloped in the Region NE. The greatest number of businesses is in trade (38.6%), catering (15.8%) and traffic (11.4 %). Registered businesses in wholesale and retail trade in catering had the biggest growth until 2002, and from 2002 the first position was taken from the realestate and traffic.

Structure of Products and Production

Production structure of economy in the Region NE is composed of the following sectors:

(1) industry, energetic and mining, concentrated mainly to the area of Tuzla basin (Tuzla, Banovići, Lukavac, Živinice municipalities)

(2) agriculture processing industries, concentrated in area of Posavina and Semberija (Bijeljina and Brčko municipalities) and Zvornik.

Unfavourable economic and financial condition, consequences of war devastation and war-caused migration, lack of capital, aged technologies, low utilisation of capacities and loss of pre-war markets have considerably lowered economic strength of the region.

Structure of Employees

The structure of employees per sectors shows that the greatest portion of the work-force is engaged in secondary sector (61.8 %), then in tertiary sector (31.32 %) and the primary sector (6.9 %).
In the post-war period the share of the employees in primary sector has decreased by almost a double, which is a consequence of a transition phenomenon of „sunset industries“. The greatest percentages in the structure of the employed, are in the sectors of processing industries (21.7 %) and budget users (20.0 %).

Agriculture

Natural conditions with regards to the land, water, climate etc. for development of the agriculture in the Region SE are satisfactory. The Region NE is not a homogenous agro-ecological area with predominantly mild continental climate.
We have to consider the forecasts that we will have periods of longer and more intensive droughts ahead of us. Agro-ecological characteristics of the Region are determined by the relief of the area. In the plains by the rivers Sava, Spreča, Tinja, the upper Drina and Bosna winter stubble wheat, corn and vegetables are produced. In the higher range above the sea-level of the relatively low mountains Majevica, Trebava, Ozren, Konjuh, Javornik, Birač and Osat there is a lot of grazing lands and meadows suitable for development of cattle breeding.
The most important agricultural resource of the Region is the land. Structure of the land in the region is the following:
- brown degraded deep ground and fertile river soils (Semberija, Posavina, the right side of the river Spreča) (about 45%)
- brown acid soils (Mountains Trebava, Majevica, Birač and Osat) (about 45%)
- undeveloped soils on the loose cliffs and brown acid ground (about 10%)

It may be concluded as follows:
- Area of the Region NE represents 15,25% of the total area of BiH;
- Participation of the private sector of the Region in total area of the private sector of BiH is 21,65 %, which is a good pre-requisite for development of the private farm production;
- There are 3 904 km^2 of cultivable land and 90% is in the private sector;
- Cultivable land in total area of land for agriculture amounts to 61%, and in the private sector this ratio is much more favourable and amounts to 74%;
- Participation of the agricultural land of the Region in the total area of the Region is relatively high and amounts to 81,88 %. In the private sector this ratio is slightly more favourable and amounts to 91,22%.

- Agricultural area of the Region per head/person of the population amounts to 0,60 hectare, which is in the level of many countries with developed agriculture. One hectare of agricultural land could produce food for 4-5 people.
However, a general tendency in reference to the cultivable land during and after the war is unfavourable.

The ownership structure of the agricultural land shows that the private sector is dominant in agricultural production, although in pre-war period state sector was rather significant.
It may be concluded as follows:
- The largest share in the total structure of the agricultural land have fields with 47,65% and forests 38,94%. Highly cultivated and irrigated land take a very small portion.
- This structure is much more favourable to the advantage of the cultivable land in the private sector. Fields participate with 57%, and forests with 26%.
- The share of the orchards, grass areas and grazing land in the total structure of the private sector is much more favourable comparing to the public sector and in the post-war period orchard areas are significantly increasing.

Agricultural production in the Region has been organised through:
- large agricultural conglomerates
- farming cooperatives and
- private estates.

Large agricultural conglomerates, which were organised in Semberija, Brčko District, Posavina and Spreča valley are currently in a very difficult economic situation. Most of them are not working at all, Farming cooperatives in the Region were established in the previous period through different transformations of state/public property. They usually have in their property village homes and nationalized land. Farming cooperatives don't have clearly defined property relations and they have a small number of active members.
Most of them are working on the edge of cost-effectiveness or they are facing great losses.
Private estates in the Region are small and divided into plots. In most cases they are not capacitated for the production and they are not able to produce enough surpluses for the market. More or less, they are producing only for their own needs. It is not possible to develop agricultural production on a small estate because of the following reasons:
- small capacity for introduction of machinery
- difficulties in improving the effective land fertility
- difficulties in irrigation and draining
- respecting crop rotation,
- construction of infrastructure and similar.

The structure of agricultural production per sort of field crops and per type of ownership is the following :
- The production of grain is dominant both in private and state sector in the Region (over 53%)
- In the total structure corn participates with about 40% of the total area and 60 % of the area is under wheat (grain).
- The grass participates in the total structure of the field crops and it is significant in the private sector as well (over 21%)
- Vegetables and stock-cattle feed participate with about 10%
- Other field crops such as industrial plants, strawberries, other berries and similar participates with about 1%
- Participation of other field crops such as industrial plants, strawberries and similar is at the level of about 1 %.

Comparing to the pre-war period, the production of all agricultural products is declining significantly. Average yield of the main crops in the Region is low compared to the pre-war period, especially compared to the countries with developed agricultural production. Yield of corn per acre is very low and amounts to about 4t/ha (in France 9 t/ha), and average yield of wheat per acre is about 3t/ha. That is very low and it resulted with importing the lacking crops. Among other things, it is a result of decreased cattle breeding, idleness and inactivity or the lack of food processing industry, old technology and similar. Technology applied in crop production is often inadequate for the needs of high-yielding crops and hybrids. The fertilizers, protective agents and declared seeds are deficient. Agricultural machinery is outdated in most cases and should be replaced.
The situation at the market of agricultural products is very difficult because of the disloyal competition from the neighbourhood (Vojvodina, Slavonija, Mačva), so having this in mind, we might better understand the negative trends in this production. The contracts on liberalization of the trading between Croatia, Serbia, Montenegro and Bosnia and Herzegovina would confirm the uncompetitiveness of the domestic production, which may have immeasurable economic and social consequences.

Cattle breeding in the Region SE have and important place in the total agricultural production. Participation of the total earnings from cattle breeding in the agricultural production in EU is 80%, in RS 70%, and it is close to the participation in the Region. Cattle breeding may be realized throughout the year, and that is not the case with crop production. Comparing with the pre-war period, cattle breeding is almost cut in half.
Intensity of agricultural production, measured as a number of cattle per one agricultural area (for example a plowfield or a grazing land) in RS in 1997 was 0,165, in France in 1990 0,72, in Denmark 0,79, in the Netherlands 2,4 and similar. Intensity of the production in the Region is 0,67.

Although the Region NE is abundant with rivers such as Sava, Drina, Bosna,Spreča, Tinja etc., fish-farming is unorganized and it is not a significant branch of agricultural production.

Service Infrastructure

Service infrastructure for the support of entrepreneurship in the Region NE is composed of:
1) Development agencies and institutes: Development Agency Tuzla, Development Agency of Brčko District (RABD), Regional LESnet office for NE Bosnia Taldi Tuzla, EU QIF Regional Office NE BiH Tuzla, USAID Consulting Tuzla, Economics Institute Tuzla
2) Business associations: Bijeljina, Gračanica, Tuzla, Živinice, Chamber of Commerce Bijeljina, Orašje, Chamber of Commerce of Tuzla Canton Tuzla, Chamber of Crafts Tuzla, Returnees' Society Bijeljina.
3) Industrial infrastructure
a) Two technological parks in Gradačac and Tuzla (Lipnica)
b) Industrial zones in Orašje, Šamac, and Šekovići (total size 689,735 m^2),
c) Free zones in Lukavac, Orašje, Šekovići, and Bijeljina (total size 85,000 m^2)
d) Business fairs: Bijeljina, Gradačac, Čelić, Lukavac, Brčko, Tuzla.

Business Advisory Services
1. Business Associations
- Municipal Association of Independent Entrepreneurs in RS, Bijeljina
- Association of Independent Entrepreneurs in RS, Bijeljina
- Association of Independent Entrepreneurs, Gračanica
- Association of Independent Entrepreneurs, Tuzla
- Association of Independent Entrepreneurs, Živinice
2. Chambers of Commerce and Crafts

- Chamber of Commerce of Bijeljina Region, Bijeljina
- Chamber of Commerce of Posavina Canton, Orašje
- Chamber of Crafts of Tuzla Canton, Tuzla
- Chamber of Commerce of Tuzla Canton

3. Development Agencies and institutes

- Taldi Tuzla
- Institute of Economy in Tuzla
- Razvojna agencija Brčko - Development Agency Brcko (RABD)
- Bijeljina
- Regional LESP net office of Region NE, Taldi Tuzla
- USAID Consulting Tuzla

Banking System

All financial institutions operating in BiH are also present in the Region NE, such as: departments of the Central Bank of BiH, centres and departments of commercial banks, micro-credit organisations (12 operating in the NE Region) and insurance companies. Banks are the greatest investors in BiH, as well as in the Region NE as well. Commercial banks are registered according to the entity laws on banking (in Brčko District by the Law on banks of Brčko District). Their work is regulated by the entity banking agencies. There were 37 banks operating in BiH in 2003 (27 in FbiH and 10 in RS) and they all have centres or branch-offices in 35 municipalities of the Region NE.
According to the estimates, total deposits in the banks at the end of 2003 in the Region NE were about KM 650 million, and population savings were about KM 310 million. Interest rates in BiH have a declining tendency in the actual and nominal values. Average nominal interests on short-term credits (up to 12 months) in the mid 2003 were 10.8 % (that is a downfall comparing to the last year and may be expressed with an index of 81.8). Interest rates on long-term credits for the same period dropped from 10.6 % to 9.2 %.
Lower interest rates, however, did not have a significant impact on the increase of credits in the private sector, and that refers to a constant insecurity of the market conditions and the economy.

In the Region NE there are no securities markets (the centres of the two existing securities markets are in Sarajevo- SASE and Banja Luka- BLSE). From the total of KM 200 million of financial transactions on these two securities markets until 2003, transactions of the Region NE amount to about KM 30 million.
Although there is a network of financial and legal services, provided by both international and domestic organisations, it is still too early to expect a high quality level of support of these organisations. In almost all the cases there is a lack of capacities and limited experience in providing services related to economic development dictated by the buyer. Majority of financial institutions, due to increased risk and insecurity of the market, place the capital with higher interest rates and they have a complicated procedure for giving credit, which de-stimulates entrepreneurs.

Tourism and Catering

After trade, tourism and catering have the fastest growth of the number of employed workers and the number of legal subjects in the post-war period (almost doubled). This sector absorbs 2% of the investments in the economy and makes 1,8 % of the total GDP of the Region SE.
Mostly, fast food restaurants contribute to the growth of catering business (index 2003/1997= 143,8). All other facilities (classic restaurants and motels) are in a significant decline.

Total number of tourists is decreasing as well (index 2003/1997=92,5), and that is expressed in the decline of the number of foreign tourists (index 2003/1997=74,2).

In the structure of services, the biggest growth is in the food and drinks (the index of the growth 2003/1997 is 240,9 in food and in drinks 144,3), and the number of overnights is decreased (growth index 2003/1997=75,7).
Pre-war thermal resort and hunting tourism may be determined by congress and the fair tourism in the Region SE: Famous pre-war hunting grounds (pheasant hunting grounds in Brčko and Srebrenik) have not been restored. Lake tourism is growing. Post-war capacities on the lake «Modrac» Lukavac are the largest of this kind in BiH, and salt lake in Tuzla is the only one of this kind in Europe.

Capacities of thermal medical resorts in Bijeljina (Spa «Dvorovi»), in Gradačac (Spa «Ilidža»), Srebrenica («Guber») and Tuzla («Salt spa») with famous healing, naturally thermal and mineral waters which cure, among other things, almost all inflammations, rheumatism, neurological, neuromuscular and gynaecological diseases, different post-traumatic conditions and rehabilitation. Spa «Ilidža» and «Salt Spa» have hundred years old tradition (first one is well-known for more than 150 years, in the second ones regular guest was Austro-Hungarian emperor Franc Josef).
Today these are modern spas with following sport and recreational terrains, and in the vicinity of the spa «Ilidža» there are two artificial lakes with nice beaches, with possibilities for fishing and boat riding.

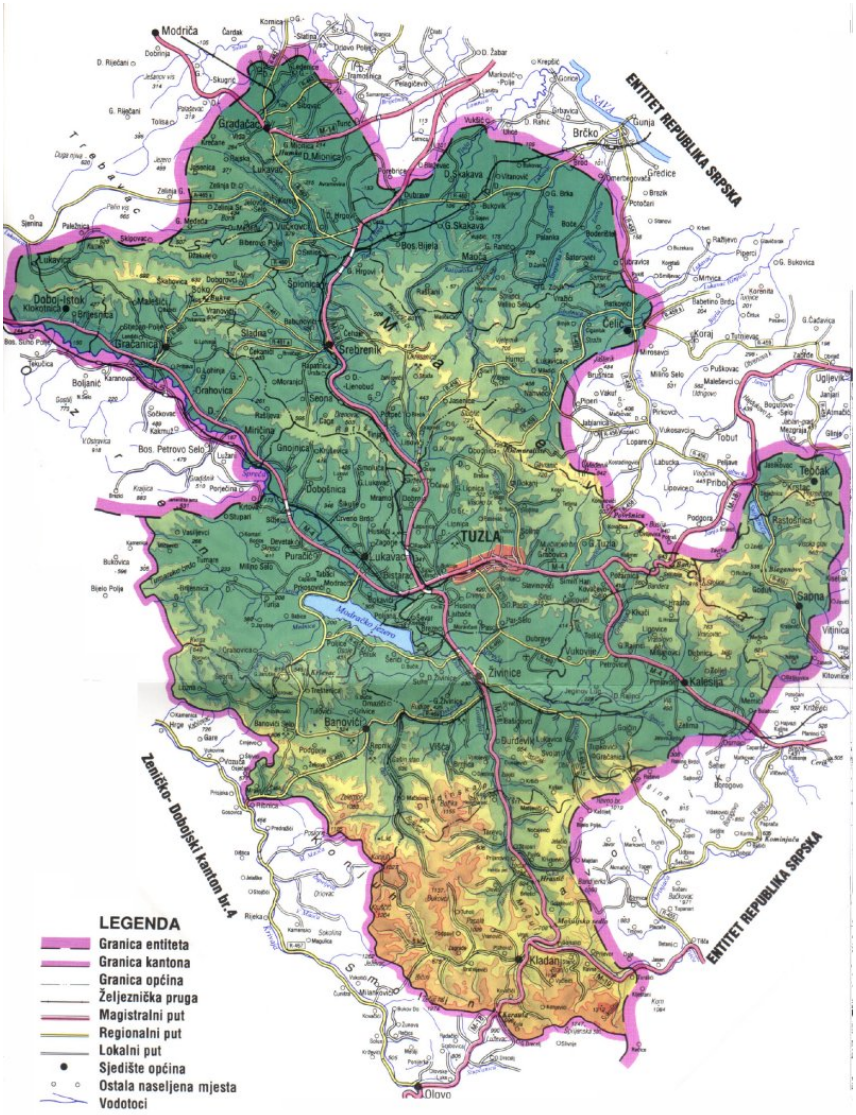
Touristic and catering capacities have been fragmented after the privatisation and they are mainly located in cities. Up to date, the possibilities for development of village tourism have not been developed.

TUZLA CANTON SOCIO ECONOMIC ANALYSIS

Overall Territory Situation

Tuzla Canton is established on a fairly large part of the territory of the region of North-East Bosnia, comprising 13 municipalities in the region, either in their entirety or only their parts:

- Banovici
- Gracanica
- Gradačac
- Kalesija
- Kladanj
- Lukavac
- Srebrenik
- Tuzla
- Zivinice
- Celic
- Doboj Istok
- Sapna
- Teocak



Tuzla Canton territory size is about 2.700 km$^{2.}$, which is 10,14% of the territory of the Federation of BH, that is 5,17% of the territory of Bosnia-Herzegovina.

Natural resources

The Canton and the broader region of Tuzla have various natural resources (minerals, soil, forests, water) but they are more important from the aspect of quantity than quality. The climate is temperate continental with certain local climatic characteristics. The average annual temperature is 10.7° C.

Although still insufficiently geologically explored, mineral resources have traditionally basic material prerequisite far the economic development of Tuzla Canton. They can be viewed as belonging to two basic groups: coal and non-metals (rock salt, quartz sand, limestone, marl and clay). Considering its coal reserves, Tuzla Canton has the biggest energy potential in Bosnia-Herzegovina. Based on the reserves explored, it has been established that 24% of all brown coal reserves and some 60% of all lignite reserves in Bosnia-Herzegovina ' are found in Tuzla basin.
The total land pool amounts to 269.000 ha.
Farmland makes up 49%, forests 45% and unproductive land 6%. The biggest part of farmland is in the municipalities of Gradacac and Srebrenik, whereas the smallest is in Kladanj. The worst situation is in the municipalities of Banovici, Tuzla and Zivinice, where the proportion is below 0.17 ha, which is considered in the world today the bottom limit for providing enough food and raw materials.
The territory of the Canton has been considerably damaged due to war destruction, which makes arable land shrink thus reducing the potential of agricoltural production.

