



# SOCIO-ECONOMIC AUDIT OF SARAJEVO MACRO REGION

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## a. GLOSSARY OF ACRONYMS

No	Acronym	Meaning
1	SMR	Sarajevo Macro Region
	FBiH	Federation of Bosnia and Herzegovina (Entity)
	RS	Republic of Srpska (Entity)
	BiH	Bosnia and Herzegovina (State)
	IC	International community
	OHR	Office of the High Representative
	NSS	Elementary school qualification
	NKV	Unqualified
	PKV	Semi-qualified
	KV	Qualified
	VKV	High qualified
	SSS	Secondary school education
	VŠS	Higher secondary education
	VSS	University education
	A	Advanced Master or Phd Education
	SERDA	Sarajevo economic development agency
	SEE	South East Europe
	SEA	Socio-Economic Audit

## b. PREAMBLE

The preparation and conducting of a Socio-Economic Audit in the region around Sarajevo is one of the first attempts of the activities since the war between 1992 and 1996. Similar projects had been carried out in some administrative areas within BiH, much more unitary areas, except for the Socio-Economic Audit in Herzegovina (Mostar) region that was completed in September 2003.

There is no formal, actual, definition or outline of what constitutes 'the region'. Sarajevo Macro Region covers the area that is formally and administratively divided in two major structures or entities: the Federation of Bosnia and Herzegovina and the Republic of Srpska. Furthermore, the territory of FBiH Sarajevo Macro Region includes the Sarajevo Canton (complete) and 4 Municipalities from Zenica Canton, 3 Municipalities from Middle Bosnia Canton and 3 Municipalities from Podrinje Canton traditionally seen as associating and orienting towards Sarajevo City as the urban centre. Beside, the administrative structure is made that way in order to make a difference between Sarajevo City, comprising of 4 city Municipalities and additional 5 municipalities in Sarajevo Canton, which are considered as suburban municipalities. Sarajevo Macro Region covers the area of 13 Municipalities in RS that are traditionally seen as associating and orienting towards Sarajevo City. While preparing a picture of the socio-economic factors affecting the area, we were confronted with the different communities and administrative systems in the area of SMR.

Additional complication was the inability of some municipalities, both in the FBiH and in the RS, to provide data that are beyond the competences of Municipalities, and which perhaps, could be obtained at the higher level of authorities or in some other institutions. It is obvious that there is a very weak cooperation between these levels in FBiH and in RS. It is remarkable that the local experts who carried out the work herein contained were able to obtain as much data as found and compiled.

There does not seem to be a tradition in the economic and statistical circles in the region (or indeed, reflecting upon the Mostar experience, elsewhere in BiH) for interpretation of data, or finding alternative ways of 'filling the gaps' perhaps by drawing instances from other sources and forecasting likely trends. In many cases, statistical data do not exist at all or exist in different formats than used in the SEA Template, so that employees in the Municipalities are unable or reluctant to do the estimates or to make trends by using the existing data format.

A team that carried out the detailed SEA data collection consisted of: 2 local senior experts and one joint senior expert. During the period of approximately 30 days, this group of experts visited all the Municipalities of SMR and performed one day working meeting with the employees and officials from each of the municipalities, with an aim to motivate them to participate in the process and to explain the needs and requirements for the needed data. Due to the SEA template formats, the municipal working groups had to estimate some data. All what is done herein is based on the data collected from the Municipalities and Statistic books for BiH for the years 1992 and for the after war period. The data that has been collected is considered to be the most reliable. There is still much room for improvement, however, and the base line produced herein will need to be further developed in the coming years. If improvements could be made in the areas of: 'access to data', data quality, interpretation and analysis, the anticipation of future trends, then, future SEAs would become even more valuable tool to be used as the basis for strategy development in the region.

## c. INTRODUCTION

Bosnia and Herzegovina has a very complex administrative organization and it is a unique country with many complex elements. The consequences of the war are visible in each part of the country; and like in any basic war, the consequences are destroyed economy with and large defunct companies, lacking the privatization efforts of strategic companies, lack of the active level of secondary industry activities that used to be very developed before the war, extensive poverty, very high unemployment rates, social insecurity and unrest, low income per capita, high migration levels (form rural to urban areas), and major political/government in 'transition', etc.

The transition process demands urgent reforms and transformations in each sphere of its functioning, especially when the aim and tasks of accession to EU are taken into consideration. B&H is not able to perform reforms leading to EU on its own, without the assistance from the International Community. The concept model tries to change the existing 'ethnic' approach that is evident in every segment of life in BiH into a democratic compatible system oriented on a competitive free market driven economy, which is usual in EU member countries. This is because, it is possible this way to provide the conditions for survival, development, and sustainability of this country. The main objective will be creation of new employments, which if accomplished, will be done through the creation of the conditions for local/regional business development.

The best and simplest way to achieve the above objective is to have, wide acceptance, the application of the regional concept in economic and total development. Through its programmes and projects, the IC is actively helping the creation of the institutional frameworks in five selected regions in B&H. One of these regions in B&H is Sarajevo Macro region, consisting of 32 Municipalities from both, the FBiH and the RS.