Forests are mainly found in the mountainous area; drinking and industrial water resources in the Canton vary in space and time, so that almost on its whole territory water supply has been unsatisfactory: moreover in some areas (Tuzla, Lukavac, Zivinice) it is critical to such an extent that it could even became a limiting factor for further development. In area of Tuzla and other municipalities due to many years of opencast mining, there appear artificial depressions of terrain, which get filled after some time thus creating artificial storage reservoirs.
The hydrographical network of rivers is comparatively wide-spread. The longest an the most important river is the Spreca, the basin of which encompasses the municipalities of Kalesija, Banovici, Zivinice, Lukavac, Tuzla, Gracanica and part of Kladanj.
All the rivers that belong to the aforementioned basin are torrential. The intense economic development, especially that of mining and basic industry brought about excessive and uncontrolled pollution of waters, which considerably diminishes the degree of usability of the existing resources. According to research carried out in 1985, the Spreca basin was classified as an area with the most polluted rivers.

Land area and human presence

After Sarajevo Canton, Tuzla Canton is the most densely populated canton in the Federation of BH. Population density in Tuzla Canton is 2.2 times as big as the avarage population density in the Federation.
In the post war period, two opposite trends have been observed in population density:

- at first, the trend of an exceptional increase from 186 inhab/km2 in 1991 to 226 inhab/km.2 in 1996, caused by the war in Bosnia Herzegovina and a huge influx of refugees
- after the war, there followed a decrease in population density, i.e. 191 inhab/km2 in 2000, which was partly the result of the process of return of refugees to their homes, but also of the phenomenon of emigration to European Countries and overseas.

On this territory lives around 520 000 citizens. Its 14% of total population in BiH and 21,6% of population in Federation BiH.
The industrial center of the Canton, i.e. the area comprising four municipalities of Tuzla basin: Tuzla, Lukavac, Zivinice and Banovoci, is particularly densely populated, and its average population density of 241 inhab/km2 is 2.8 times as big as the average of the Federation of BH and 22% bigger than the average of the Canton itself.

Population

In terms of the number of its entire population (505.053 inhabitants at the end of the year 2000) Tuzla Canton is the biggest in the Federation of BH, sharing 22.1% of the total population of the Federation.

An analysis of the dynamics of the fluctuation of population indicates that the population of Tuzla Canton more than doubled over 4.5 decades with an average annual rate of 1.8%. Until the end of the 1980s, Tuzla Canton was an area with the highest demographic growth in Bosnia-Herzegovina.

The crucial role in the formation of the total population growth until 1991 was than of the natural fluctuation components. At the same time, however, another tendency is also recognizable: the natural increase rate is in natural decline.
Another important factor that influenced the total number of the population until 1991 was migrations: the motives for such emigration were mainly related to the need for employment and education in other areas that were more developed.

During the war (1992-1995) there occurred a heavy loss of human life, as well as a massive exodus of the population. In a very short time more than 200.000 people arrived in the Canton. The refugee wave hit most the cantonal urban centers (Tuzla, etc.)
The war has had a noticeable impact on changes in the population structure: ethnic structure and age structure: the Bosniak refugees increased from 70.4% in 1991 to 90.6% in 2000.
In the age structure, there has been an increase in the share of the population beyond working age in the majority of the municipalities as well as in the share of those in working age.

Labour market: employment and unemployment

The number of unemployed persons recorded in 2001 was 70.869 (of which 37.8% are women).
Tuzla Canton has the highest registered unemployment in the Federation of BiH (13.326). By the record from Cantonal office for employment on the territory of Canton presently exist 70 000 employed persons, in the same time another 20 000 is employed unofficially (estimation, workers "on black"). By the same record 70 000 persons is unemployed.

Cantonal employment rate is 19% and unemployment rate about 50%. Rates are results of statistical data, situation on field is better (not-registered work).
Comparing with the other Cantons, Tuzla Canton has the lowest employment rate (29.7%)

In the whole post-war period, the percentages of individual educational qualifications in the overall structure of the unemployed have remained almost unchanged.

In the unemployment structure unskilled persons make up 42.8% of all the unemployed, low-skill persons (LS) being the biggest group among them . The biggest group among unemployed persons with technical training is the skilled ones, who make up 61.3% of this population, that is 35.7% of

the total number of the unemployed. Women make up 37.9% of the total number of unemployed persons.

Sectoral survey

- Industrial production

Tuzla Canton is the mainstay of the production capacities of mining and industry in the BH Federation (industrial production in the Canton makes up over a quarter of industrial production in the BH Federation and in mining it employs more than half of all workers in this sector of the BH Federation economy). Before the war, the industry, energy supply and mining of the Canton (where a large number of complex business companies operated such as the Chemical Complex "SODASO" Tuzla, the "Coking and Chemical Complex" Lukavac, the Coal Mines Tuzla, the Thermoelectric power plant Tuzla, "Umel" Tuzla and others), were the crucial sectors of economy, concentrated mainly in the municipalities of Tuzla basin.
They attracted almost three quarters of all investments, employing ca 60 000 workers (making up 59% of the total number of employees at the time) and generating half the GDP.

In the post-war period, these sectors are still dominant in the economic structure of the Canton, but with a trend of significant decline. In the sector of energy supply, more than half of the plants and the transmission and distribution grid were destroyed or devastated by the war. In the industrial and mining production, the number of workers has been halved (making up one fifth of all employees in the Canton at the moment), investments have significantly declined as they have focussed mainly on small – and middle-sized enterprises (in the period 1996-1999, in industry 99.6 million KM was invested, or 21.5% of the total amount of investments).
The private sector prevails in processing industry (out of 1.112 business, 91% are private) and mining (out of 42 legal entities, 79% are private1y owned), whereas in electricity supply it is the public sector which is dominant (out of 11 legal entities,8 are in the public sector).

The share of the total industrial production that TC has in the structure of industrial production in the BH Federation has a significant downward trend. From 31,0% in 1997 this share dwindled away to 26,1% in 1999. The share of industrial production that Zenica Canton has in the structure of industrial production in the BH Federation has a similar downward trend, whereas Herzegovina-Neretva Canton has recorded a rise in this share (from 16,0% in 1997 to 24,7% in 1999). Since 1998 industrial production in Tuzla Canton has also been falling behind the average reached at the level of the BH Federation. Industrial production in the BH Federation was bigger by 11% in the first six months of this year in comparison with average production achieved last year, whereas in Tuzla Canton it remained at last year's level.
The resurgence of industrial production, where significant incentives have come in the form of loans and donations from the international community, is discontinuous. The physical volume of production in 1997 increase by 52.6% in relation to 1996, which was a higher increase than in the industry of FBH. However, in the years that followed the production output of the Canton's industry was continuously lower in comparison with the same sector in the FBH.
The public industrial sector, which still owns 40% to 60% of this capital, is in an extremely unfavourable economic condition, characterized by huge debts, insolvency and operating losses. The total losses of public enterprises in mining and industry in the year 2000 amounted to KM 138,3 million, in which processes losses per worker were KM 4.955 a major part of those losses is generated in mining.

The rate of production capacities utilisation varies from branch to branch, and on the whole it is still very low. In most of the cantonal industrial companies, the rate of production capacities utilisation is below 40%, while only some of them have a rate of 40% to 60%.

In traditional branches of production there are huge differences in achieved production outputs. The electrometallurgical complex achieves 22.5% of the pre-war volume of production. Also, very modest output have been achieved in the chemical industry, the branch that was expected to achieve substantial exports.

Trade, catering, tourism

Trade and catering have recorded the fastest growth in the number of enterprises and employees after the war . Trade also has the largest number o f enterprises in Tuzla Canton – 3925 of which 98% are privately owned, making up 43.3% of the total number in Tuzla Canton. In comparison with the year before, the number of employees rose by 7.2% amounting to 4.139 employees. Cantonal trade enterprises have their share in the GDP of Tuzla Canton, (which is considerable higher share than the federal share which is 11,8%) and are much more productive than the average that trade achieves in the Federation of BH. The accomplished volume of business within the country in 2.000 amounts to 754.8 million KM and is bigger in relation to the previous year by 27%. The retail trade makes up 43.4% of the total volume of business and 65% of all employees in domestic trade, and there are altogether 657 shops. The majority of those shops are in private (50.1%) or mixed ownership (partly privately and party state-owned – 36.2%).

The private sector makes up 73,5% of the total turnover in the retail trade and 41,2% of the total turnover in the wholesale.

In the inter-entity trade, Tuzla Canton achieves surplus: in the first six months of 2001, sales to the Republic of Srpska amounted to 9,837,260 KM and purchases amounted to 3,151,437 KM. Non-metal construction materials (40%) and chemical products were sold most, whereas foodstuffs (45% of all purchases), non-metal construction materials and liquid fuels and lubricants were items that were bought most. In accordance with the upward trend in the inter-entity trading, the sales of Tuzla Canton have risen by 18.7% and purchases by 28.4% in the June 2000 - June 2001.

Catering has an annual turnover of ca 9.3 million KM. The downward trend in the achieved turnover in catering during the years 1999 and 2000 continued in the first three months of 2001. Compared to the same period of the previous year, the turnover decreased by 16.7%. The biggest turnover in the catering sector is achieved by hotels (58.4%) and restaurants (25.1 %), but the turnover was on the decline in the first three months of 2001 (by 16.3% and 38.2%, respectively). At the same time, the turnover of coffee shops and bars is on the rise (bigger by 2.6 times). With respect to the kinds of services, the biggest turnover is achieved with food (55.5%) and accommodation(20.7%), and as far as drinks are concerned, with wine and beer. Compared to the same period of the previous year, all kinds of catering services recorded lower turnover in the first three months of 2001, except for wine, which rose by 6.7%.

Income generated in tourism in April 2001, amounting to 218.587 KM was lower in comparison with the same period of the previous year by 27 .5%. Foreign tourists make up 34.2% of the tourist revenue.

Agriculture and forestry

In the year 2000, ca 1.140 workers employed in 139 enterprises (of which 5 are state - owned, 110 are private, 1 is socially - owned, 16 are cooperative and 7 are in mixed ownership) and ca 80.000 individual farms were engaged in agriculture, hunting and forestry. Continuing the post-war upward trend in the number of employees, this number was even doubled in the first quarter of 2001 (2023 employees).

Agriculture realizes 11.0% of investments and generates 16.6% of the GDP of Tuzla Canton (third place within the Cantonal economic structure).

There is 0,20 ha of plow land and gardens per inhabitant of Tuzla Canton (the Federal average is 0.17 ha), which is the international bottom limit for providing enough food.
Sown land has mildly expanded after the war and in terms of percentage it is considerably more extensive than at the level of the BH Federation. After the sowing in the autumn and spring of 2000/200l, sown land makes up 70,2% of the total surface area of plow land and gardens, whereas at the level of the BH Federation sown land makes up only 44% of the total surface area of plow land and gardens. As to the structure of sown land, cereals are still the most important crops (although their share diminished from 62% in 1996 to 41.5% in 2000), followed by fodder crops (29,5%) and vegetables (23,7%). At the level of the BH Federation, the percentage of these crops in the structure of sown land is more or less the same. The crucial cereal crops are maize (ca 70% of sown land) and wheat, and the most important crops among vegetables are potatoes, cabbage and onions; among fodder crops, the most important are clover-like grasses and lucerne. Of the total sown land in Tuzla Canton, the most is in Gradacac (20,1%), Tuzla (13.6%) and Lukavac (12.2%).

It is estimated that in the year 2000 ca 7.700 tons of meat was produced, most of which included poultry (53,3%) and cattle (41,5%). Tuzla Canton produce ca 15,1 Kg. of meat per inhabitant annually. During the first three years after the war livestock numbers increased intensely. After 1998., when the biggest livestock numbers were reached, a significant decline was recorded. In 2000, as compared to 1998., the number of cattle (58.557 head) , declined by 16%, the number of sheep (24.877 head) declined by 15% the number of pigs (5.988 head) declined by 385. Alongside the decline in livestock numbers, milk production also declined from 80.284 litres in 1998 to 59.948 litres in 2000.

At the same time the number of poultry more than doubled (2.295 thousand), whereas the number of bee-hives increased by 30%. As a result, egg production increased from 62.232 thousand to 81.228 thousand and honey production increased from 149 tons to 174 tons.

In the period from 1998 to 2000 fruit growing also had a crop failure and a decline in the number of trees of all the nine statistically registered kinds of fruit (quinces are an exception; their number increased by ca 2.500 trees). The crop and the number of trees in 2000 declined to 20 - 60% of the achievement in 1998. The biggest failure was recorded in the case of plums (the number of trees fell from 1.6 million to 1.3 million, and the crop fell from 29.727 tons to 8.576 tons), sweet cherries (the number of trees fell from 107 thousand to 82 thousand, and the crop fell from3.683 tons to 2.248 tons), apples (the number of trees fell from 244 thousand to 222 thousand, and the crop fell from 5.935 tons to 3.249 tons) and sour cherries (the number of trees fell from 81 thousand to 39 thousand, and the crop fell from 1.373 tons only 273 tons).

A downward trend in agricultural production is very marked and it is characteristic not only of the Canton but also of the BH Federation. The radical reduction of agricultural production since 1998 has been determined as of this year by a fall in foreign donations to Bosnia - Herzegovina and by the absence of bigger bonus payments to agricultural production. Namely, in the period from 1994 to 1997, US $ 379,1 million of donations arrived in Tuzla Canton, of which amount ca US $ 3,2 million was granted to the agricultural sector.

Canton by its production could satisfy 17% of the needs in production of wheat, 39% of the needs in meat production, 44% of the needs in milk production, 62% of the needs in eggs production, 29% of the needs in production of leguminous and 81 % of the needs in fruit production. Surplus is obtained only in production of vegetables.

The biggest growth in the production and sale of the forest assortment (the output in 2000 was higher by 13% in comparison with 1999, and by 30% in comparison with 1998) is with timber (primarily logs for mechanical processing and cutting) and firewood.

The potential of agricultural and agro-industrial production is far from being used at full capacity. This is lucidly proven by the statistical data according to which TC uses only 20 to 30% of its existing agricultural potentials, whereas for the import of food (data for the year 2000) it spends KM 38,8 million (which is 30% of the total import of food in the BH Federation).

Communication/Transport

The average number of employees in this sector in 2000 was 6050 workers, of whom by far the biggest number worked in overland transport. In the first quarter to 2001, this number declined by 10,1%.

Expecting 15% or so big enterprises in this sector, the total number of 846 enterprises in this sector is illustrative of the fact that they are small fragmented enterprises that on average employ 7,1 people. This sector realised 9% of investments and generates 8% of the GDP of Tuzla Canton (sixth place within the economic structure of Tuzla Canton). At the level of the BH Federation this sector generates 6,8% of GDP.

The war (1992-1995) stopped the pre-war trend of the modernization of transport capacities, thus making it one of the most adversely affected sectors in the economic structure of Tuzla Canton. The devastation caused by the war and the non-functioning of railway transport increased the usability of road communications and of public transport in towns and commuter lines.

The total road transport, public transport in towns and commuter services in Tuzla Canton fall behind the physical growth in this sector at the level of the BH Federation.

Among services in road transport and public transport in towns, it is only passenger transport that records a permanent growing trend.

Building trade

There are 775 enterprises in the Canton engaged in building trade, employing 4.964 workers, which makes up one-fifth of employees in building trade at the level of the BH Federation. Enterprises in this sector are even more fragmented than in transport sector. The indicators of the number of enterprises and the number of employees place building trade in fourth position within the Canton's economic structure.

In the investments and GDP of the Federation of BH, the building trade of Tuzla Canton has share of 21,3% and 15,5% respectively. At the level of the BH Federation the share of building trade in generating GDP is much lower, i.e. 6%. On average, 26% of the surface area and the volume of completely built buildings in the Federation of BH are constructed in Tuzla Canton annually.

A high upward trend in high-rise construction continued in 2000. In comparison with the previous year, the value of construction works carried out was bigger by 66% and the value of construction works carried out was bigger by 3.5 times.

In the area of housing construction, the rehabilitation and refurbishment of existing apartments as well as the construction of new apartments have continued.

Almost all the apartments completely built in 2000 were constructed in Tuzla (83.1 %), Kladanj (13.4%) and Gracanica (2.6%). In Tuz1a Canton the share of new building in completed construction works (90,8%) is much bigger than at the level of the BH Federation (53,3%).

The main economic Sectors

Due to different levels of development, Canton can be separated on three sectors:

- Rural non-agricultural municipalities (Sapna, Teocak, Celic, Doboj East, Kalesija, Kladanj) characterized with low level of economic development, high level of unemployment, low traffic linkages etc.

- Agricultural and entrepreneurial municipalities (Gracanica, Gradacac, Srebrenik), also with high rate of unemployment but with significant activities in agricultural sector same as large number of small and medium companies from construction or wood industry, trade etc.

- Municipalities with predominantly "waning industries" (municipalities of the so-called Tuzla industry basin:Lukavac, Zivinice, Banovici, Tuzla). Those municipalities are connected through technological chain from coal mines, through electric power production and industrial steam till the basic chemical industry. War activities same as loss of ex – YU market produced negative effects for those municipalities.

Foreign trade

The post-war volume of the imports and export of Tuzla Canton (since 1996) shows a discontinuous rise, where the trade deficit still considerably exceeds the amount of exports. In this period (the year 2000 inclusive), imports increased by 6.1 times, while exports increased by 9.2 times. Therefore, although exports record a faster rise than imports, the Canton still has a trade deficit which amounted to nearly 300 million KM in 2000. The trade deficit in the period from 1996 to 2000 is increased by 5,8 times.

Exports

The total amount of exports in 2000 was ca 202 million KM. Of the individual economic sectors, the biggest share in the exports structure belongs to processing industry (88.4% of the total exports), within which woodworking industry has the biggest share (24.2%), followed by (ranging from 14 to 10%*)* leather processing, the production of fancy goods and footwear, then the production of clothes, the final processing and colouring of fur, chemicals and chemical products, foods and drinks.

In comparison with the same period of the previous year, the first quarter of 2001 saw a further increase in exports by as much as 63%. Although the resurgence of exporting activities after the war has been observed in near1y all branches of processing industry, the biggest contribution to the total increase in exports in the first quarter to 2001 belongs to the production of clothes, the final processing and colouring of fur (an absolute increase by 4.2 times in comparison with the same period of 2000), furniture production(an increase by 1.8 times) and the production of chemicals and chemical products (an increase by 1.8 times); it should be noted, however, that forestry and forestry services have recorded the biggest upward trend in exports (an increase by 45.8 times).

Imports

The imports amounted to more than 500 million KM in 2000. The average annual rate of increase in the post-war imports is 20,4%. In the imports structure, a dominant share belongs to processing industry, within which motor vehicles, trailers and semi trailers have the bigger share (15.8%) followed by chemicals and chemical products (10.1%) machines and appliances (9.5%) and food and drinks (7.8%).

In comparison with the same period of the previous year, the first quarter of 2001 saw a further increase in imports by 71%. The biggest increase in imports in the first quarter of this year in comparison with that of the previous year was recorded in the production of clothes, the final processing and colouring of fur (by 42 times), the processing of leather and the production of fancy goods and footwear (by 6.4 times) and tobacco products (by 3.1 times).

The EU markets are the main destination of the foreign trade of Tuzla Canton. Their share in the Canton' s foreign trade is 65% in exports and 89% in import. Italy is the Canton' s most important partner in foreign trade (50.6% of imports and 39% of exports) and has the fastest trend of grow in the trade volume (in comparison with the same period of the previous year, exports to Italy doubled in the first quarter of 2001, while imports increased by as much as 9.9 times). The trade with Italy makes up 56.5% of the total foreign trade deficit of Tuzla Canton.

Among other leading destinations of the Canton's exports are: Germany (18.8%), Croatia (11.9%), FR Yugoslavia,(9.9%) and Slovenia (9.8%). In comparison with the same period of the previous year, exports to these countries increased in the first quarter of 2001 by 22.5%. After Italy, the leading foreign trade partners of the Canton in imports are: Slovenia (14.6%), Germany (11.7%) and Croatia (6. 7%). The highest increase in imports was recorded in the trade with Slovenia (39%).

In a situation where imports and exports had almost the upward trends in 1999 export activity shows that:

- processing industry has the biggest share in exports and it has also recorded an expanding trend throughout the whole post-war period;
- through an incentive policy towards agricultural and agro-industrial production, significant reductions could be achieved in the import of food, but also in the export of food, which already shares 10,2% of cantonal exports;
- permanent growth of exports to Croatia, FR Yugoslavia and Slovenia shows that it is possible to return to the markets of former Yugoslavia.

Investments

During four years after the war, from 1996 to 1999, the amount of 462.5 million KM was invested in the economy of Tuzla Canton (on average 115.0 million per year), which makes up 11.3% of the realized investments in the Federation of BH in that period. Compared to other cantons of the FBH, the investment activity of Tuzla Canton is relatively falling behind.

From the comparison of realized investments in individual cantons of the Federation of BH, the following conclusions may be drawn:

(1) There is an obvious discrepancy between the share of Tuzla Canton in the total population and the amount of investments in the Federation of BH. Tuzla Canton encompasses 22.1% of the FBH population, whereas its share in the investments realized is only 11.3%.

(2) Among the ten cantons in the BH Federation, Tuzla Canton is as low ranking as in seventh place with respect to the amount of investments per capita (877KM).

(3) There is a direct causal relationship between the cantonal GDP per capita ($ 756 or 1 330 KM in 1999, i.e. fifth place among the cantons of the FBH) and the amount of investments realized.

(4) As regards the amount of investments per capita (877 KM), Tuzla Canton is falling behind the FBH average.(l.811 KM). The Federal average of investments is, therefore, 2.1 times as high as the Cantonal.

(5) Investments realized in Sarajevo Canton are six times as big as those in Tuzla Canton.

(6) The structure of investments realized in Tuzla Canton with respect to their specified purposes shows that the bulk of the funds (57.1%) was focussed on the procurement of equipment (where 82.7% of the total investment in equipment was spent on imported equipment). The share of buildings in the technical. structure of investments is also comparatively high (38.0%), whereas the expense of setting up new businesses is low (4,9%).

Private investments in the form of facilities, equipment and money amounting to 309.2 million KM are dominant in the funding scheme of investments (66.8%); they are followed by loans - 86.1 million KM (18.6%), donations - 49.3 million KM (10.6%) and budgetary funds (1.6%).

In the period 1996-1998, Tuzla Canton shared 12.3% of the total amount of funds granted to the Federation of BH by the World Bank and the European Commission within their "Priority Reconstruction Programme".
Through this, 580 projects in the Canton were funded, most of them being in economy (207), then power-supply infrastructure (54), education (52), health care system (50), water supply (29), transport (27) and housing (26). 1740 legal entities had investment activities in 1999.

The bulk of donations (coming from over 70 organizations from various countries) have come four organizations: USAID, UNHCR, ECHO and ODA. Their share in the total amount of granted funds was around 29%. Most of the funds from this programme were used in the first years after the war: 45.9% in 1996, 30.2% in 1997 and 23.9% in 1998.

Gross Domestic Product

The total GDP of Tuzla Canton generated in 1999 amount to US$ 463.3million.
Tuzla Canton shares 14.5% of the GDP generated by the Federation of BH. The GDP growth in Tuzla Canton is significantly slower in relation both the average GDP of the Federation of BH and most of the cantons in the Federation.

The economy of Tuzla Canton has recorded the lowest GDP growth. In comparison with 1996, the GDP in 1999. has increased by only 3.8%. At the same time, the GDP of Sarajevo Canton has more than doubled; the Canton of Central Bosnia has recorded an increase of 65.7%, Herzegovina-Neretva Canton by 63.7%, etc.

The share of Tuzla Canton's GDP in the BH Federation GDP has a downward trend. Most other cantons records a significant increase.
Tuzla Canton generates one of the lowest GDPs per capita in the BH Federation. In 1999, its GDP amounted to US $ 917, being lower than the Federal average by 18,6%. The Federal average of the

post-war GDP growth is by 10 index points bigger than that in TC. In comparison with Sarajevo Canton, Tuzla Canton's GDP per capita is less than half of GDP per capita in Sarajevo Canton.

The municipality of Tuzla has reached only 46% of its pre-war GDP per capita. For the sake of comparison, in this same period European transition countries reached on average 95% of their GDPs, whereas only countries that were formerly part of the USSR are below Tuzla's average: Tajikistan, Ukraine , Georgia and Moldova.

In comparison with the seven countries form the narrower circle of the Stability Pact as the economically least developed region in Europe, Tuzla Canton was falling behind six of them in the achievement of GDP per capita in 1999. As follows: 55,6% of the average GDP per capita of the whole group of countries; 25,3% of GDP per capita in Croatia and 88,9% of GDP per capita in FR Yugoslavia. The least developed country in economic terms, Albania, has a lower GDP per capita than TC by one-third.
This lagging is even more marked when compared to West European countries: e.g. TC achieves only 3,5% of GDP per capita in Germany and 9,8% of GDP per capita in Portugal.

Tuzla's GDP per capita in 1999 was as low as the level it had reached in the mid-1970s. Even such a low level of the GDP per capita was by some 90% above the Cantonal average by some 60% above the FBH average. A comparison with similar regional centres shows that Mostar is economically more powerful and efficient than Tuzla whereas Zenica is inferior.

The amounts of Tuzla's GDP per capita stated above should, however, be taken with a pinch of salt for two basic reasons. The first reason is that GDP per capita is based upon the statistical amount of the total GDP *(organizational principle, not the* principle of *pure* industrial branches), which does not include the effects of some very important sectors of Tuzla 's economy (power productiom in the thermoelectric power plant "Tuzla", postal and telecommunication services).
The other important fact that should be borne in mind with respect for the calculation of GDP per capita is related to the effects of the so-called grey economy, which has an influence, it is estimated, on 50% of economic activity.

Infrastructure

Communications & Transport

Tuzla Canton has favourable transportation characteristics, including a comparatively high level of the categorized road network. It has access to the strategic road Bosanski Samac - Doboj - Zenica - Sarajevo - Mostar - PIace (port) stretching from the north to the south as well as to the road Brcko - Tuzla - Banovici, which has an important role for development and integration.
There are several important arterial roads and railway lines. This refers particularly to the arterial road Zupanja - Tuz1a - Sarajevo - Opuzen, which is its way out to Central Europe and the Adriatic Sea. Regional roads are: Tuzla - Zenica leading towards Central Bosnia, Tuzla - Doboj with extensions towards Banja Luka and Derventa as well as the roads Tuzla - Bijeljina and Tuzla - Zvornik linking Tuzla Canton to Southeast Europe.
Connecting this area to the European highway C-5 (Hungary - Adriatic Sea) is one if the major goals of the development of the region's traffic infrastructure.

Railway on TC is not in function, whether as an consequence of the war devastation, or non integrated railway system of BH. Activation of these rail roads is expecting, since that managing

with it is committed to the Railway Public corporation, which United railroad transport operators within B&H. The basis of the railway network is two railway lines, the total length of which is 140 km: Brcko - Tuzla - Banovici and Tuzla - Doboj. The railway line Tuzla - Brcko provides, through the Republic of Croatia, a way out to Central Europe, while the line Tuzla - Doboj provides a way out to other parts of Bosnia-Herzegovina as well as to the Adriatic Sea and the seaport of Ploce. The railway line Tuzla - Zvomik, the length of which is ca 50 km (put into service in 1990), provides a way out to the territory of the FR Yugoslavia.

Regarding river transport communication, TC could use some specific advantages and navigable opportunities of the Sava river (Brcko port is located in the Brcko District), which is important route of the international transport communications, with potential to on cheaper river transport connect TC with whole Europe. Building of the shipping canal Vukovar - Samac which would connect Tuzla area via river shipping route (Sava - Danube) with the rest of the world is expecting.

The airport "Tuzla", which is 8 km southeast of Tuzla and 5 km east of Zivinice and which was properly put into service in 1998. Additional investments for its complete opening are required. Activated capacities could meet the needs of the passenger and cargo transport not just for Tuzla region, but for a wider area of South East Bosnia, Slavonia and Srbija too.

Water supply system

Organized water supply is provided in Tuzla Canton far ca 40% of population, mainly for the population of municipal urban centres and some suburbs. The rest of 60% of population mainly gets water from small rural waterworks or catchments. Municipalities Doboj East, Sapna and Teocak do not have central water supplies at all. From other municipalities who do have the lowest number of households connected to the main water supply system are: Kladanj (8,8% of population), and the biggest Tuzla (90% of entire population). The city water supply systems are almost run out, from 11,5% in Gracanica till 100% in Kladanj. The daily losses in the city water supplies are going from 20% in Kalesija till 60% in Celié and Kladanj. Except the city water supply systems, there are 1.112 local water supplies, 5.135 wells, 26 piped wells and 213 springs, most of them has not been under control, which means that it is not disinfected and without laboratory control.
Certain industrial facilities are also connected to municipal water supply systems spending 20-40% of the total quantities provided far individual municipalities. The biggest agglomeration - Tuzla city - provides industries with technological water from Modrac Lake. The supply of drinking water is one of the major problems of Tuzla city and its neighbourhoods.

There have been severe restrictions on water consumption in all of Tuzla municipality for many years (on average, citizens have running water at their disposal 4-8 hours a day). The problems in the municipal water supply system are: the existing springs do not provide sufficient quantities of water, the whole water supply network is battered, the municipality has a hastened economic development and a permanent increase in the number of consumers. Water is supplied to the municipality from three central springs: Stupari, Toplice and Sprecko Polje, and from several local springs. The average minimum capacity of these springs is 470 l/sec., and the maximum is 700 l/sec.

The capacity of the springs of Stupari and Toplice depends largely on hydrological conditions. In the dry summer and autumn period, the capacity diminishes by *30*- 50%. Of the total water quantity, 80% belongs to the municipality of Tuzla, so the available quantity amounts to Qmax= *560* I/sec. and Qmin=376 I/sec. Tuzla's water supply system is, on the whole, very old, most of it being aver 40 years old; besides, even pipelines that are more than 90 years old are used, far which reason losses rise up to 50%.

Liquid waste

The infrastructure facilities for draining, dumping or processing liquid waste do not meet the needs of the population and businesses, and particularly the environmental protection standards. Sewerage generally covers only urban municipal centres.
The percentage of population making use of the sewerage in bigger municipalities of the Canton ranges from 20% in Gradacac to 45% in Tuzla. The municipality of Gradacac is the only one that has a plant for filtering liquid waste. The bulk of water used is directly drained into the rivers Jala, Oskova, Spreca, Litva and Tinja. Spreca river basin is the most polluted area in B&H and one of the most polluted from all former Yugoslav republics.

Doboj Istok, Sapna and Teocak municipalities do not have central collecting system for the liquid waste. Percentage of population in other municipalities who are connected with the central collecting system of the liquid waste is from 30% in Lukavac till 85% in Kalesija. Rest of population use septic holes who do not satisfy basic hygienic principles.

The liquid waste of the population and industries is collected in the same municipal collector, and the liquid waste of the chemical industry is collected in internal plant sewers and drained through several drainpipes into the Jala river. The sewerage (built as far back as in Austro-Hungarian times) is for the most part battered and nonfunctional, and a number of drains and drain junctions are completely out of use. The size of the main sewage collector is such that those quantities of water coming from the eastern part of the city cannot be accepted, nor can it economically accept liquid waste and rainfall from the broader drainage area and drains them in the possible way. Very often liquid waste pours out, and when there are heavy rain streets and sidewalks get submerged, which makes the spreading of epidemics infectious diseases possible.

Electricity

The biggest sources of energy in the whole region are the Thermoelectric Power Plant Tuzla and the Thermoelectric Power Plant Ugljevik. With its five phases, the Power Plant Tuzla produced before the war four and a half billion a year, making up half of the country's electricity. In the first few years after the war the production decreased by ca 70%, except for the production of thermal energy, which was increased. The utilization rate of its capacities at the moment is 50% and its maximum utilization is 570 MW. The needs of Tuzla city for electricity are on average some 30 MW (for the supply of central heating to the city) and some 35 MW for the needs of households. Presently, the power plant produces over 30% of electricity in Bosnia-Herzegovina and over 40% of electricity in the Federation of BH.

Thermal energy

The Thermoelectric Power Plant Tuzla provides 174 MW of thermal energy (hot water with thermal characteristics of 145/75 °C). The total length of the heating pipe is 15 km and it supplies heating to 12.500 apartments and 800 business premises. It is expected that the production of thermal energy will increase to the limit of the optimum capacity of the power plant as it is today, but thermal energy will continue to be produced and supplied to Tuzla city only. Other major towns will build their own local heating plants and central heating systems.

By the year 2010 Bosnia-Herzegovina will probably be connected to alternative gas pipelines supplying natural gas from both the north and the south. Tuzla region is situated in the immediate vicinity of arterial gas pipelines. It is quite certain that this too will be integrated in the integral gas pipeline network of Bosnia-Erzegovina by 2015, which will significantly increase the volume of energy supply population and businesses.

Educational

On Tuzla Canton territory exist 87 primary school's with around 60 000 pupils, 31 secondary school's with around 26 000 students and University with 11 faculties and 11 500 students.