Sarajevo Macro Region, beside the climate, relief, geotransit, and geomorphologic as well as other similar characteristics on the entire territory, has its specific historical background. The basic elements that motivate these 32 Municipalities to participate in establishment of Sarajevo Macro Region are: linking of economies and orientation towards Sarajevo City as a regional economic centre, the mixed population of the entire territory of Sarajevo Macro Region, education opportunities for people from all over the region, cultural and traditional links, infrastructure and communications, etc.

One activity that supports this idea is preparation of the document called Socio-Economic Audit of Sarajevo Macro Region that will be the basic document for the development and production of the regional Strategy. This document will be very helpful to the Regional development agency SERDA (Sarajevo economic Regional Development Agency), and sub-regional development agency REDRIN (Podrinje sub-region within Sarajevo Macro Region), in order to start acting based on the needs, requirements and specific potentials of these Municipalities or groups of Municipalities, that are the members of SERDA and/or REDRIN.

The basic tasks of the SEA are as follows:

Systematic description of all the available data per unified methodology, so that the results are comparable among the municipalities and/or sub-regions in the area covered by Sarajevo Macro Region.

- Serving as a basis for the clear definition of potentials within the region or its parts, as well as the definition of obstacles.
- Serving as the basic document for the preparation of the SWOT analysis for the region or its parts.
- Serving as the basic document for the preparation of the Regional Development Strategy (RDS).
- Serving as the informative document for the engagement of any local and foreign business partners.
- Serving as the basic document for Local Authorities undertaking initiatives in economy and internal networking within the region and with other regions in Bosnia and Herzegovina.

Despite of all the problems caused by the administrative organization of the region divided in two entities, 4 Cantons, the SEA is designed in accordance with the unified methodology and can be used as a model for preparation of similar type documents in the future.

The SEA document is subject to changes, attachments, amendments, corrections, annexes, exhibits and other alterations as needed or required. The determined method and content used herein, should be constantly elaborated to achieve actual character, which provides an analytical elaboration of all the changes (or potential changes) appearing in the Sarajevo Macro Region.

## 1. DESCRIPTION

## 1.1 GENERAL DESCRIPTION OF BOSNIA AND HERZEGOVINA

Bosnia and Herzegovina (BIH) was recognized as an independent state by the European Union member countries and the United States and it became a member of the United Nations on 22 May 1992 after disintegration of the Socialist Federal Republic of Yugoslavia at the end of 1991. It was heavily destroyed during the war (1992-1996). After the Dayton Peace Agreement that brought peace in the whole region, reconstruction and transformation has started within the entire Balkan region including Bosnia and Herzegovina. B&H was the independent state that suffered the largest loss of lives and the highest level of destruction during the war. Based on the estimates from the year 2000, the area of the country is 51,209 km² and the population amounts to 3.800.000, with a population density of 74205 inh/km². According to the population figures, it is almost twice the size of Slovenia or Macedonia, 25%.

The length of its borders is 1,537 km (774 km Continental and 751 km river border), of which approximately two thirds is the border with the Republic of Croatia and the rest with Serbia and Montenegro. It is located between East and West Balkans, so that it is a Balkan country. It has approximately 24 km of the Adriatic Coast (Neum-Klek), and west border with the Republic of Croatia is very close to the coast (in some parts less then 10 km), so that it is considered a Mediterranean country as well.

The massive chain of the Dynaric Mountains divides Bosnia and Herzegovina into the geographic area of Bosnia and Herzegovina. It is also divided by the rivers of the Adriatic catchment area (rivers of Herzegovina) and the Black Sea catchment area (rivers of Bosnia). The Dynaric Mountains massive chain is the main reason for the evident climate differences. Bosnia divides into flat areas in the North (around the Sava River) named Posavina, and mountainous areas in the region of Bosnia.

Herzegovina has a modified Mediterranean climate (modifications from typical Mediterranean to Continental in a smaller part of a country) while Bosnia has a variant of Continental climate (modifications from the typical Continental to mountainous-alpine).



Figure 1. Bosnia and Herzegovina and the neighboring countries



Figure 2. Geographical map of BiH with the characteristic relief

The strategic position of B&H is determined by the north-south transversal (continent-Adriatic Sea or Budapest - Zenica - Sarajevo – Mostar – Adriatic direction) of the international importance (Corridor CV) and direction of Ionian Sea stretching along the Adriatic coast. Access to the sea goes through the river Neretva and the port Ploče (Croatian port that is given on use to BiH for the period of 100 years based on the Washington agreement (administrative competence of BiH)).

Generally, BiH currently has and always had a very important strategic position. The territory of B&H has always been divided into different administrative-territorial units during the periods of the different reigns and empires in the region and even when it was an independent state. However, it has always been a unified, individual, administrative unit.



Figure 3. Main communication routes in Bosnia and Herzegovina

## 1.1.1 Administrative Organization of B&H

The actual administrative-territorial organization of B&H as a state is the result of a successful cessation of the war and forced conciliation of the ethnic groups and other Balkan states that were in a war. The agreement has been reached in Dayton, USA, under the pressure of the IC, led by the USA. The agreement was applied with the assistance of the IC, led by the Office of the High Representative that has a large scope of legal authority.

There are four administrative-territorial levels in Bosnia and Herzegovina as shown below.

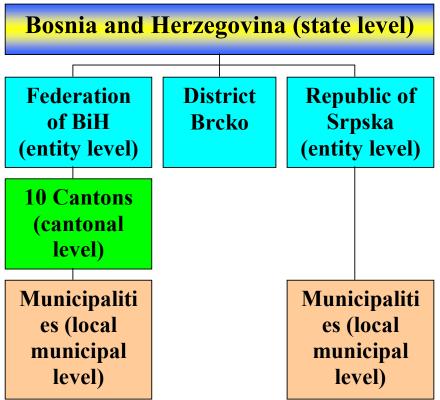


Figure 4. Administrative structure of Bosnia and Herzegovina

The country is composed of two administrative-territorial units – entities and one State District:

- Federation of Bosnia and Herzegovina (FB&H) with 51.08% of territory and 61.32% of the population.
  - Republic Srpska (RS) with 48.92% of the territory and 38.68% of the population.
  - District Brcko

B&H Parliament is the highest legislative authority and it has two Houses:

- House of Representatives
- House of People

The highest executive body on the state level is the Council of Ministers with six ministers. The state has a "Three-Presidency" (Bosniac, Croatian and Serb).

The entity legislative authorities are represented by two-house parliaments:

- House of Representatives
- House of People

The executive body is the entity Governments with jurisdiction in the majority of fields, except for the ones that are mutually agreed at the state level of B&H (state integration), so they are responsible for the functioning of systems and the regulation of life. During the last two years, it has evident that the

transfer of jurisdiction has started from the entity level to the state level, in order to meet the criteria for B&H accession to the EU.

FB&H has ten organizational units named Cantons, which are composed of the municipalities, while RS has only municipalities with no intervening Cantons.

Each Canton in FB&H has an Assembly, which is comprised of the municipal representatives (legislative authorities) and the Government (executive authorities).

The Municipalities (local level) do not have a large scope of authorities. Considering the budgets of Municipalities, the responsibility lays at the level of Cantons in the FBiH and the Entity level in the RS. Thus, the majority of authority rests either at the level of the Cantons or the Entities.



Figure 5. Cantons and regions in BiH with the defined Sarajevo Macro Region

At the state level, the vital functions regulated by the Constitution of B&H include the control of:

- External policy
- Export-import policy
- Customs-Monetary policy
- Financing of Institutions and International Payments of B&H
- Immigration, refugees, asylum; international policy and cross entity policy (including harmonization)
- Introduction and functioning of common and international communications
- Control of air traffic

In period from 2001 until present, there is an evident transfer of some significant functions from the entity level to the state level regarding the control of elementary state functions that will allow Bosnia and Herzegovina access to global integrations (accession to EU and NATO structures). Therefore, the state led by the Presidency and the Council of Ministries is currently responsible for the following issues:

- Defence (Minister of defence at the state level)
- Border controls (State Border Service)
- Intelligence service (SIPA)
- Etc.

However, most of the operatational and functional realization of responsibilities is at the level of entities and Cantons.

The complex state-administrative organization, reached as a compromise, disables implementation of reforms and transition processes according to the planned dynamics. Therefore, the IC is supporting and creating the regional concept, at least for economic development, hoping that it will speed up reintegration of Bosnia and Herzegovina and increase its competitiveness on the way to the accession to the EU and NATO structures, which is the basic goal. Five regions have been identified within BiH, which are currently in the process of defining and forming institutional frameworks. One of them is the Sarajevo Macro Region (SMR).

#### 1.2 SARAJEVO MACRO REGION - SMR

Sarajevo Macro Region is an integral area based on many characteristics: natural, geographic, cultural, historical, communicational, and economic characteristics. Sarajevo Macro Region consists of and covers the territory in both B&H entities, including 32 Municipalities in total: 13 Municipalities in the RS and 19 in the FBiH). The Municipalities that belong to the SMR in FBiH administratively belong to some of four Cantons. The figure below shows the municipalities that belong to the SMR.