- Academy of dramatic arts
- Faculty of special education teacher
- Economic faculty
- Faculty of electrical engineering
- Faculty of sports and physical education
- Faculty of Philosophy
- Faculty of mechanical engineering
- Medical faculty
- Faculty of Natural Sciences and Mathematics
- Faculty of mining-geology and construction (building)
- Faculty of chemical engineering

Beside that, in Tuzla exist and operate 5 institutes:

- Mining Institute
- Economic Institute
- Institute for chemical engineering
- Institute for construction and constructional material and non-metals
- Institute for protection and education

SWOT ANALYSIS

TERRITORIAL AND ENVIRONMENTAL SYSTEM

STRENGTHS		WEAKNESSES	
North Est Region of BiH	**Tuzla Canton and Municipality**	**North Est Region of BiH**	**Tuzla Canton and Municipality**
1. Considerable numbers of natural resources, diversified and variously distributed in the area (arable land, mineral resources – coal , metal and not-metal resources – salt , forests and various natural resources - rivers) 2. The area is in the belt of temperate continental climate, with accented yearly variations of temperatures and precipitation 3. Geographic position is suitable for trade of products 4. This is the most important grain-bearing (barn) area of Bosnia and Herzegovina 5. There are mineral springs	1. The Canton and the broadest region of Tuzla have various natural resources (minerals, soil, forests, water) 2. Tuzla has the biggest energy potential in Bosnia-Herzegovina 3. Most of the mineral springs are in the Tuzla area 4. Commitment towards adjustment current regulations at the standard UE.	1. War damages and mined areas (but the removal of mines is almost concluded) 2. Uncontrolled use of natural resources 3. In the middle part of the region the extensive part of arable land is on slopes, which makes the use of modern mechanization more difficult. 4. The natural resources are aspects more significant in quantity than in quality 1. Potable water supply is not organised in some higher form (such as regional or sub-regional form of organisation) 2. Water deficit: the resources available do not correspond to the needs of population and economy. 3. Water pollution 4. Lack of adequate regulations and systems for the issue of liquid waste. 5. There is no regional sewage system, it exists mainly in municipal centres, with incomplete networks	1. Mined areas 2. The natural resources are more important with respect to quantity than quality. 3. The territory of the Canton has been considerably damaged due to war destruction, which makes arable land shrink thus reducing the potential of agricultural production. 4. Polluted rivers due to the intense economic development in the area : the longest and the most important river Spreca was classified as an area with the most polluted rivers 5. The hydrographical network of rivers is composed of small rivers, not economically available

OPPORTUNITIES		THREATS	
North Est Region of BiH	**Tuzla Canton and Municipality**	**North Est Region of BiH**	**Tuzla Canton and Municipality**
1. The area is with an heterogeneous structure, where very differentiated longitudinal zones provide various possibilities for economic utilization 2. Relatively big potential in agriculture (especially arable land) in the northern part of the region, which is the largest land resource in Bosnia and Herzegovina. 3. The southern part of the region is rich in forests, which are crucial for the development of wood-processing capacities in many of municipalities within the region (Kladanj, Zvornik, Vlasenica, Živinice, Gračanica). 4. Important river network able to support the development of economic activities (e.g.: industry, transport, tourism) 5. Significant hydropower potential is an important basis and pre-condition for energy production and for the development of basic and processing industry 6. Abundance and variety of mineral resources - coals (coal mines in Tuzla, Banovići, Živinice, Lukavac, Ugljevik), metal ores, and non-metal minerals (e.g. salt – the only source of the mineral in	1. Coal mines in Tuzla can be important pre-condition for energy production and for the development of basic and processing industry 2. The area is still insufficiently geologically explored 3. Tuzla basin is rich with stoned salt 4. 3 Thermal medical resorts in Tuzla Canton can be elements of tourist and medical development	1. The middle, hilly part of the region, is subject to erosion. 2. Risk of natural disasters due to lack of control and management of the resources, especially in Tuzla Canton. 3. Lack of consciousness within the population with reference to environmental risks (subsidence, pollution in general)	1. Tuzla is subject to erosion 2. Risk of natural disasters due to lack of control and management of the resources (E.g. subsidence) 3. Unsatisfactory water supply in Tuzla area could became a limiting factor for further development. 4. Water supply has been unsatisfactory – Impoverishment of natural resources, most of all water, also due to the lack of criteria, regulations, procedures aiming at guaranteeing a sustainable development or by the way with the lack of adaptation to UE standards. 5. The infrastructure facilities for draining, dumping or processing liquid waste don't meet the business needs

OPPORTUNITIES		THREATS	
North Est Region of BiH	**Tuzla Canton and Municipality**	**North Est Region of BiH**	**Tuzla Canton and Municipality**
ex Yugoslavia) useful for electricity supply and improvement of the industrial system 7. Rich in various natural attractions of the area (preserved flora and fauna, especially in the southern part of the region – thermal and mineral springs, artificial and natural lakes) with extensive cultural and historical heritage: this recourses represent a big potential for the development of tourism of the North Est Region 8. The only 3 Thermal medical resorts in Tuzla Canton, can be elements of tourist and medical development			

SOCIAL SYSTEM

STRENGTHS		WEAKNESSES	
North Est Region of BiH	**Tuzla Canton and Municipality**	**North Est Region of BiH**	**Tuzla Canton and Municipality**
1. The NE Region is more populated and with a bigger density than Bosnia Herzegovina 2. Favourable age structure, with the working-age population making up 68% of the total (The workforce potential is of 271,609 people) 3. In the post-war period, the number of university students has increased 4. Variety of educational institutions, including a University, public and private institutions offering educational programmes. *The structure of employees per sector shows that the greatest portion of the work-force is first engaged in the secondary sector, then in tertiary and primary.*	1. High density population - After Sarajevo Canton, Tuzla Canton is the most densely populated canton in the Federation of BiH. 2. With reference to NE Region, the highest number of employed people is in Tuzla municipality. 3. A University and a centre of research and development are to be found in Tuzla. 4. Labour availability – especially young people, motivated and highly skilled 5. Even though civil war was over some years ago and economic difficulties are still there, recovery is visible at all levels 6. High level of availability to open up to new markets (language skills and interest towards new technologies) 7. Will to take up European scale challenges 8. Presence of various university establishments with a good quantitative (various university establishments are located in Tuzla) and qualitative (universities are very close to companies' needs and try and meet them) value	1. High level of unemployment / Big unemployed rate (45.9% in the BiH Region in the 2002): the NE rate is higher than the average BiH employment. 2. The use of workforce is very low and in the recent years it has had a decreasing tendency. The highest number of employed people is concentrated in 2 municipalities of Tuzla Basin and two in Posavina Semberija area. 3. Abstinence from primary schools is characteristic of rural areas and is connected with economic and cultural reasons, mostly affecting female children 4. Low numbers of graduated people: here is only 1.6 % of the total population in the Region NE who attend institutions for higher education, which is much lower than the standard in the developed countries. 5. Research and development is very modestly organised, mainly in university and institutes 6. Brain drain of young people (especially in Europe and in America) 7. IT illiteration is very high, but is decresing	1. Tuzla valley is one of the worst areas as far as ecology is concerned 2. Tuzla Canton has the highest registered unemployment 3. TC has the lowest employment rate 4. Low request of qualified and educated personnel by the existing enterprises . 5. Women make up the 37,9 % of the total number of unemployed people

OPPORTUNITIES		THREATS	
North Est Region of BiH	**Tuzla Canton and Municipality**	**North Est Region of BiH**	**Tuzla Canton and Municipality**
1. New European Founds for research activities and the development of training programmes. 2. The workforce potential is increasing at the average of 4,3% 3. The interest in higher education has significantly increased from 1999 to 2003 4. The IT literation is getting rapidly better	1. New European Founds for research activities and the development of training programmes. 2. Adequate politics of development can encourage qualified manpower also through the refugees' return to their hometowns 3. Universities and Secondary Schools and Institutes which, through training courses matching the enterprises' needs, can improve the level of competence and match also the expectations of the economy, thus increasing the young population cultural level. *Tuzla is a University centre (11 faculties with 11500 students): dramatic arts, education teacher, economic, electrical engineering, sports and physical education, philosophy, mechanical engineering, medical faculty, natural sciences, mining-geology and construction, chemical engineering* *5 Institutes: mining inst, economic inst, institute for chemical engineering, inst for construction and constructional material, inst for protection and education*	1. The area is affected by a social crisis with the living standard below the BiH average. 2. Significant decrease in the rate of natural growth of the number of inhabitants and tendency to demographic ageing 3. Immigration	1. Risk of permanent pollution and epidemics due to lack of adequate health systems and environmental politics. 2. 40% of economy is "grey" *20000 employee unofficially* *In the unemployment structure unskilled people make up 42,8% of all the unemployed*

ECONOMIC SYSTEM

STRENGTHS		WEAKNESSES	
North Est Region of BiH	**Tuzla Canton and Municipality**	**North Est Region of BiH**	**Tuzla Canton and Municipality**
1. **Production structure** of economy in the Region NE is composed of the following sectors: industry, energy and mining, agriculture processing industries 2. GDP rates have increased in the last years *(but mainly because the rates is small)* 3. Increase in the number of small businesses : their number is quadrupled compared to the pre-war period 4. The greatest number of businesses is in trade, catering and transport 5. Some sectors present a continuous growth in the GDP : the sectors of trade, transport and communications. 6. In agriculture, the main productions are those of wheat, both in the private and public sectors, and fruit. 7. Industry based on the development of fruits, in the middle area, industrial processing facilities have been built	1. Tuzla is the economic centre of the North Estern Region →it can influence economically the strategies of development 2. Tuzla Canton is the mainstay of the production capacities of mining and industry in the BH Federation 3. Trade and catering have recorded the fastest growth in the number of enterprises and employees after the war 4. The turnover of catering, coffee shops, bars, and in general and mostly services such as food and accommodation is on the rise. 5. A big potential of agricultural and agro-industrial production. 6. Surplus is obtained only in production of vegetables and fruit 7. **Export products** of processing industry (woodworking and leather processing – concentred in Tuzla area), fancy goods and footwear, cloths, ,chemicals and chemicals products, foods and drinks.	1. War has considerably reduced the GDP per capita: many cities in the North Eastern area BiH have not yet reached the levels of growth of the ante-war period. 2. Discontinuous growth of GDP per sectors. 3. Contrary from the pre-war period characterised with a sufficiency, in the post-war period there is a deficit in the external trade 4. Although entrepreneurs, small and medium businesses form an integral part of a dynamic economy, this sector is underdeveloped in the Region NE. 5. Unfavourable economic and financial conditions, consequences of war devastation and war-caused migration, lack of capital, aged technologies, low utilisation of capacities and loss of pre-war markets have considerably lowered economic strength of the region. 6. Constant fragmentation of the small farm ownership disempowering competitiveness	1. The main sectors of the Tuzla area (industry, mining and energy supply) have a trend of significant decline, caused by the war, absence of investments and so on. 2. Small and fragmented enterprises in the communications, transport and building trade sectors 3. The rate of production capacities utilisation in the different branch of industry is very low (in the most of cantonal industrial companies the rate of production capacities utilisation is below 40%) 4. The investments realised in the Tuzla Canton are very low compared with the other BH Region. 5. The share of Tuzla Canton GDP's has a negative trend. 6. Unliked, not good method of privatisation 7. Investments have significantly declined as they focussed mainly on small and middle size enterprises 8. The public industrial sector,

STRENGTHS		WEAKNESSES	
North Est Region of BiH	**Tuzla Canton and Municipality**	**North Est Region of BiH**	**Tuzla Canton and Municipality**
8. The greatest trend of growth in investments is recorded in: agriculture, hunting, forestry and fishing, and also mining, construction, processing industries and power, gas and water supply. 9. Opportunity for tourism and for hunting and fishing connected with tourism 10. In total **exports,** dominant shares have processing industries, followed by wood industry and production of textile and clothing, raw wooden material. 11. In total **imports,** the highest shares have products of processing industries, followed by machines and vehicles and chemical products, finished goods. 12. Presence of different service infrastructures (e.g. development agencies and institutes, business associations, industrial infrastructures, technological parks, industrial zones, business fair, chamber of commerce and so on) for the support of entrepreneurship in the NE Region. 13. Assistance and less complicated	8. In Tuzla are present different service infrastructure for support the development of economy (E.g. Chamber of Commerce, Development agencies and institutes, business associations, technological park, business fair) 9. Encouragement and support to new, innovative ideas and projects 10. As a general perception, the country risk level looks much lower than that established by international organisations 11. Widespread credit system 12. Strong interest and attention towards co-operation and collaboration projects with UE countries as well as other countries in general, for instance: efforts to improve competitiveness and economic recovery *Building trade makes up one-fifth of employees in building trade at the level of BH Federation, enterprises are fragmented* *Farmland makes up 49%, forests 45% and unproductive land 6%.* *Foreign tourists make up 34,2% of the tourist revenue* *Agriculture realizes 11,0% of*	of the sectors 7. The average yield of the main crops in the Region is low compared to the pre-war period, especially compared to the countries with developed agricultural production. 8. Technology applied in crop production is often inadequate for the needs of high-yielding crops and hybrids (Agricultural machinery is outdated in most cases and should be replaced.) 9. Private estates are small and divided into plots (so there is a small capacity for the introduction of machinery, difficulties in irrigation and draining, etc...) 10. The fish-farming is unorganized and it is not a significant branch of agricultural production. 11. The traditional restoration and classic motels are in significant decline 12. Famous pre-war hunting grounds have not been restored 13. Slow processes to adopt UE and International Standard and procedures	which still owns 40% to 60% of this capital, is in an extremely unfavourable economic condition, characterized by huge debts, insolvency and operating losses. 9. A downward trend in agricultural production is very marked and it is characteristic not only of the Canton but also of the BH Federation. 10. The war stopped the pre-war trend of modernisation of transport capacities 11. Trade deficit (imports are bigger than exports) is a significant problem. 12. High interest rates

STRENGTHS		WEAKNESSES	
North Est Region of BiH	**Tuzla Canton and Municipality**	**North Est Region of BiH**	**Tuzla Canton and Municipality**
and expensive procedures for the start up and development of existing business 14. Presence of a network of micro-credit organisations and banks (12 micro-credit organisations in NE Region and centres and branch-offices banks in all the 35 municipalities) 15. Compared with the pre-war period, the total number of tourist is increasing, also foreign tourists *The largest share in the total structure of the agricultural land has fields with 47,65% and forests 38,94%.*	*investments and generates 16,6 of the GDP of TC* *TC produce ca 15,1 kg of meat per inhabitant annually* *Italy is the Canton's most important partner in foreign trade (50,6 % imports and 39% exports)* *Increase in imports: processing industry, motor vehicles, trailers and semi trailers, chemical and chemical products, machines and appliances, food and drinks.*	14. Higher interest rates have a significant impact on the increase of credits in the private sector, and that refers to a constant insecurity of the market conditions and the economy. Unfavourable credit and finance 15. Low level of awareness towards domestic products and services (but it is increasing) 16. Foreign Direct Investment in BiH is still modest	

OPPORTUNITIES		THREATS	
North East Region of BiH	**Tuzla Canton and Municipality**	**North East Region of BiH**	**Tuzla Canton and Municipality**
1. Activation of facilities, personnel, tools to support the development of the economy. 2. The growth in foreign investments can contribute to increase the local economy 3. Restoring existing capacities in production and service structures, such as joint regional and wider initiatives 4. Important rivers such as Sava, Drina, Bosnia for fish-farming and for transport 5. The middle land is more suitable for the development of fruit growing and cattle breeding. 6. The Northern part of the region represents a big potential in agriculture, and is also a long-term basis for the development of agriculture 7. Promoting association solutions in the small farm ownership, can improve the competitiveness of the sector. 8. Development of the tourism connected with the natural existing resources and with the traditions of the territory (ski, hunting, spa, adventure tourism – rafting) 9. Working out new possibilities of	1. Presence of an historical background of production/ industry production traditions 2. Widespread entrepreneurship 3. Energy is widespread both in the private and the public sector 4. Improvement of the export to UE countries representing the principal target markets for foreign exports, also through the creation of a partnership among European cities. 5. Permanent (but small) growth of exports to Croatia, FR Yugoslavia and Slovenia shows that it is possible to return to the markets of former Yugoslavia. 6. Exploitation of the energetic potential to support the needs and development of productivity. 7. The potential of agricultural and agro-industrial production is far from being used at full capacity 8. Resurgence of export activities after the war has been observed in nearly all the branches of processing industry 9. The health tertiary level is strong in Tuzla 10. Important rivers such as Sava, Drina, Bosnia for fish-farming and transport	1. Significantly declining of production of all agricultural products. Lack of investments to introduce and adapt tools and technologies for agriculture 2. Lack of facilitations for the access to credit, decreasing the power of attraction towards foreign investors 3. The lack in a system of connection among the principal farm produces, reduces their competitiveness on the markets 4. Lack of adequate politics of local development which prevents the improvement of the cultural and historical heritage. 5. Insecurity of the market conditions and the economy 6. The presence of complicated procedures for the access to credit does not encourage investors and does not stimulate the growth of small/ medium enterprises.	1. Difficulty in re launching economic development without suitable (not discontinuous) incentives and economic support. (e.g. Continuous and radical reduction of agricultural production determined by absence of donations to Bosnia - Herzegovina and by the absence of bigger bonus payments to agricultural production.) 2. Significant decline of the industry, energy supply and mining after the war 3. The infrastructure facilities for draining, dumping or processing liquid waste don't meet the business needs 4. Discontinuous rise of the volume of import and export – The imports/exports are not balanced 5. Lack of facilitations for the access to credit, decreasing the power of attraction towards foreign investors 6. Insecurity of the market conditions and the economy 7. High interest rates 8. Difficulties in accessing credit services

OPPORTUNITIES		THREATS	
North East Region of BiH	**Tuzla Canton and Municipality**	**North East Region of BiH**	**Tuzla Canton and Municipality**
facilitation to the access to credit *current foreign investments: Austria, Croatia, ecc* *Presence of 6 Development agencies and institutes* *Presence of 9 Business associations* *Presence of 2 technological parks*	• *There are 0,20 ha of plough land per inhabitant of the Canton (in some area as Tuzla 0,17, which is considered the bottom limit)* • *The income generated by tourism in April 2001 was lower than the one of the previous year in the same period* • *A very modest output has been achieved in the chemical industry, the sector that was expected to achieve substantial exports*		

INFRASTRUCTURE AND LOGISTIC SYSTEM

STRENGTHS		WEAKNESSES	
North East Region of BiH	**Tuzla Canton and Municipality**	**North East Region of BiH**	**Tuzla Canton and Municipality**
1. The region NE lies by the key traffic arteries, which connect the area to the other countries nearby 2. In general, acceptable regional infrastructure of road connection 3. There are local air traffic capacities and facilities 4. Capacities for production of secondary kinds of energy – electrical, heating, steam – have been constructed *Physical spatial division of market per entities and cantons related to communications*	1. There are several important arterial roads and railway lines 2. Municipality of Tuzla is the major producer of thermal energy in the area . 3. In the municipality of Tuzla a big energy potential is present	1. Unfavourable structure and quality of roads: connections with certain countries enabled through some roads 2. Railroads are not electricity supplied 3. 3Monopolistic position of fixed phone providers and high costs of the services. Competition is completely "out of the picture", customers do not have the possibility to choose. Services offered are not of a satisfactory quality – low quality of services. 4. Mobile communication services are too expensive	1. Railways in Tuzla Canton are available only for freight transport 2. The total road transport, public transport in towns and commuter services in TC fall behind the physical growth in this sector at the level of the BH Federation 3. Inadequate system of supply of water, specially in Tuzla. The problems in the municipal water supply system are: the existing springs do not provide sufficient quantities of water, the whole water supply network is battered, there is a permanent increase in the number of consumers, the structures of distribution of water are very old. 4. A number of municipalities in Tuzla Canton do not have central collecting system for the liquid waste. The sewerage is for the most part battered and non functional , a lot of drain junctions are completely out of use. 5. The nearby rivers are the most polluted: Spreca river basin is the most polluted area in B&H and one of the most polluted in all the former Yugoslav Republics 6. The utilisation rate of capacity of thermoelectric power of Tuzla area is lower than the effective potential..

OPPORTUNITIES		THREATS	
North East Region of BiH	**Tuzla Canton and Municipality**	**North East Region of BiH**	**Tuzla Canton and Municipality**
1. Central position of the airport (extremely favourable climate and location) can open up new possibilities for its use. 2. Significant possibilities for the use of river traffic in the system of the Region NE are related to the Sava river. 3. There is a need and a possibility for integration of traffic (road, railroads, rivers) in the area 4. The function of Port Brčko District in the future, in the overall development; should be looked at from a wider point of view, not strictly as far as transportation is concerned. 5. Artificial lakes are fundamental in resolving the water deficit 6. The power market is regulated by a Memorandum, that aims at setting up integrated power market in SE Europe by 2005 and securing the integration into the International EU market 7. Opportunities for the increased traffic of fixed phone communication services with major investments. 8. Development of an international airport in Tuzla since 1998 9. The number of internet users in	1. It has access to the strategic road Bosanski Samac - Doboj - Zenica - Sarajevo - Mostar - Place (port) stretching from the north to the south as well as to the road Brcko - Tuzla - Banovici, which has an important role far development and integration 2. Railway activation to improve economical relationships 3. Regarding river transport communication, TC could use some specific advantages and navigable opportunities of the Sava river (Brcko port is located in the Brcko District), which is important route of the international transport communications; with potential to on cheaper river transport connect TC with whole Europe. Building of the shipping canal Vukovar - Samac which would connect Tuzla area via river shipping route (Sava - Danube) with the rest of the world is expecting. 4. Possibility of integrations with the near arterial gas pipelines of Bosnia, could significantly increase the volume of energy supply for population and businesses. 5. Passenger transport and freight	1. Isolation of the North Eastern region due to lack of improvement of link systems (e.g. absence of highways) 2. Increasing water pollution 3. Health risks due to pollution 4. Depopulation of rural areas and growth of the immigration 5. Decreased quality of the communication service	1. Isolation of Tuzla area due to the lack of empowerment of communication systems (railways, absence of highways). 2. Increasing water pollution and consequent health and ecological risks

OPPORTUNITIES		THREATS	
North East Region of BiH	**Tuzla Canton and Municipality**	**North East Region of BiH**	**Tuzla Canton and Municipality**
comparisons with the total number of the inhabitants is currently low, but it is growing fastly.	transport record a permanent growth 6. Development of the connection to the European highway C-5 (Hungary –Adriatic Sea) 7. Empowering the roles and services offered by Tuzla airport as a support to the international traffic for both goods and passengers transport. 8. Improvement of various connection and infrastructure networks		

SWOT ANALYSIS SUMMARY: EVALUATION OF STRONG AND WEAK POINTS

The examination, carried out by using typical SWOT variables such as environment and territory, society and employment, job market, production and economic activities and infrastructures and logistics, provides an overall view of the situation in the territory.

The area is rich in **natural resources**, which are evenly spread along the whole North Eastern Region: among these resources there are mineral resources like coal, or other resources like salt, but also river and thermal resources. Thanks to these resources, especially to coal, the Tuzla municipality has the largest **electric energy** distribution potential in Bosnia Herzegovina. Tuzla also has relevant resources as regards **thermal resources**.

However, as regards availability of such resources, it must be pointed out that their value is probably higher as regards to quantity than quality.
There is anyway a serious issue related to the limited and inadequate control on the management and exploitation modalities of available resources: although the legislation in force disciplines and sets general regulations pertaining to environment management and preservation, there are various problems related to their actual application. This fact calls for accurate management and control procedures to avoid that the current **environmental problems**, like those related with water pollution, subsidence, and so on may persist and grow to beyond-control size.

The area's **demographic structure** features markedly positive features that are also suitable to guarantee the presence of enough workforce to bring about a revival of economic activities. Most of the population is in fact in the "active workforce" age group, while the share of elderly population is low (although the population aging process has begun to appear in the last years together with the reduction in size of the "below 15" age group, a fact that makes the area's demographic structure more similar to other European Countries').

As regards the **job market**, unemployment has reached dramatically high levels, especially in the Tuzla area. The region is however also experiencing some positive phenomena, namely the increase in school attendance and number of university graduates, improvement of so called ICT *(Information and Communication Technologies) literacy.*
However, even taking into account these positive elements, the job offer problem remains: The offer of adequately qualified and trained personnel is not met by the demand from companies and the job market in general.

The **Production structure** of North Eastern Bosnia Region consists of a series of base sectors, including industry, especially mining industry, the energy sector and the agriculture and food industry.
The majority of enterprises are in the services sector, especially commerce, transportation and catering. The Tuzla Canton, which may be regarded as the economic centre of the North Eastern Region, features a similar situation, i.e. mining and industry have always been the most important activities.

Compared with the pre-war period, **the economic and production structure of the Tuzla Canton** underwent strong changes, in particular there has been:

- reduction of significance of these sectors that in the past led the area's development and economics, i.e. heavy industry (industry, especially chemical, mining and energy industry once accounted for 50-60% of GDP, but this figure dropped to 30-40% now). The heavy industry sector is currently undergoing a massive restoration phase regarding both a reduction in production capacity and a change in business organisation. Small and medium

enterprises, which took the place of the larger ones as a result of a series of company re-structuring and re-organisation processes, are consolidating themselves and gaining success.
- Reinforcement of services, especially commerce, tourism and catering, which represent sectors that underwent the most significant growth even in the post-war period as regards number of enterprises and Employees
- Splitting of private agricultural property
- Presence of different centres and services to support development of enterprises and entrepreneurship.

In terms of **Exports**, among the main products there are timber and textile industry products and manufacturing industry in general and especially in Tuzla all products derived from Chemical Industry.
As regards **Imports** , the leading place is represented by processing industry, machinery and vehicles and chemicals.

However, the aftermath of war has been dramatic both on the Canton and on the region as a whole: massive GDP reductions, trade gap, under exploitation of the potential production capacity, sharp decrease of the main sectors, absence of investments, obsolete technologies, severe difficulties, especially in some sectors, to recover their former market shares (both domestic and foreign), difficulties in meeting European Regulation and Standards, unfavourable banking and credit access conditions. All these factors make economic recovery, even if helped by a strong will and dedication, both by private citizens and the state, difficult and troublesome.

It bears mentioning that there are important structures and services that support enterprises and business ideas. There are many chambers of commerce, agencies, incubator companies, start up centres, company assistance services, universities, and all these subjects play a fundamental supporting, backing and consultancy role for enterprises. The same is true of the support by public bodies and institutions, whose role is undoubtedly essential.

As regards infrastructures and logistics the North Eastern Region and the Tuzla Canton are located in a favourable position, especially as regards connections between Central and Eastern Europe. However, although the Region features a widespread river network and system, in some areas even river navigation, the streets conditions are nonetheless critical. The area lacks motorways, and the Tuzla airport is not fully used neither for freight nor for passenger traffic.

PART II: STRATEGIES AND ACTION LINES FOR ECONOMIC DEVELOPMENT OF TUZLA AND ECONOMIC REGION OF NORTH-EAST BiH

STRATEGY AND GOAL

The previous paragraphs drew the picture of an area that still suffers from severe difficulties but yet features a strong will to recover and renovate, as well as a strong aptitude to integration with the other European Countries.
On one hand there are countless resources: natural, social, economic and human that together constitute the base for future development; on the other hand, the absence of shared and joint guidelines and strategies could jeopardize or altogether stop the whole development process and prevent an autonomous and lasting economic development.

TUZLA AND ECONOMIC REGION OF NORTH-EAST BiH

... THE EXISTING WEAKNESSES

- High unemployment rate
- Over scaled production capacities in some industrial sectors (textile industry, shoe industry)
- Transport–related difficulties; in particular: not connected railway system, stagnation of civilian air traffic, road system not suitable for the growing transportation needs
- High rate of obsolescence of production capacities of economic entities in the NE region
- Local business entities unprepared for the conditions in the external markets
- High interest rates
- Inexistence of appropriate financial institutions for the investment support
- Low competitiveness
- Law regulations not consistent to the needs of economic development of the region

AND THE NEW OPPORTUNITIES

- Labour availability – especially young people, motivated and highly skilled
- Widespread entrepreneurship and development of entrepreneurial spirit and culture
- Implementation of new, innovative ideas and projects
- Well-structured centers to encourage development and support of new entrepreneurial ideas already exist
- Prequalification
- Updating and implementation of current standard so as to comply with European standards
- Infrastructure improvement
- High level of availability to open up to new markets (language skills and interest towards new technologies)
- Presence of quality high-educational institutions with a good quantitative and qualitative (universities are very close to companies' needs and try to meet them) value
- As a general perception, the country risk level (credit and investment risk) seems to be much lower than that established by international organizations
- Innovative and new IT technologies are quite widespread
- Governance processes focusing on Development Plans, for instance: service infrastructure planning definition

- Strong interest and attention towards co-operation and collaboration projects with EU countries as well as other countries in general, for instance: efforts to improve competitiveness and economic recovery

General Strategic Goal

Promoting economic development and recovery in order to reduce unemployment creating new business activities, improving the status of existing ones, creating conditions for sustainable development.

In the light of the previous remarks, it is necessary to define, within the framework of the area's current distinguishing traits, a sustainable development path that will raise the current development level (structural factors) and on the other hand will improve its dynamism (cyclical factors) making Tuzla area's key sectors more proactive through a series of guidelines/directions.

Economic structure reinforcement : The development strategy requires relaunch, restoration and consolidation strategies for the industrial production activities that in the past led to the development of the Tuzla area, as well as supporting the recently developed activities by means of

- Attracting new investments and creating new SMEs
- Requalification, reconversion, modernisation
- Knowledge and innovation

Increasing and improving the supply of infrastructures and logistics systems, in order to guarantee easier access to people, capitals and means to move the Tuzla area, but also the whole Bosnian region, closer to the most important commercial routes, both European and International ones, to guarantee the existence of these base conditions that may support the development of the economic production activities in all sectors, by means of:

- improving and extending the railroad, road and air network
- improving computer connections and equipment

Improving quality of life, first of all by promoting economic development that may affect directly and indirectly the reduction of unemployment, one of the most serious problems together with underground employment and, last but not least, granting a social and quality life level more in tune with the developed countries by means of

- adequate training and education actions and plans
- actions aimed at reducing unemployment and increasing employment

- new services to guarantee a better quality of life

Improving Environment and Territory Quality, by means of:
- suitable waters management systems and plans
- more attention to valorisation of natural resources
- environment protection policies and plans

Development of cooperation projects and experiences, by means of:
- cooperation between local and institutional subjects, through participation to cooperation programmes, as a core feature for the transfer of good practices and experiences built up in contexts different from the enterprise

cooperation between enterprises to start trade/production cooperation relationships.

STRATEGIC FRAMEWORK FOR TUZLA AND ECONOMIC REGION OF NE BiH ECONOMIC DEVELOPMENT

MAIN OBJECTIVE *Promoting economic development and recovery in order to reduce unemployment, creating new business activities, improve the status of existing ones , creating conditions for sustainable development.*

Economic structure reinforcement

Improving Environment and Territory Quality

Development of cooperation projects and experiences

Improvement of quality life

Increasing and improving the available Infrastructures and logistic systems

POSSIBLE ACTION LINES

It is possible to define some action lines consistent with the specific goals that may jointly represent the goal to be met in order to pursue the medium and long term strategic objective.

The specific goals to be achieved and the possible action lines to be started have been divided in four main axes:
Axis 1: Improving economic system's competitive edge
Axis 2: Facilitating territory access to the region
Axis 3: Providing the workforce with new employment opportunities
Axis 4: Valorising the environmental and territorial system
Axis 5: Promoting international cooperation

AXIS 1: IMPROVING ECONOMIC SYSTEM'S COMPETITIVE EDGE

1.1 Support to key economics sectors, such as manufacturing SMEs, as well as support to innovation and spreading of knowledge to keep up with an increasingly global market.

Tuzla, thanks also to a strong drive from the university world but also to its reception capacity and openness to external inputs, as well as to the many cooperation projects currently going on, features a great attention and sensitivity to innovation. Proof of that is, amongst other things, the presence of an incubator company to support new innovative enterprises' start-up, the existing enterprises' will to cooperate with foreign companies by adapting to the standards required by other companies working in the European market.
However, on the other hand the many years of civil war have created a knowledge gap in the enterprises as far as the current market dynamics, especially European ones, are concerned.

It is also important to remember that the so called Tuzla Canton Strategy [1]has clearly pointed out that SMEs may represent the key development and actual economic growth factor for the Tuzla area.

The objectives, therefore, are the following

- Development of policies aimed at promoting, fostering and supporting an increase of innovation in the Enterprises' production, creating strong links between the territory enterprises and the qualified research and innovation sites, beginning with the University.
- Helping developing an Economic System based on knowledge as the key factor to increase innovation and competitive edge in an increasingly globalised market.
- Concentrate and lead the innovative efforts towards those sector which may act as driving force for economic recovery and revival of the city and the canton.

The measures should therefore be focused towards:

- Supporting innovation, modernisation, restoration, adaptation of production activities, focusing on those sectors which may be crucial for local economics recovery, in particular by means of supporting the manufacturing sector
- Supporting the birth of small and medium-sized enterprises and helping their diversification
- Supporting introduction and diffusion of new technologies

[1] *Regional Strategy of the Tuzla Canton 2002-2004* produced by the Tuzla Canton's Government in cooperation with EG Tuzla, on February 2002

- Strengthening and developing the research and development activities, both through cooperation with research centres and universities and cooperation among enterprises, which may positively affect the development of industrial and production capabilities
- Help technology transfer processes, for example through cooperation with enterprises (including foreign ones), public-private cooperation, university/ enterprises cooperation.
- Help reinforcing the actual services for enterprises in order to guarantee development of the entrepreneurial fabric and an increased competition capacity (for example through support to knowledge and services acquisition, especially in environment, energy saving, traceability of agriculture and food products and so on)
- Promoting, also with the help of enterprise support centres and agencies, marketing, monitoring, market research and studies to be used as a knowledge base and tool to guarantee market and demand knowledge to enterprises and also to guarantee the skills required to adapt to the market needs and requests
- Setting up public financing lines for investments in production sectors aimed at improving competitiveness.
- Setting up financial instruments to support enterprises start-up

1.2 *Creation of industrial production areas, with proper technological equipment, in compliance with the environment protection criteria.*

This goal may, in particular, be pursued in the following way:

a- Qualification, rationalisation and extension of the existing areas having a definite aptitude to industrial activities

b- Identification of new areas / lands to be used for new industrial and/or crafts production activities, as well as for technological centres

c- Setting up an incentives and facilitation system to help production sites

Building industrial/production areas may foster the production orientation of the region's economy by means of:

- Strengthening existing incubator companies by increasing their size and/or creating new industrial areas through which other companies may have access to a series of instruments like:
    - Assistance, consulting and tutoring
    - Shared support structures like meeting halls, conference halls, offices and so on.
- Shared and joint services like joint promotion, administrative and so on.
- Preparing feasibility studies and surveys focussed on identifying areas with the potential to become production areas in order to avoid site dispersion phenomena
- Building a network of joint services to help the already settled and operating enterprises while guaranteeing a higher quality level and higher cost-effectiveness thanks to economies of scale;
- Adapting and implementing to European environmental regulations. Process of BiH accession to the European Union requires adoption of all the requirements and prescriptions of the Lisbon Strategy, making it necessary to change the industrial policies. The industrial areas shall feature adequate environment protection systems in a sustainable development framework (ecologically equipped areas).
- Starting financing lines to help investments in the industrial areas.

1.3 – Strengthening cooperation between the regional economic stakeholders

The need to revive and relaunch production activities requires a joint effort by the territory's economic stakeholders, also through cooperation between public and private subjects: starting the e-governance process is therefore essential.