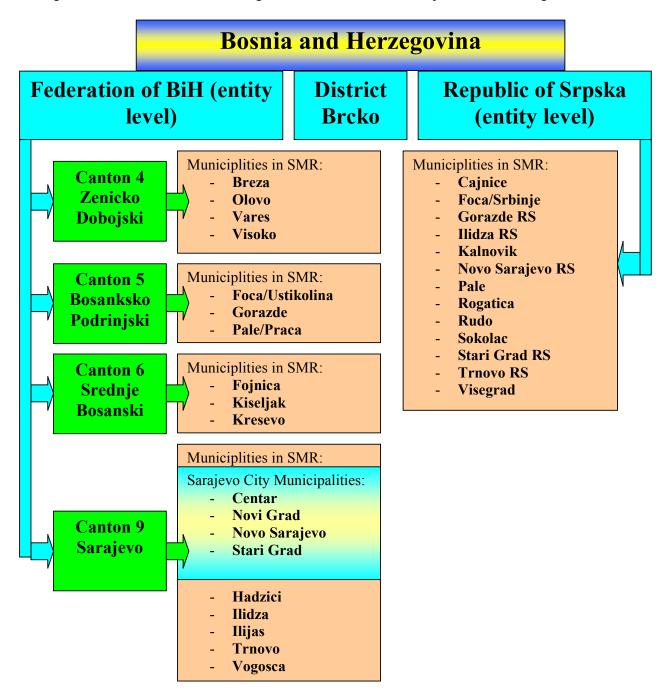


Figure 6. Administrative structure in the territory covered by Sarajevo Macro Region



Figure 7. Map of Municipalities within Sarajevo Macro Region

The SMR is characterized by different geographic characteristics and basic units (geographically looking). There are large mountainous areas and river valleys in the SMR where the most of the largest settlements and urban centres are located:

- The Drina river valley is a large and flat area (field) along the Drina river (one of the largest rivers in BiH). The Drina river flows mainly through the Canton Podrinje (Gorazde city as administrative centre), and partly through the Republic of Srpska. Generally, by looking at the contours of this river and majority of its length, it is clear that this is the natural border between Bosnia and Herzegovina and Serbia and Montenegro.

- Romanija Mountain that stretches between Sarajevo City and the Drina valley (east from Sarajevo) is characterized by a typical mountainous area, with lots of forests and grassland. It has the typical mountain climate, with only a few larger settled areas.

- The chain of high mountains of Treskavica, Jahorina and Zelengora (approximately 2100m high) covers a huge territory between Sarajevo City and Drina valley (southeast from Sarajevo). This is characterized by the high mountain area, with very heavy living conditions along the area and with several smaller communities along its borders. This area has a modified Mountainous-Alpine climate.
- The chain of mountains of Bjelasnica, Igman, Visocica, Bitovnja and Vranica represent a natural border between Herzegovina and Bosnia and Sarajevo Macro Region. This mountain chain lies on the east and northeast parts of the SMR and its bottom, is some of the most areas in Bosnia and Herzegovina.
- The Sarajevo valley is positioned along the rivers of Miljacka, Bosna and Zeljeznica. The characteristic of this area is that it is a highly populated area with the largest city in Bosnia and Herzegovina, Sarajevo City as the capital of BiH. Approximately 20% of total BiH population lives in this area. The climate is typical Continental. There are other natural resources that can provide support to this large population living on a relatively small area. Sarajevo city is the Administrative Capital of BiH and is recognized as economically the most attractive area in BiH with the largest market. Sarajevo City is the major historical and cultural centre of BiH with highly recognized multiethnic and multicultural image. The Sarajevo Valley is one of the finest Metropolises of South east Europe, consisting of Sarajevo City and its suburbs.
- The Fojnica River valley has a typical Continental climate. It enjoys several larger settlements and in terms of communication as well as natural configuration, it is very closely connected to the Sarajevo valley.
- The area around Zvijezda mountain (southern parts) a modified Continental-mountainous climate. The area is naturally and communication-wise attached to the Sarajevo valley. Besides, there are only few largely populated settlements and many smaller ones within this area.

The relief of the region is typical for mountainous areas: river valleys, mountain heights and hills. The top of the mountain chain is a typical example of unpopulated alpine area. Hydrographically, the main characteristic of this area is a great number of small mountain springs, creeks and rivers with only 2 big rivers; the river Bosnia and the river Drina. There are also a few smaller glacial lakes at the mountain, as well as many hectares of forest lands and several natural grazing lands (excluding the abundance of wilderness with bears, foxes, wolves, etc.).

Vegetation is rich, with some endemic species. The largest territory of the SMR is covered with forests. Beech and oak can be mainly found in the lower areas, while in the higher mountains there is evergreen pine or spruce woods. The territory of Sarajevo Macro Region has the largest ancient forest in the Europe called Perucica. Lower areas and river valleys are mainly populated and covered with grasslands, as well as used for agriculture, cattle farming, fruit and vegetable production.

The fauna of the mountain and/or forest area is rich with birds and small animals such as: eagles, grouses wild boars, fawns, wolfs, foxes, rabbits, bears, smaller wild cats and many other wild species. There are also many other natural elements in these areas such as pine cones, wild flowers, varieties of fruits and berries, wild mushrooms, nuts, etc.