In this sector it is therefore necessary to:

- Create proper decision making bodies composed of public (state) and private stakeholders' representatives for recommending the measures and actions that would influence the policy of economic renewal and strategic planning;
- Reinforce the support to the enterprises sector by Public Bodies, economic development support agencies and chambers of commerce through
    - Information activities,
    - Basic consultancy services in administrative and law matters
    - Services aimed at stimulating innovation and knowledge as well as favouring research and development activities
- Promoting networking and cooperation between private economic subjects, like service centres and research and innovation centres in order to foster and facilitate close cooperation between all economic stakeholders in the enterprises sector, research sector and also among public institutions.
- Identification and introduction of instruments that stimulate cooperation and investments, based also on our positive experiences in other European States.
- Support to cooperation between university and the enterprises, as a key factor to diffuse innovation capacity.
- As regards the importance of the Chamber of Commerce's support to local enterprises it might be possible to plan measures focussed to letting the Chamber play a more active role, in order to improve its capability to provide services actually useful to the enterprises

1.4 Favouring access to credit

One of the most critical issues is the credit sector, the difficulty of having access to the capital to support new investments, due to the presence of restraints to credit access, required guarantee conditions, high cost of money and expensive financial charges.
The goal is to favour access to credit capital as a key instrument both for recovery, adapting the production sector and helping technological innovation

The possible action lines might be the following:
- improving access to credit by the enterprises, also through agreements between banks and institutions to stimulate investments in crucial sectors and/or territorial areas
- defining new financial instruments that integrate with each other, such as credit lines for specific investments; credit-guarantee funds for SMEs; participation in risk capital.

1.5. Increasing the capacity to attract investments

The possibility of re-launching Tuzla and its canton's Economics is strictly related to its capacity of attracting new investors that may bring new strength to the production and economic fabric. It is necessary to operate on several different fronts in order to make territory more appealing, also considering the massive competition of other territories.

In this context it may be necessary to:

- Adapt and implement all the basic logistics services to operate in a global context (for example; suitable railroad, road and air connections)

- Creating a system of services to help enterprises - privileged localisation packages, also through special agreements with the local banking system and the enterprises support centres, to help foreign investments, especially for what concerns Direct Foreign Investments.
- Plan and prepare support, consultancy and tutoring actions to help the enterprises to settle and operate in the region.
- Promote Tuzla and economic region as a territory suitable for creating and developing production sites, implementing suitable regional marketing policies.

AXIS 2: FACILITATING ACCESS TO NORTH-EAST REGION

As regards the infrastructures and logistics system, the main goal is first of all to reinforce the transportation and logistics services network, to facilitate access to the territory to both freight and passenger traffic.

2.1 Improving the road system

Improving and reinforcing the road system, by means of actions on the current national and regional roads (secondary road system) as well as by reinforcing the primary road system and building faster and more propulsive roads and new motorways (Sarajevo-Tuzla-Orašje, Doboj-Tuzla-Bijeljina(Zvornik).
Such operations may simplify and improve connection between the main economic centres and the nearby states, for example between Zupanja and Tuzla also by means of building the C5 corridor.

2.2 Actions on river resources

Increasing navigability of the Sava river also in order to guarantee connection between the river and the important Brcko Harbour.

2.3 Restoring the railway

Reconstruction, modernization and connecting of the existing NE region railways with the aim to reduce the road transportation load, favouring solutions with reduced environmental impact and less expensive

2.4 Functionality and modernization of the capacities of the International Airport Tuzla

Improving the International Airport Tuzla, especially for passenger traffic, by enlarging it and providing it with air routes for the main European cities, in order to guarantee a better access to the region.

AXIS 3: PROVIDING THE WORKFORCE WITH NEW EMPLOYMENT OPPORTUNITIES

3.1. Fight the serious unemployment problem

Unemployment is a major issue in all of Bosnia Herzegovina, and the problem is even more serious in the Tuzla Canton, where it reached dramatic levels.
Undoubtedly, economic recovery, especially development of "driving" economic sectors may reduce current unemployment, but it is necessary to operate on more than one direction to solve this delicate problem.

To be more precise, the main goals are:

- support reduction of unemployment ratio, especially among youth
- increase the workforce's professional skills
- lower the school dropout phenomenon and improve school training level and quality

- support and acknowledge the role of university and training in general as a key to guarantee economic recovery and unemployment reduction

The main action lines to be followed can be based on two directions:

LABOUR POLICIES

- increase job orientation services, enabling better compliance between job offers and demands as well as assistance and help in the field of orientation for starting enterprises
- widen the production base to stimulate employment, especially among youths, by means of supporting new enterprises building, especially innovative ones, from university or business spin-offs
- create and implement the measures of economic (subventions) and tax incentives to support the employment of new staff
- define programs, projects and promotion of projects for employment and self employment

TRAINING AND REQUALIFICATION POLICIES

- Implement training, prequalification and employment policies in the strategic sectors for economic revival to provide production growth in the key sectors and to guarantee training of personnel adequate to the needs and requirements of economic activities
- Support and advocate for educational and training plans in the large and medium sized enterprises
- Support to development of the educational/training services providers' networks
- Promote university training and adaptation to standards and training programmes of European universities,
- Promote cooperation between universities and enterprises; improve existing scientific and technological research departments also to support the birth of new enterprises as well as innovation, development and corporate spin-off processes.
- Support centres providing business services to the enterprises, especially innovative and with high professional skills.

3.2. Ensure quality of life in tune with the European Cities Standards

Considering that the majority of the population in the Tuzla Canton area is in the "active workforce" age group, there are many social services that may be used to counter the school dropout problem and guarantee adequate living standards.

- Developing business services, especially those related to sports and leisure activities, also through the recovery of abandoned buildings and/or areas to be devoted to such activities
- Developing leisure services for young people that may represent an alternative to bars/restaurants and act also as a meeting point for youths from the nearby rural communities while at the same time providing opportunities for cultural activities, voluntarism, associations' activities and so on.
- Developing cultural initiatives also through the involvement of local associations and groups.
- Adequate housing policies, especially to support young couples' housing projects (buying/hiring a house) that often have to deal with extremely high costs.

AXIS 4: VALORISING THE ENVIRONMENTAL SYSTEM

4.1.Countering the subsidence problem.

The area, and the city of Tuzla in particular has been suffering from a series of problems related to territory subsidence.[2] In this context, thanks to a project featuring cooperation with the Environmental Sciences Faculty in Ravenna, research activities are currently in progress to monitor and control the subsidence problems related to exploitation of rock salt deposits.

- Managing the complex issue of subsidence requires well coordinated and joint actions followed by continuous monitoring based on scientific conclusions and solutions.
- Preparing projects in this field together with relevant institutions from Europe on the possibilities and ways of alleviation of consequences of the subsidence.

4.2.Adapting the economic production system to the European environmental regulations in order to guarantee a re-launch and sustainable development in order to make the production areas more appealing and attracting new investments.

Environment protection regulations and rules, focussing especially on the economic activities have been in force for many years. However, there is still the problem of guaranteeing actual adoption and correct and real application of the environmental regulations by the companies. In an economic context like the Bosnian one, introduction of environmental regulations is regarded solely as pointless waste of economic resources that yields no advantage or benefit. However, adoption and application of environmental regulations that take into account the European standards may play a key role in the future plan of a cooperation of the whole Bosnian Region with the rest of the European Countries. Failure to comply with environmental regulation may in fact jeopardise the possibility of competing on European markets and cooperating with the rest of the European Countries and slow down direct foreign investments in Bosnia, in absence of goods and services obtained following the relevant regulations.

A synergic action by the Public Institutions and the Network of Services like Agencies and Chambers of Commerce that act as "trait d'union" or bridge between the new European context and the world of Bosnian enterprises and economy will be essential: in this context it will be possible to:

- Introduce environmental regulations in tune with European Standards
- Start information and awareness raising initiatives for the population
- Provide consultancy and assistance to enterprises
- Provide financial support, also through tax relief and other types of incentives.

4.3.Improving quality of waters and water safety, i.e. improving water purification system and management of hydraulic system, aimed at improving water safety in the territory, protecting the environment and using water resources more rationally.

- Improving industrial and civil waste water purification system

The Tuzla Canton features several problems related with the water system and waste water treatment and disposal. We have detected several activities that may have a heavy adverse effect on water quality, mostly industrial activities but also agricultural and other economic activities that do not use suitable water purification and waste water disposal systems due to the absence of ad hoc regulations; there is the need for measures focussed at introducing suitable systems for purification, disposal and general handling of waste waters.

[2] Reckless extraction of salt from the Tuzla subsoil has led to the formation of large caves and the subsequent collapse of about 30 thousand buildings in the last fifty years.

As regards the civil sector, a large amount of pollutants come from inadequate water purification systems, especially in the more rural zones where there are areas not reached by purification systems. There is the need for actions focussed at guaranteeing a better management of water purification.
As a general rule, there is the need for:

- water network leaks detection and control systems,
- planned maintenance systems,
- Introduction of new systems to guarantee higher efficiency and control over water purification
- Reinforcement, restoration and modernisation of civil and industrial waters system

4.4 Realization of the priority activities from the Local Environmental Action Plan – LEAP TUZLA

- Promotion of LEAP (leaflets, education, media, etc.)
- Preparing projects and Feasibility studies for the LEAP priority programs

AXIS 5: PROMOTING INTERNATIONAL COOPERATION

5.1. Development of institutional cooperation projects and experiences

Cooperation, especially with other European Countries but, more generally speaking, the implementation and participation to cooperation programmes may represent, today and in the future, a key feature to transfer good practice and experiences built up in other contexts.

Tuzla municipality has started cooperation projects with other countries and it is also deeply involved in implementing institutional cooperation projects with other EU countries (e.g. Italy, Finland and so on).
Initiatives for establishing cooperation and partnerships in the sectors of: economy, culture, environment, tourism, agriculture, health, etc.
Cooperation and partnership connections shall be implemented through the following levels:

- Regional Development Agencies
- Locals Chamber of Commerce
- University and research centres
- Public institutions
- Service centres for enterprises and the community
- Non-governmental organizations

In particular, it must be pointed out how significant and relevant it may be to develop joint research and development activities to promote innovation and quality in view of an increased competitive edge and a new social, territorial and economic development.

5.2 Promote entrepreneurial partnerships

Data collected from the Italian-Bosnian Chamber of Commerce points out that since several years ago the enterprises in the Tuzla Canton have already started cooperation relationships with Italian companies, and in addition to that the quality survey carried out directly on a sample of local enterprises points out that, in addition to relationships already started with enterprises in other countries, Bosnian companies are interested in cooperating with EU companies, especially Italian ones, in order to give birth to commercial and production relationships.

The sectors most suitable to start cooperation projects are: agriculture and food, metal working, building industry, textile and clothing, shoes industry, wood. In these sectors the interest has been shown in starting the following types of partnerships:

- Raw materials, semi-finished and finished goods import-export

- Subcontracting relationships
- Building joint-ventures or other forms of mixed capital companies

In order to promote cooperation relationships between enterprises the following must be taken into account:

- Definition of a foreign investments promotion programme that involves institutions, Trade Unions, Entrepreneurs' Professional Associations , also through entering into cooperation agreements.
- Setting up a system of facilitation and support systems to favour cooperation relationships
- Creating new areas for production sites fitted in compliance with European standards
- Setting up marketing and promotion actions to favour cooperation between companies.

Creating a subcontractor data base about enterprises of the North-East Bosnia and Hercegovina and enterprises of Emilia-Romagna and others Italian North East Regions to favour the matching between enterprises.

RECOMMENDATIONS TO IMPROVE COMPETITIVE EDGE IN THE KEY ECONOMIC SECTORS

In order to favour development of the economic system in the Tuzla area we also mention some recommendations that may contribute to improving competitive edge in some sectors.

■ *INDUSTRIAL SECTOR*

Current situation

The researches show that in the future industry will keep playing **a key role in rebuilding the Canton's economy,** although there are a series of problems and issues such as:

- Capital migration
- obsolete technologies, inadequate machinery and equipment
- Debits
- Unfair competition
- Limited attention to environmental problems (water pollution, incorrect waste water and industrial scraps management, pollution)
- Unemployment
- High production costs
- Current absence of Professional Training in tune with the new technologies/new production standards
- Limited use of Quality standards (like ISO)

Goals

- Developing policies focussed on promoting, encouraging and supporting the sector's rebirth, especially for manufacturing, as a leading force to Tuzla area's development, considering also the availability of workforce with skills in this sector.
- Always encourage an increase in innovation of companies' production, both by creating bonds between enterprises in the territory and qualified research and study centres, beginning with University, both by transferring knowledge and know-how.

Lines of Action

- Encourage modernisation, renovation and reconversion of production structures and acquisition of new production plants, public funding and/or tax relief programmes, **especially for SMEs in the manufacturing sector,** where Tuzla has a well-established tradition, and which is also the sector on which area development should be chiefly based.
- Training activities for personnel, also by means of internship periods, vocational trainings and similar activities, also abroad
- Instruments and services to support young entrepreneurs that may want to invest in this sector
- Creation of industrial areas dedicated to the *manufacturing sector with* ad hoc services, instruments and structures
- Settlement Marketing Packages for foreign companies wishing to invest in the manufacturing sector
- Granting easier credit access and more favourable economic conditions, especially for modernisation and restoration measures (even basic ones) such as replacement of obsolete technologies, machinery and facilities with newer ones

- Solving the heavy debts problem of some enterprises/sectors also by means of new cooperation forms, including banking cooperation
- Complete the privatisation process defining as clear and quick modalities as possible
- Ensure and support cooperation relationship with foreign companies, especially for the supply of equipment and machinery and to favour the establishment of commercial and production partnerships and agreements
- Support technological and production innovation and circulation of knowledge as well as a more *market oriented* spirit focussed on reducing the subcontracting relationships in favour of "finished products" manufacturing that includes new products with a higher technological content

SOME REMARKS FOR THE SECONDARY RELEVANCE SECTORS

■ ***SERVICES: COMMERCE***

In the post-war period the **commerce** sector is the one with the highest number of enterprises (34.4% in 2003), and the second highest (just behind industry) for what concerns number of employed people as well as the one which reported the strongest increase in new employed people. It also ranks third for what concerns GDP(after Industry and Agriculture).
The greatest difficulties and problems are related to

- unfair competition
- low organisational skills, especially for what concerns cost effectiveness and efficiency principles
- unfavourable customs and tax conditions
- financial difficulties (limited capital availability, difficult and costly credit access)

Possible action lines may therefore be:

- changes and adaptations of the current tax regulations, especially for what concerns foreign commerce
- actions aimed at increasing financial solidity of the market
- removal of unfair competition with special regulations

■ ***AGRICULTURE AND AGRICULTURAL INDUSTRY***

The agricultural sector plays a key role in the Canton's economics, in particular agriculture and agricultural industry that are regarded as essential for the economic relaunch of the area.
However, there are major issues related to

- low economic efficiency in land use
- reduction of cultivable lands due to problems related with mining areas, pollution, subsidence
- very small entrepreneurial structure that does not allow adequate innovations and investments: the average size of agricultural firms in the Tuzla Canton is 1.74 hectares per firm.
- obsolete technologies
- limited attention to the quality of productions
- absence of competition skills in particular in comparison with the same sector in other former Yugoslavian states
- absence or lack of raw materials for agricultural industry for example, the number of zootechnical farms, usually inadequate to the needs of sausage industry
- the need to recur to importing food products due to inadequate domestic production capacity

In order to face this situation the following action lines have been drawn:

- Measures related to basic crops and herbal productions
  - Modernization of plants
  - Product and process innovation
  - Actions aimed at valorising typical products and peculiarities
  - Subventions to the primary agriculture producers (processing companies, state funds)
  - Introduction of suitable systems to guarantee and certify products quality as a key element to compete on European and International markets
- Consulting services for making feasibility studies for the most suitable agriculture production in different areas of the region
- Training
  - Company consulting services focused on compliance with existing regulations (environment, health and so on).
  - Tutoring and corporate guidance
  - Improving operator's agricultural skills in order to introduce new techniques and cultivation/farming techniques and methods according to EU regulations (integrated control, organic farming, certification processes and so on).

■ ***SERVICES: TOURISM AND CATERING***

The tourism sector is not currently regarded as a key sector on which development of the territories should be based. However, in the middle- long-run there are some guidelines that may be enacted, trying to build a synergic and integrated development of Tuzla with other Bosnian territories.

For what concerns **Tourism and Catering,** sectors, the Tuzla Canton has many resources and natural attractions as well as a relevant historical and cultural tradition which is undoubtedly important in view of tourism promotion and development.
The sector is also interesting because it is one of many sectors currently facing a growing trend after the war.
In this context, the possible lines of action should focus on:

- Improving and adapting NE region offer, especially from the quality point of view, acting on key factors like quality and features of reception facilities, the services offered (including information) in order to meet the demands of increasingly exacting tourists. The action makes it possible to ensure the presence of those basic elements that, otherwise, could compromise the sector's competitive edge especially if compared to the tourist service offer of nearby countries like Croatia
- promote new actions and investments aimed at developing an appealing tourist offer for the NE region
- prepare a program of activities to protect environmental resources and build networks of these resources, as well as rehabilitation actions (for areas requiring reclamation or mine clearing but having a well known environmental-naturalistic value)
- promote a better connection of the Tuzla and the economic region of Nord East BiH with the domestic tourist circuits as well as those of the nearby states, like Croatia, that have been already partly established and reinforced, also by means of ad hoc tourist products offer
- strengthen the transport systems and the connections (railway, road and air) in order to guarantee an easier and better access to tourist, especially foreign ones, as well as guaranteeing a better access to the most rural areas
- prepare integrated offers that aim to the NE region's peculiarities and typical features in order to integrate the possible tourist offers: environmental-naturalistic, sports, cultural-

history, in order to define the NE region as a "tourist destination", by means of the diversified and integrated offer of the various resources available on the territory

- identify, by means of joint marketing strategies from private and public subjects, adequate promotion policies of Tuzla and the economic region of NE BiH, capable of attracting both local and foreign tourists, improving especially the image of the region on the foreign and international markets.