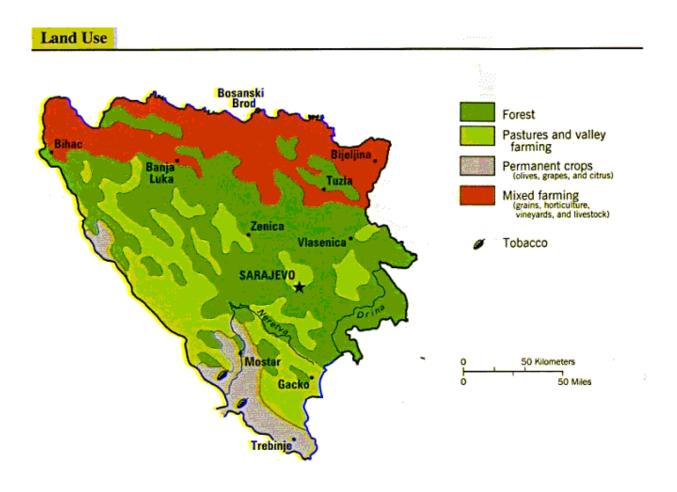


Figure 8. Land use in Bosnia and Herzegovina and forest areas

Archaeological excavations and sites show that the region has been inhabited since the ancient times. Those locations confirm the earlier existence of the settlements from the Stone Age and the Iron Age, the pre-Roman and Roman civilizations (Roman Bridge in Sarajevo, and Butmir), the Bogomilian necropolis and cemeteries. These ancient society remains can be found everywhere, but most of them are located in Bjelasnica and near Visoko city, which used to be originally the capital of Middle age Bosnia kingdom and the free Bogomilian University (the first in Europe) during the Middle Age – pre-Turkish time. During the Turkish period, modern concepts of urban living were introduced, and it seems to be the applied concept of contemporary cities in Bosnia and Europe.

During the Turkish Empire, in period from 16<sup>th</sup> to 19<sup>th</sup> century Sarajevo was a centre of the "ejalet" or large administrative area and became one of the largest and most progressive cities in Europe. It grew to a population of about 60.000 to 80.000 inhabitants, partially due to its location on the crossroads between the east and the west. Water and sewage systems in Sarajevo were designed, constructed in put in use during the Turkish Empire as well. Lots of "hamams" - public bathrooms, "Carsija" as a commercial centre with hundreds of small stores and handicraft shops, mosques, and other religious facilities for Christians and Jews, as well as libraries were established during that period. Most of these

facilities (many of which destroyed during various wars, some repaired or reconstructed) exist even now and are either in use or serve as an attraction for tourists.

During the Austro-Hungarian Empire (end of 19<sup>th</sup> and beginning of 20<sup>th</sup> century) Sarajevo started developing its industrial facilities and made a step ahead in the process of modernization. The example of the development was a new city profile (new commercial and residential area in Austro-Hungarian style), construction of the first tram systems in Europe (public transportation for passengers), development of the railroad and railway stations, provision of a gas supply system for household use, foundation of museums, etc.

It is hard to determine which group current population belongs to, because it is evidently a huge melting pot from the middle ages. Some sources say that majority of population belongs to Dynaric Ethnic Group and its modification (especially in large urban centres that have existed for hundreds of years). During the Middle Ages the population of BiH was divided by religion: Muslims, Orthodox, Catholics and Jews. At the beginning of the 20<sup>th</sup> century, the population started dividing per ethnicity: Bosniaks, Serbs, Croats and Jews. The last war on the Balkans and in Bosnia and Herzegovina resulted with severe demographic population changes (refugee migrations along ethnic lines) with long-lasting consequences.

Natural resources of SMR are modest, but they exist and are available. There are large forest areas under beech and evergreen trees, grasslands, agricultural land, loads of large capacity drinking water springs, mineral waters (near Kiseljak, Fojnica and Ilidza), thermal waters (near Ilidza all the way up to and beyond Zenica), deposits of dolomite and ornament stones, deposits of iron ore (near Vares), deposits of brown coal (near Breza) and probably some deposits of gold. The significant natural resource is hydro potential of the river Drina and huge number of small mountain rivers that could be used for small and medium HPPs. The other potentials are as follows: forests and forest products, high mountains (5-6 mountains under the snow) that have the road connections and other infrastructure nearby and convenient for development of winter tourism. The existence of Sarajevo, as a Metropolis and centre of the SMR is characterized by the development of the large scope of sectoral services due to its high population density.

The basic and traditional activities in the rural part of region are forestry, agriculture and cattle breeding. The climate, especially in the valleys, is favourable for cultivation of fruits and vegetables (apple, pears, plums, cherries, nuts, potatoes, tomatoes, pumpkins, carrot, onion, etc.). In the mountainous area the most common fruits grown are apples, pears and plums, and vegetable such as potatoes, cabbage, pumpkin etc. Good quality honey is also well-known product of this area. Cattle breeding and sheep pasturing are the activities typical for the mountainous region, with a large unused potential, due to the lack of large grass fields. The rivers and lakes as well as fishponds and fish cages are generally good for the development of fishery and recreation activities. Some of the rivers like Miljacka River in its lower flow and part of Bosnia River flowing through Sarajevo City are polluted and cannot be used in any purposes. Herein encountered is environmental and ecological issue within the SMR.

The industrial capacities were almost completely destroyed during the war. During the pre-war period around Sarajevo there were many large industrial facilities that used to employ thousands of people (Steel factory Vares, Steel factory Ilijas, Car Factory VW, UNIS Military industry, FAMOS military tanks industry and motor industry, Energoinvest, Sipad wood industry, UPI food industry, Vitkovici explosive production, etc.). Most of these companies and their activities are not in function anymore. The remaining production capacities face enormous problems due to the transition changes. The problems are mainly the following: old-fashioned equipment, lack of the market, unresolved

privatization issues, lack of financial institutions and capital resources, and devastation of capacities and facilities/infrastructure.

Current form of settlements is mainly the result of historical changes, different influences and styles. The Eastern (Turkish influence) and Western construction style give a specific 'look' of unique urban form. The cities with old parts of town were developed from smaller settlements formed along the rivers and/or at the crossroads. The mountain villages are scattered around and smaller size, but the villages in the river valleys are concentrated and have a centre and sub-villages (large villages).

The valleys of the rivers Drina, Bosna and Fojnica are the important communication routes. Nowadays, the international traffic road and railway line stretches along the river Bosna (Corridor C5: Baltic-Adriatic), and road along the Drina valley that connects Serbia through Bosnia with Montenegro and Adriatic cost.

There is no river, lake or see traffic at all in the Sarajevo Macro Region. There is the largest and most important international airport in Bosnia and Herzegovina in Sarajevo (Butmir) and one large airport in construction near Visoko. Outside of the Sarajevo Macro Region there are several nearby airports (Dubrovnik (Croatia), Split (Croatia), Tuzla (BiH) and Mostar (BiH)).

The mountain region with a preserved environment is full of natural resources and beauties. Reservoirs, rivers, mountain creeks, waterfalls, largest ancient forest in the Europe, few natural glacial lakes, mineral and thermal springs, and snow mountains are insufficiently used for the development of tourism, particularly given the existing roads and other available infrastructure that connects these areas with the cities. In addition to archaeological locations, there are significant tourist potentials, as well.

The available diversity, tradition and resources together with the existence of Sarajevo City as a metropolis of SEE can definitely contribute to the idea that this region has many advantages and good chances for regional development. The existing diversities should be seen as the advantages ensuring the progress of the region.

## 2. SARAJEVO MACRO REGION

Administrative unit	Municipality	km <sup>2</sup>
	Municipalities in the F.	BiH within SMR in 1991
Canton 4	Zeničko-Dobojski	
1.	Breza	73
2.	Olovo	408
3.	Vareš	356
4.	Visoko	231
Canton 5	Bosansko-Podrinjski	
5.	Foča/Ustikolina	188
6.	Goražde	248
7.	Pale/Prača	130
Canton 6	Srednje-Bosanski	
8.	Fojnica	308
9.	Kiseljak	165
10.	Kreševo	148
Canton 9	Sarajevo	
11.	Centar	33
12.	Hadžići	273,3
13.	Ilidža	143,4
14.	Ilijaš	308,6
15.	Novi grad	47,2
16.	Novo Sarajevo	9,9
17.	Stari Grad	51,4
18.	Trnovo	338,4
19.	Vogošća	71,7
Total from FBi		3531,9
10000 j.om 1 De		to current SMR in 1991
20.	Čajniče	275
21.	Foča/Srbinje	1115
22	Goražde RS	123
22. 23.	Ilidža RS	23
24.	Kalinovik	732
25.	Novo Sarajevo RS	
26.	Pale	492
27.	Rogatica	684
28.	Rudo	344
29.	Sokolac	689
30.	Stari grad RS	105
31.	Trnovo RS	138
32.	Višegrad	448
Total from RS	1	5168
TOTAL FOR S	SMR	8699,9
1011111 Off L	/1/221	00//9/

Figure 9. Surface of Municipalities in SMR in 2002

## 2.1 CHARACTERISTICS OF SMR RELIEF

This region as many other Bosnia and Herzegovina regions is characterised by enormous varieties within its entire region. The changes in the earth layers that happened thousands of years ago, due to the earth being formed through massive volcanic actions and the consequent cooling processes are clearly present throughout this entire region. All this was created by tectonic plate shifts deep under the surface where large and small earthquakes were caused, which still affects this region thus resulting in radical changes to the surface land. Notably the 'land-slide' area in the vicinity of Zetra in Sarajevo regularly experiences shifts from minor earthquakes.

All these different changes over many centuries resulted in creation of hills, mountains, valleys, but rather limited continuous level of flat land. Since snow melted and rain started, the waters became an abundant factor due to extensive running off from these hills and mountains into the lower levels or valleys thus forming creeks, brooks, streams, and rivers. These run-offs over the time carved into or wore down the surfaces of land additionally exposing many layers to the changes that happened over the past period of time. Eventually, as the climate stabilized and vegetation and trees emerging out of washed surface lands decreased significantly and resulted with the situation that exist here today.

By looking at this region one can see many streams or rivers flowing all over the year with beautiful, clear and clean water, as well as many hills and mountains that are steep, rocky, even snow-capped and magnificently picturesque, water falls, plenty of forests with a wide variety of vegetation, growth and multiple types of trees (mostly high quality hard woods), and some flat areas suitable for farming or cattle grazing. This diverse landscape provides many opportunities and capabilities for the economic development of this region.