A POSSIBLE INTERVENTION FOR REVITALISING THE MANUFACTURING SECTOR SMEs IN THE TUZLA CANTON

General Goals

- Developing policies focussed on promoting, encouraging and supporting the sector's rebirth, especially for manufacturing, as a leading force to Tuzla area's development, considering also the availability of skilled specialised workforce in this sector.
- Always encourage an increase in innovation of companies' production, both by creating bonds between enterprises in the territory and qualified research and innovation study centres, beginning with University, by transferring knowledge and know-how.
- Find public-private joint partnership solutions, especially those involving enterprises, the University and local authorities that will guarantee sustainable development and valorisation of the district's identity
- Favour SMEs renewal and adaptation to economic changes in order to strengthen their competitive edge and create higher quality jobs

Possible actions

1- STARTING UP THE LIPNIKA INDUSTRIAL DISTRICT

Goals
- Making the Lipnika area more well-structured and organised, as well as more efficient for the enterprises operating there and for the establishment of new ones
- re-qualify the local production sector, solving the structural and service issues to complete the area's and the companies' development process at district level
- Reduce the management and settlement costs for SMEs organising shared services and structures in order to economize more

Actions
Developing the First Draft of the Lipnika area incubator for what concerns definition, structure adjustment and implementation of common services, both material and immaterial, to support the companies that settled in the area. This will be done in particular by:
- Implementation of shared support structures, like meeting and conference halls, to be used by the enterprises.
- Developing a system of shared collective services: surveillance, goods transportation, inter-company catering service, cleaning and management of green areas etc, plus shared administrative services.
- Supply of innovative shared services, by means of development of structures destined to host innovative enterprises: enterprise incubators; development of joint ICT and telecommunications systems.
- Support to new enterprises start-up
- Planning and definition of new infrastructure solutions to improve the environment conditions of the settlement area: rationalisation of the waste disposal system, development of environmental management systems, use of clean technologies in line with the EU standards and regulations, waste recycling, rationalisation of waste water and scraps.

Involved subjects:
RPC Tuzla, Tuzla Municipality, Ambient

2 – ENTERPRISE SUPPORT SERVICES

Goals

- Simplify procedures and relationships between enterprises and public administration

Action

- Create a kind of *Enterprise settlement support*, with the task to provide the enterprises with all the necessary information and services required to create new enterprises, expand and/or modify the activities, new investments and so on, supplying:
    - Support and help to settle new enterprises or develop the already settled ones, or defining alternative locations;
    - Information on legislative requirements, registration modalities, administrative services and so on and, in general, support for the relationships with Local Authorities and Public Institutions
    - Information on available funding, credit lines, research, development and innovation opportunities and so on.
- Settlement marketing to promote settlement of enterprises, especially local ones, in the incubator by means of promotion of territory image: creation of promotional material, definition of instruments to favour settlements (e.g. localisation packages) participation to local exhibits.

Involved subjects

NERDA Agency, DELTA 2000, Tuzla Canton Chamber of Commerce

3 – ATTRACTING NEW FOREIGN INVESTMENTS

Goal

- Develop and promote new investments in the area, marked by a strong development potential, by means of promotion of the Sector's strongest points.

Actions

Market research focussed on the manufacturing sector and/or other key sector of the Tuzla Canton economy and of the Bosnia North Eastern Region as a whole, in order to define the features, the development potential and the opportunities to start up cooperation relationships, agreements and commercial-production partnerships especially with foreign companies, as well as the modalities for a subsequent promotion to the foreign companies of the opportunities offered by settlement in the Bosnian territory.

- Support to the *Settlement Services Centre* to help settlement in the Tuzla Canton area, capable of managing and directing every stage of the commercial/production agreement process with the foreign investors interested in settlement and more generally to provide services to develop the International cooperation among SMEs
- Territorial and Settlement Marketing focussed especially on potential foreign investors, through participation to specialised exhibits, preparation and circulation of leaflets and targeted information material, creation of a specialised centre

Involved subjects:

Italian-Bosnian Chamber of Commerce, Tuzla Chamber of Commerce

4- IMPROVING CREDIT ACCESS

Goal:
Favouring access to credit capital as an essential instrument both for renewal and production adaptation and for technological innovation.

Action

- Define new financial instruments, innovative and integrated, such as creating new funds/credit lines dedicated to specific investments, guarantee funds for SMEs; co-participation in the risk capital: for example defining at least one credit line for the investments

Involved subjects:
Local banks, Tuzla Municipality, enterprises representatives.

5- CIRCULATION OF GOOD PRACTICES IN RESEARCH AND DEVELOPMENT

Goal

- Promote a broader partnership among all economic stakeholders, that is promoting a closer cooperation and partnership among enterprises, research and the public institutions

Action
- Prepare a feasibility study for a research and development project to be implemented jointly between all the subjects involved in the project, as well as other universities, research centres, foreign institutions that had already developed projects in this area, regarding a relevant issue that my be advantageous for all the enterprises settled in the incubator: e.g. feasibility study regarding the waste/ waste water/ scraps management modalities; the modalities for a correct management of the industrial area in tune with the environment protection standard.

Involved subjects:
Tuzla University, BIT Centre, Enterprises representatives, NERDA Agency.

PART III: COOPERATION RELATIONSHIPS BETWEEN TUZLA AND RAVENNA COMPANIES

ANALYSIS OF A SAMPLE OF ENTERPRISES IN THE TUZLA AREA

Methodological notes

The survey was carried out on a sample of 36 enterprises working in the region of Tuzla and belonging to the manufacturing sector (they are listed in attachment 1).

Through a questionnaire administered to the enterprises by means of a direct interview, the following elements were surveyed:

1. Features of the enterprises
2. Products and services
3. Customers and markets
4. Funding and credit
5. Innovation and quality
6. Problems and perspectives

Furthermore, it must be noticed that since not all the enterprises had all the data requested by the questionnaire at hand, the questionnaires have not always been filled out completely. As a consequence it is impossible to carry out a complete quantitative analysis on the data provided: we therefore chose to analyze the data in order to attain a qualitative-quantitative analysis, in order to obtain at least a 'picture' of the actual industrial-manufacturing situation of the Tuzla region.

Enterprise features

Six of the enterprises are large while the other 30 are small and medium enterprises (among them there are individual proprietorships, craft enterprises, etc.).
The enterprises belong to the food and food and agricultural, textile-clothing and footwear and building sectors.

On average the enterprises were set up in the last 50 years, with a greater concentration of enterprises established in the Eighties and in the Nineties. Several enterprises have undergone later modifications, above all as regards their legal status, in terms of both the privatization of several initially state-owned enterprises and the change of the legal status due to changes in the Bosnian legislation.

The education level of the founder is generally equally divided between those who hold a degree or a high school diploma and those who attended a professional school in order to acquire the technical-productive skills to be able to start up and carry out the entrepreneurial activity.

83% of the entrepreneurs (i.e. 30 out of 36) do not own other enterprises.

As regards the turnover, 29 enterprises or 81% declare that they experienced an increase between 1995 and 2005. Apart from a few exceptions, turnover increases, associated with an increase in the number of employees and customers, have been moderate. There are also several cases in which

there was no turnover increase, also due to the extensive damage caused by the war, which had as a consequence high costs related to the restoration, transformation and/or creation of new production facilities and/or plants.
Taking into account the last five years (2000-2005), we can realize that said increases have been moderate: the lowest figure is 1%, the highest 14%, the average is 1-2%.

Production features

As regards the typology of machinery used, the majority of the enterprises used semi-automatic machinery in 1995; manual machines were still widespread, above all in individual proprietorships and craft enterprises, while in few cases automatic machines had been adopted. Only a medium sized enterprise used numerical control machines.
In general in the subsequent years there was a shift from manual to semi-automatic and/or automatic machines, or an increase of the latter where they had already been introduced.
In 2005, as it may be expected, the situation is evolving towards a larger use of automatic machines or a combination of semi-automatic and automatic machines, with more instances of numerical control machines.

Taking a look at the industrial automation processes, it emerges that in 1995 they were almost nonexistent (save for two enterprises), while in subsequent years they became more and more widespread, in particular with CAD, production control and industrial machinery control, quality tests, automatization of warehouse handling.

As regards the activities and functions carried out by a computer system, in 2005 more than half of the enterprises (i.e. 53%, 19 out of 36) entrusts to a computer several functions, such as: production and stock scheduling, definition of standards for quotations, financial quotations, personnel management and invoicing, order management, administration and warehouse accounting.
The other enterprises carry out only some of these functions through a computer: most notably administrative, accounting, personnel management functions, etc.

Customers and markets

13 companies mentioned the markets in which they placed their products in 1995; 9 of those declared that such markets are within 100 km of the production premises.
The other 4 companies exported on average 30% of their products mainly in European markets, such as in former Yugoslavia, as well as in Austria and, in small percentage, in Italy.

In 2000 the majority of the production was placed on local markets within 100 km; nevertheless, the percentage of products placed on the local market but at a distance exceeding 100 km increased.
In general the most meaningful markets are Sarajevo, Tuzla, Brcko and other Serbian markets.

In 2005 the situation is more diversified. There is an increase in the percentage of sales on foreign and particularly European markets: among them it is worth reminding former Yugoslavia, France, Spain, Austria, Germany and Italy.

> *There is also an increase of sales on the European markets and, partially, on Italian markets, in particular in North-Eastern Italy (Rimini, Treviso, Brescia, Padua, Verona). The products involved are manufactured by food, building, steel and footwear enterprises).*

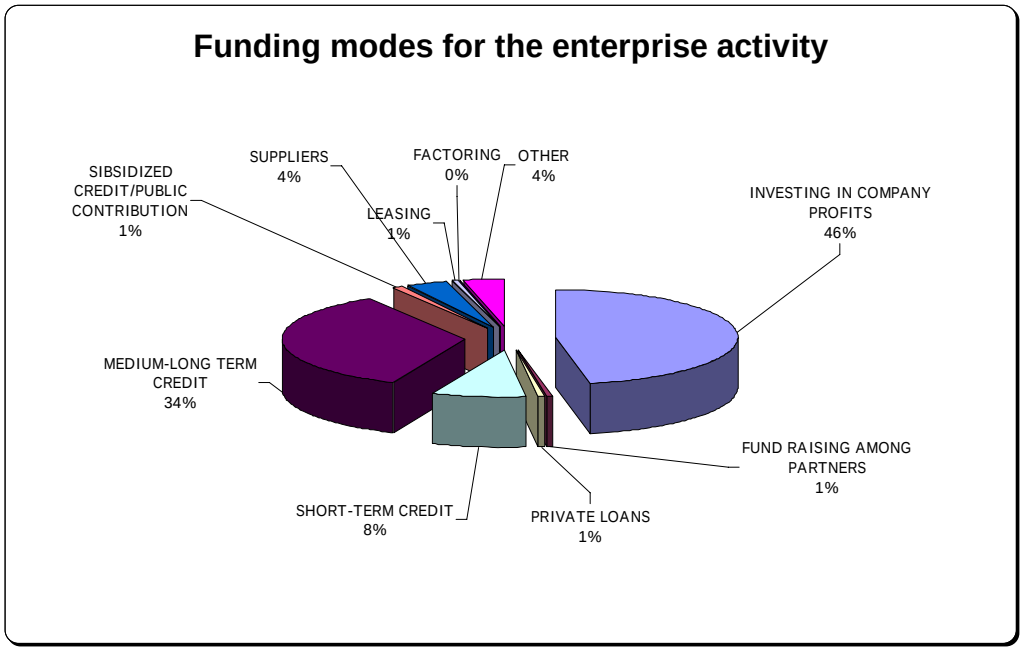
There is the peculiar case of a company (processing and production of fruits and vegetables) which sells its products on the US and Canadian market for a limited share of its overall sales (6% in 2000 and 7% in 2005).

Funding and credit

As regards the funding modes for the enterprise activity, the majority of the instruments used by the enterprises are:

- use/investment of the profits of the entrepreneurial activity (46%)
- medium/long term funding (34%)
- short term credit (8%)

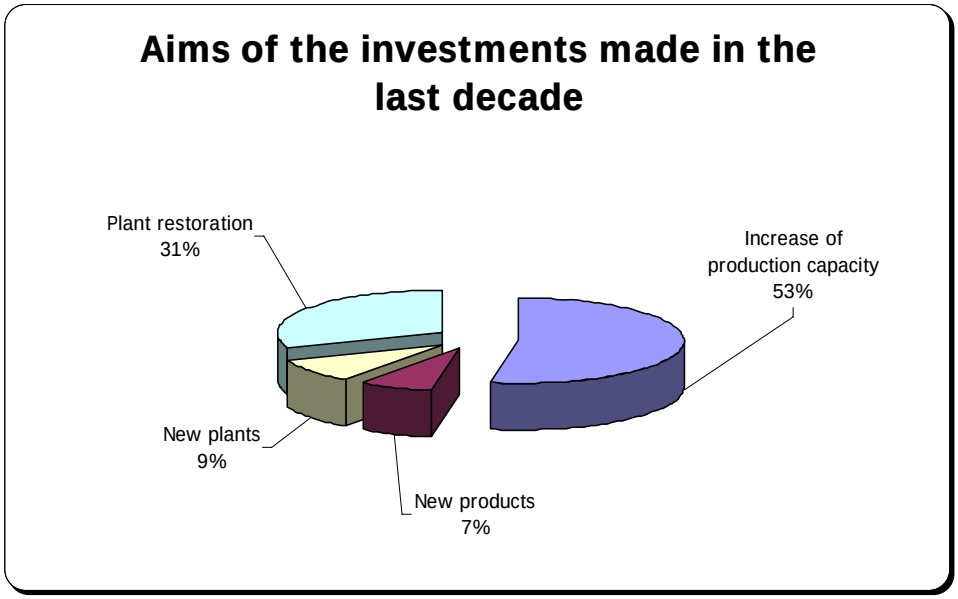
Other instruments such as leasing, factoring, etc. are less used.



As regards the purpose of the investments in the last ten years, the majority of the investments was aimed at increasing the production capacity without modifying the type of product, for a percentage exceeding 53%.

Different activities have been also carried out for the restoration of production plants (31%) as well as for the creation of new ones, also due to the need of recovering production systems, offices, equipment, etc. after the civil war.

The introduction of new products saw less widespread investments (7%).



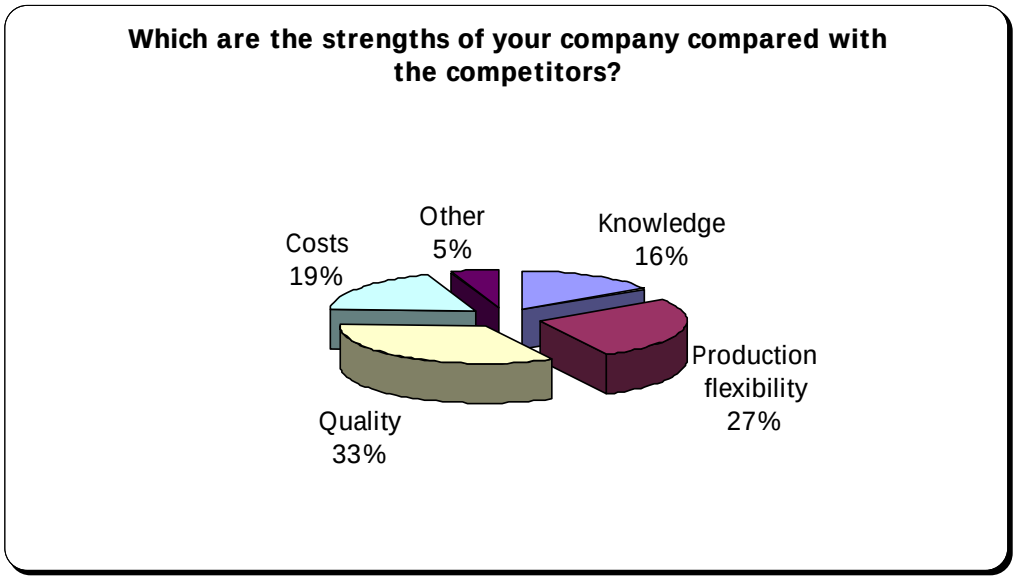
Innovation and quality

22 enterprises replied to the question 'With reference to recent innovations, which in your opinion are the most important innovative factors?'; half of them indicated research and development, followed by technological innovation of machines and external technical consultancies.

The adoption of certifications was carried out by 9 enterprises out of 36, usually with the adoption the ISO 9001/2000 standard, while another enterprise started the procedure to obtain the same certification.

Problems, perspectives and expectations

The interviewed enterprises believe they have several strengths in the comparison with competitors, in particular as regards production quality and flexibility; low production costs and knowledge of production methodologies are also considered important factors.