Below table shows mountains in the SMR and Municipalities in the mountainous area:

Mountains Height m		Territory of Municipalities or Sub - region covered	Comments
Zvijezda	1349	Outskirts of Breza, Vares, Olovo,	
Cemerno	1465	Outskirts of Breza, Ilijas	
Greben	1.169	Vares	
Javornik	1.254	Vares	
Igrište	1.303	Vares	
Dragovičko brdo	1.398	Vares	
Budoželjska planina	1.257	Vares	
Selačka planina	1.235	Vares	
Visocica	1528	Visoko, Kresevo, Trnovo	
Stogic	Low	Visoko	
Stolac	1 520	Foca/Ustikolina	
Kacelj	1 674	Foca/Ustikolina	
Klek	1748	Pale/Praca	
Crni vrh	1390	Pale/Praca	
Vranica	2112	Fojnica	
Zec	1800	Fojnica	
Zahor	1400	Fojnica	

Figure 10a. Mountains and elevation of mountain peaks in SMR

Mountains Height m Territory of Municipalities or Sub -**Comments** region covered Fojnica Pogorelica 1432 Bitovnja 1700 Kresevo Inac 1437 Kresevo 1210 Meorsje Kresevo Trebevic 1629 Outskirts Centar, Stari Grad, Stari Grad Olympic mountain RS. 1740 Creposljsko Stari Grad RS, Bjelasnica 2067 Hadzici, Trnovo, Trnovo RS Olympic mountain Igman 1533 Hadzici, Ilidza, outskirts of Ilidza RS Olympic mountain Ivan 1450 Hadzici Ormani 1142 Hadzici Ozren 1453 Ilijas Treskavica 2056 Trnovo, Kalnovik, Trnovo RS Jahorina 1907 Trnovo, outskirt of Gorazde RS, Pale, Olympic mountain Trnovo RS 1271 Olovo Koniuh Stakorina High Cajnice High Cainice Vučevica Stražica High Cajnice Maglić 2.386 Foca/Srbinie Zelengora 2.015 Foca/Srbinje, Kalnovik Volujak 2.337 Foca/Srbinje Lelija 1809 Kalnovik Crvanj 1300 Kalnovik Romaniia 1649 Pale, Sokolac, Olovo, Ravna Planina 1607 Pale 1497 Siemec Rogatica Devetak Rogatica, Sokolac 1417 Varda 1389 Rudo V.Stolac 1675 Visegrad Ivica Visegrad 1496 1304 Gostilja Visegrad 1223 Visegrad Bujak

Figure 10b. Mountains and elevation of mountain peaks in SMR

On the territory of Sarajevo Macro Region there are 48 bigger and smaller mountains with the elevation from 1142 m up to 2386 m. Some of the listed mountains actually belong to the larger mountain chains that are dominant in the Region.

Below table lists rivers and creeks in the SMR, as well as the length of total flow and flow through some of the Municipalities in the Sarajevo Macro region.

Rivers	Total length km	Flow through the Municipalities and/or Sub - regions in km	Comments
Stavnja	35	Breza (11 km) Vares (25), Ilijas (2,5)	FR, FP, ST, SH
Misoca	30	Breza (10 km), Ilijas (20)	ST, FR
Mala rijeka	10	Vares (10)	FR, FP, ST, SH
Blaza	10	Vares (10)	FR, FP, ST, SH
Bukovica	15	Vares (15)	FR, FP, ST, SH
Tribija	10	Vares (8)	FR, FP, ST, SH
Ocevlja	8	Vares (4)	FR, FP, ST, SH
Bosna	271	Visoko (21), Ilidza (6), Ilijas (11), Novi Grad (4), Vogosca (5)	Polluted
Fojnica	35	Visoko (10), Fojnica (9)	FR, FP, ST, SH
			Polluted in the lower flow
Drina	Int 344	Foca/Ustikolina (13), Foca/Srbinje (30), Gorazde RS (15), Visegrad (56)	FR, FP, ST, SH
Kolina	20	Foca/Ustikolina (10)	FR, FP, ST, SH
Osanicka rijeka		Foca/Ustikolina (3)	FR, FP, ST, SH
Praca	57	Pale/Praca (15), Gorazde RS (3), Pale (13)	FR, FP, ST, SH
Zeljeznica (F)	15	Fojnica (15)	FR, FP, ST, SH
Dragaca	7	Fojnica (7)	FR, FP, ST, SH
Scona	3	Fojnica (3)	FR, FP, ST, SH
Pozarna	4	Fojnica (4)	FR, FP, ST, SH
Borovnica	4	Fojnica (4)	FR, FP, ST, SH
Jezernica	12	Fojnica (12)	FR, FP, ST, SH
Bistrica (F)	3	Fojnica (3)	FR, FP, ST, SH
Kozica	12	Fojnica (12)	FR, FP, ST, SH
Kresevka	14	Kresevo (10)	FR, FP, ST, SH
Rakovcica	5	Kresevo (5)	FR, FP, ST, SH
Crna Rijeka (K)	11	Kresevo (11)	FR, FP, ST, SH
Miljacka	20	Centre (1,5), Novi Grad (8), Stari Grad (5)	Polluted in the
			lower flow
			(Sarajevo City)
Zujevina	20	Hadzici (10)	FR, FP, ST
Bijela Rijeka	10	Hadzici (10)	FR, FP, ST, and
			water supply for
7.1: (7)	1.5	W.1. (10) F. (2) 711 77 (2)	Sarajevo city
Zeljeznica (T)	45	Ilidza (10), Trnovo (9), Ilidza RS (6),	Polluted in the
		Trnovo RS (20)	lower flow
T ' 1 '	1.7	H (11) A. (6)	(Sarajevo City)
Ljubina	17	Ilijas (11), Vogosca (6)	FR, FP, ST, SH
Raca	10	Ilijas (10)	FR, FP, ST, SH
Dobrinja	8	Novi Grad (2), Ilidza RS (1)	Polluted
			(Sarajevo City)