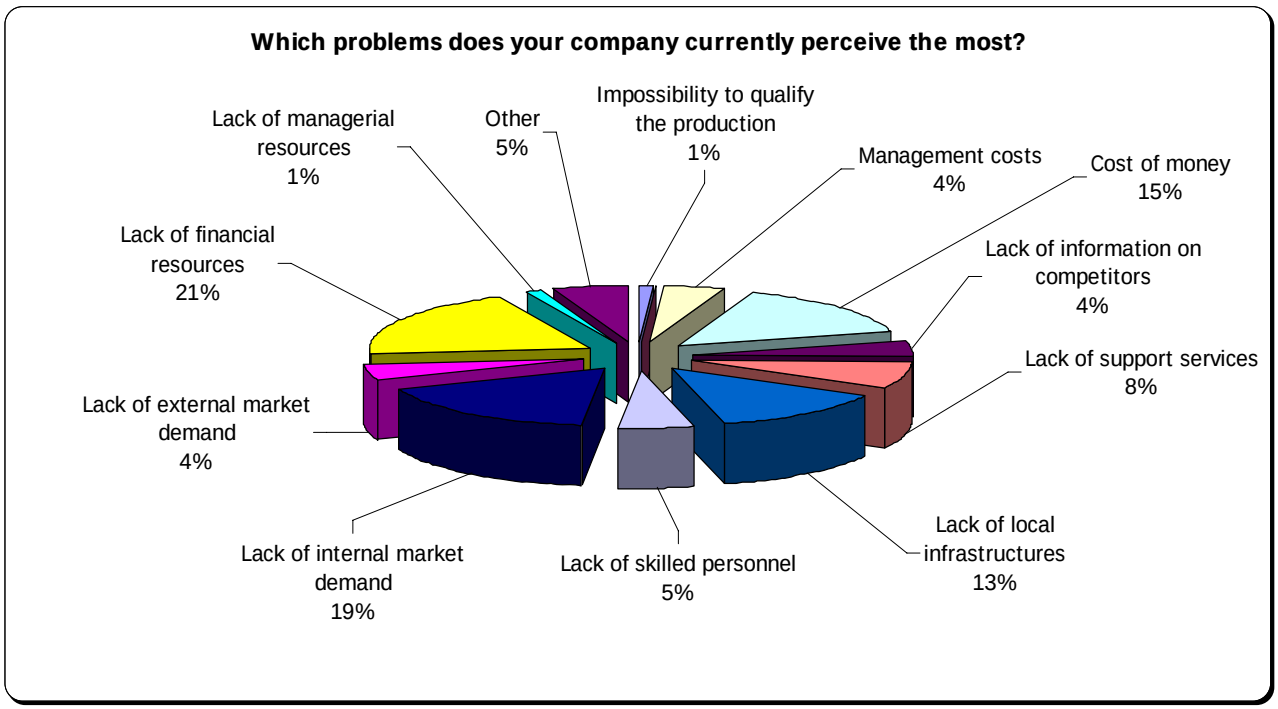


Nevertheless the enterprises perceive several criticalities, above all with reference to:

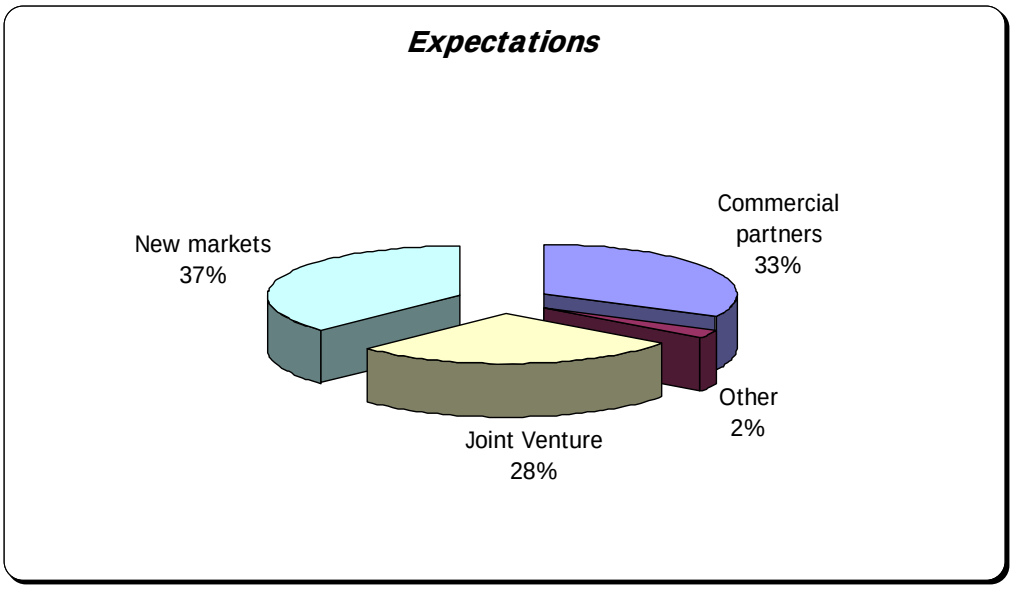
- lack of financial resources
- lack of demand, in particular by the national and/or internal market
- high cost of money
- inappropriate logistic systems and connection and transport infrastructures.

Only some of the enterprises identify possible solutions for the current problems of Bosnia. Among those:

- at the governmental level, greater consideration for the strategic importance of the industrial sector for the economy, reduction of the cost of money, standardization, prohibition on the import of used cranes, solution of the problem related to the national debt, greater market regulation.
- appropriate regulations to support the export, reducing taxes and providing incentives and contributions for the export, with better customs controls.
- a faster privatization process
    - tax reduction, particularly on wages
    - better financial support for enterprises



As regards the expectations that the selected enterprises have on the possibility of cooperating with Italian enterprises, and in particular with enterprises from Ravenna, many believe it may be useful to gain access to new markets (37%), followed by the possibility to find new commercial partners and to set up joint ventures and the like (33% and 28%, respectively).



NOTES ON THE MEETING BETWEEN RAVENNA AND BOSNIAN ENTERPRISES

Methodological notes

After administering questionnaires to the Bosnian enterprises and to the enterprises visited during the mission in Tuzla in the month of May, an attempt was made to find in Italy, and more specifically in the area of Ravenna, enterprises which responded to the needs of the Bosnian enterprises and which were willing to start cooperation relationships.

An informative communication was transmitted directly to some Ravenna enterprises, with the support of the Italian-Bosnian Chamber of Commerce, and to all the entrepreneurial associations, including a company profile of the Italian companies.

Through bilateral workshops and the organization of a mission in Bosnia it was possible to present the local area and to start an exchange of proposals between the enterprises.

Highlighted elements

by the Italian enterprises:

1) perplexity on the safety of economic transitions with Bosnian enterprises
2) refusal to import raw materials (fruit, poultry, vegetables) from foreign territories (European or not) by some Italian enterprises, due to a corporate strategy of processing of homemade products
3) need for qualified manpower
4) need for low cost qualified manpower for specific tasks, which are not accepted by Italian manpower
5) need for specific products which are no longer produced in Italy (e.g. gherkins for appetizers)
6) lack of knowledge on the Bosnian situation, open attitude towards Croatia and curiosity for other markets
7) need of quick responses
8) acknowledgement by the enterprises which visited some 'model' Bosnian companies of the quality of finished products (marmalades, juices, shutters and frames)
9) marvel at the 'rebirth' atmosphere and at the strong will of economic growth in the country
10) acknowledgment of an 'innovative' and 'technological' atmosphere, guaranteed by the presence of Universities and BIT, as a spur to a qualified development
11) identification of a lower attention for environmental quality and compliance with environmentally sustainable processes
12) marvel upon realizing that several of the enterprises visited had aimed their procedures at a process/product with a certified qualitative level, also under European standards
13) in the agricultural sector the lack of innovative machinery was identified, as well as the need to replace existing products with new ones, mainly of Italian origin
14) extremely open attitude towards commercial exchanges and setting up future relationships

by the Bosnian enterprises:

a- strong expectations to sign contracts immediately
b- perception and hope to find an immediate 'solution' to economic trouble
c- interest for Italian know-how
d- attention towards the didactic activities related salt and to the Museum of Salt in Cervia, as well as to the city of Cervia as an example to be transferred to the Solana company and the Museum of Salt of Tuzla
e- will to develop commercial relationships, also activating 'rented manpower'
f- marvel at the services, the equipment and the functional capacities of Italian industrial areas

'Problematic' elements

- possibility of transferring high numbers of skilled workers in Italy, 'rented manpower', with reference to the regulations on immigration
- considerable distance between the local areas, which translates into a problem for meetings, because the travel is extremely long and tiring
- concrete language problems and need for interpreters and translators

SOME RECOMMENDATIONS FOR THE DEVELOPMENT OF COOPERATION RELATIONSHIPS BETWEEN ENTERPRISES OF THE TWO AREAS

From the elements analyzed and presented in the previous paragraphs, from the analysis of the existing literature as well as from what has emerged during the study tours and the missions carried out within the project, a *series of elements and possible recommendations seem to emerge, that may foster the introduction of cooperation relationships between the two areas*.

- **Information and promotion**

Better dissemination of the information of Italian investors on the cooperation opportunities between the two areas: indeed it turned out that the majority of the contacted enterprises did not know the opportunities provided by the Bosnian market, in terms of both potential commercial relationships and wider cooperation.
In such a context actions such as the following would be important:

- Targeted workshops, mainly on those sectors which are potentially more appealing for Italian investors
- Support to the participation in sector-specific fairs by local enterprises
- Wider promotional and informative activity through booklets, brochures, dedicated websites on the Bosnian market
- More information on the technical and financial instruments supporting investments in Bosnia, as well as on local and customs regulations.

- **Relying on strategic sectors**

The sectors to rely on for ***commercial promotion activities*** in BiH are the traditional sectors for which made in Italy is best known: leather and leather goods, machine and mechanical systems (also as elements to transfer know-how), agricultural and food products, textile goods and clothing.
As regards the possibility of ***direct investments in Bosnia***, thanks to the well-established presence of important Italian banks (such as Unicredit and Banca Intesa), it may be possible and interesting to invest in the agriculture and food sector and in mechanical activities.

- **Adjustment and strengthening of transports**

One of the main difficulties in developing cooperation relationships between enterprises in the two areas is represented by shortcomings in trades. The situation of logistic structures supporting trades is still troublesome, as regards the roads (which should possibly be strengthened and integrated with a connection corridor with the main European roads, corridor C5), the railway (which needs to be restructured and restored after the civil war), and air traffic (still partly limited also due to the use of the airport for military and paramilitary safety purposes)

PART IV: SUGGESTED OPERATIONAL STEPS TO DRAFT THE LOCAL DEVELOPMENT PLAN

Below we are presenting a series of concrete indications to provide the most effective way to create a local development plan for the Tuzla area.

PROPAEDEUTIC/CROSS-SECTOR ACTIVITY: CONCERTATION PROCESS FOR THE START UP OF A TABLE FOR PROJECT IMPLEMENTATION AND LOCAL DEVELOPMENT.

PROMOTING SUBJECT – Tuzla Municipality:
Starting up a table which may act as a catalyst for actions leading to a good project outcome and to trigger virtuous local development policies means identifying all the local stakeholders who, for different reasons, may provide a specific contribution to the debate and, subsequently, to the implementation.

The table should have the following features:

- be validated as a local leader
- be able to bring forward proposals
- identify the objectives to be attained
- know extremely well the local system
- have developed, also partially, a local system of relationships

PARTNERSHIP MEMBERS

- Public administrations: Provinces, Municipalities, etc.
- Other public players: regional or national parks, chambers of commerce, etc.
- Entrepreneurial associations: in the tourist, craft, industrial, commerce sectors, etc.
- Trade unions
- Environmental safeguard associations
- Non-profit organizations
- Training institutions
- Associations representing local communities in general

CONCERTATION PROCESS

PROPAEDEUTIC ACTIONS FOR THE CONSTITUTION OF THE TABLE AND OF WORK GROUPS, IF ANY
While it is fundamental to set up a Table which may represent a single interlocutor, in general it is appropriate, from an organizational and logistic standpoint, to create thematic work groups.

- Identification of possible participants/members: creation of an address list. Definition of macrothemes for the various work groups to be created.
- Invitation to participate to the Table: it must contain a description of the objectives, the motivations, the expectations, the work proposal, including the method and the macrothemes
- Planning the management of the work of the Table
- Defining a calendar for the meetings of the Table
- Appointing a Coordinator

- Appointing facilitators and allocation of tasks and roles
- Preparation of information material (participants' form)

TABLE CONSTITUTION

- Project presentation: aims, objectives, contents
- Description of the aims of the Table and of work methodologies
- Presentation of macrothemes and proposal for the creation of workgroups: identification of possible participants
- Communication of undertakings and calendar
- Voluntary adhesion to the Table by the participants

CONSTITUTION OF THE WORK GROUPS

- Focusing of macrothemes
- Collection of adhesions to groups
- Preparation of a questionnaire for the collection of information
- Summoning of the groups: focus on the efficient management of the groups through the correct employment of coordinators and facilitators

ELABORATION OF THE STRATEGIC DEVELOPMENT PLAN: OPERATIONAL PROCEDURES

1. Elaboration of quantitative and qualitative data in the light of the meeting carried out and definition of the strategy and objectives identified in the strategic plan for the development of the Tuzla area.
Pursuing the objectives identified during the concertation stage and the work of the thematic groups shall require the implementation of a number of actions, which shall be divided into Axes/Measures. Each Axis/Measure shall be articulated in a series of detailed 'project forms', which shall refer to initiatives through the implementation of which the plan objectives may be attained.
The forms shall roughly be articulated as follows:
   - Action title
   - Objectives
   - Description
   - Operational stages
   - Timing
   - Provisional budget
   - Funding source, if any (state, local, foreign, EU, etc.)
   - Promoter
   - Other players to be involved, if any

2. Identification of the possible tools and of the funding opportunities for the actions through a targeted research, with reference to the local/regional, national, foreign, community regulations.

ANNEX 1 - SOURCES

- Regional Economic Development Strategy Northeast BiH Economic Region, NERDA, November 2004
- Regional Strategy of the Tuzla Canton Bosnia and Herzegovina, 2002-2004, Volume I : Summary Report, Government of the Tuzla Kanton in co-operation EG Tuzla, February 2002
- Review of economic situation in Tuzla Canton, role of the University in entrepreneurship development and justification for setting up the Business Centre at the University of Tuzla, Ministry of Foreign Affairs, Republic of Austria, May 2004
- Rapporti Paese Congiunti Ambasciate / Uffici ICE estero – 2° sem. 2005 – Ministero Affari Esteri e Istituto Nazionale per il Commercio Estero.

ANNEX 2 – INTERVIEWED ENTERPRISES

Enterprise Name	Legal Status	Offices location	Sector
Alpamm	Society with limited liability	Tuzla	Construction industry - Aluminium lockers production
Menprom	DOO - limited liability	Gornja Tuzla	Food industry
Smrčak	Society with limited liability	Zvornik	Drying medical herbs and mushrooms
Construction Company Širbegović	DOO - limited liability company	Sarajevo, Belgrade, Split, Ptuj	Building industry
Solana d.d.	Joint Stock Company	Tuzla	Salt production and processing
Remontmontaža d.d.	Joint Stock Company	Tuzla	Steel industry
Seidić Commerce	D.O.O.	Odžak	Fixtures and windows
PTP "Tanasic" doo	DOO - limited liability	Dvorovi	Food industry
Alfe MI	D.O.O.	Ljubaće b.b.	Metalworking Industry
Fering	D.D.	Gračanica	Metalworking Industry
D.O.O. Vegafruit	100% private owned company	Brijenisca Mala	Food Industry - Fruit and Vegetables
Herceg d.o.o.	DOO - limited liability company	Srebrenik	Fixtures and windows
D.D. "Olimp"	D.D.	Gračanica	Men and women clothing
MTK "OMORIKA"	Legal entity - limited liability	Han Pijesak	Timber processing
"PAM & S" DOO	DOO - limited liability	Prud	Food industry - Poultry
Pirkan	DOO - limited liability	Ĉelić	Food industry - Poultry
D.O.O. Reweus	100% private property	Lukavac	Roadbuliding
DOO "Sirko" Gračanica	Private company limited liability	Gračanica	Food industry - Milk
Tehnoinženjering Ltd	Limited company	Tuzla	Heating and plumbing
Farmers Association "Poljopromet" Ĉelić	Legal entity - Association	Ĉelić	Agricultural products
DOO "Zejćirović" Ĉelić	Private	Ĉelić	Building industry
Alfa 90	D.O.O.	Živinice	Building industry

Enterprise Name	Legal Status	Offices location	Sector
Bauming	D.O.O.	Gračanica	Building industry
Dilče	D.O.O.	Donja Špionica	Timber Industry
Dom Invest DOO	Limited liability	Orašje	Building industry
SZR "EKO MLEKO" (ECO MILK)	sole poprietorship in yogurt production and sale	Bijeljina	Yoghurt and milk production
Flam	D.O.O.	Klokotnica Doboj Istok	Textile Industry
"Fortuna" DD Gračanica	Joint Stock Company	Gračanica	Footwear Industry
"Fresh and Sweat"	Legal subject, limited liability	Donji Draljevac	Confectionery/ production of ring cakes
Giprom D.O.O. Tuzla	D.O.O.	Plav, Montenegro, Tuzla, Bosnia, Sarajevo, Germany	Building of flats and palaces.
"Mesoprodukt" a.d. (Shareholders company)	Shareholders company	Velika Obarska, Bijeljina	Butchers
D.D. "Prerada i promet mlijeka"	Stock holding company	Tuzla	Food industry - Milk
Milch Product Smajić	D.O.O. - limited liability	Čelić	Food industry - Dairy Products
Mikrostampa	D.O.O. - limited liability	Tuzla	Print Shop
Poligarden	D.O.O. - limited liability	Crnjelovo	Building industry