Figure 11a. Rivers and Creeks in Sarajevo Macro Region

Rivers **Total** Flow through the Municipalities and/or Comments length Sub - regions in km km 5 Moscanica Stari Grad (5) Lower flow is capped 14 Crna Rijeka (T) Trnovo (14) FR, FP, ST, SH Bijela Rijeka (T) 12 Trnovo (11) FR, FP, ST, SH 30 Rakitnica Trnovo (16) FR, FP, ST, SH Skakavac 10 Vogosca (10) 5 Josanicki creek Vogosca (5) Polluted 30 FR, FP, ST, SH Janjina Cajnice (25) Radoina 35 Cainice (30) FR, FP, ST, SH Cehotina Int 91 Foca/Srbinje (27) FR, FP, ST, SH Tara Int Foca/Srbinje (22) FR, FP, ST, SH Kasindolski Creek 15 Ilidza RS (9), Pale (6) Polluted (Sarajevo city) Int 225 Neretva Kalnovik (30) FR, FP, ST, SH FR, FP, ST, SH 22 Bistrica (K) Kalnovik (20) 12 Pale (12), Stari Grad RS (1,5) FR, FP, ST, SH Paljanska Miljacka 7 FR, FP, ST, SH Bistrica (P) Pale (7) Mokranjska Miljacka 10 Pale (10), Stari Grad RS (1,5) FR, FP, ST, SH Repašnica 6 Pale (6)FR, FP, ST, SH 4 FR, FP, ST, SH Kamenica Pale (4) 5 Gračanica Pale (5) FR, FP, ST, SH 15 Rakitnica (R) Rogatica (10) FR, FP, ST, SH Lim Int 168 Rudo (23) FR, FP, ST, SH Biostica 32 Sokolac (18), Olovo (9) FR, FP, ST, SH 20 Kaljina Sokolac (20) FR, FP, ST, SH Ljustra 5 Trnovo RS (5) FR, FP, ST, SH 5 Trnovo RS (5) FR, FP, ST, SH Sirokarka 41 Stupcanica Olovo (20) FR, FP, ST, SH 73 FR, FP, ST, SH Krivaja Olovo (32) Visegrad (18) FR, FP, ST, SH Rzav Int 62

Figure 11b. Rivers and Creeks in Sarajevo Macro Region

Legend: FR – F ish R ich, FP – P ossible f ish pools, SH – S mall H ydropower plants, ST – S port tourism, I nt – I international F river

In the territory of Sarajevo Macro Region there are 46 bigger and smaller rivers and creeks with the total flow length through this region of about 979 km. It means that density of river flows in this region is 11,25 (km of flow)/ $100 \, km^2$ .

In the table below are listed natural lakes and reservoirs in the SMR and surface, depth, and position of the lake in the region.

Lake	Surface km2	Depth m	Natural or Reservoir	Position in the Municipalities and/ or Sub - regions	Comments
Hrasno	0,000225	15	Natural	Breza	
Smreka	0,12	120	Reservoir	Vares	On the place of ex-iron mine (ST)
Mala rijeka	0,03	20	Reservoir	Vares	On the place of ex-iron mine (ST)
Prokosko	0,47		Natural	Fojnica	Natural park – mountain lake, (T)
Veliko	0,0332	5	Natural	Trnovo	(T)
Crno	0,0014	10	Natural	Trnovo	(T)
Platno	0,0012	1,5	Natural	Trnovo	(T)
Bogatici	0,0452	3	Reservoir	Trnovo	SHPP dam (FR)
Orlovačko	Small		Natural	Foca/Srbinje	
Donje Bare	Small		Natural	Foca/Srbinje	
Gornje Bare	Small		Natural	Foca/Srbinje	
HPP Drina	Large	20	Reservoir	Gorazde RS	HPP dam is in Visegrad, but the lake is along the Drina river (ST), (FR)
Crvanjsko	74,4	15	Natural	Kalnovik	(T)
Kotlanicko	22,5	15	Natural	Kalnovik	(T)
Stirinsko	48,9	15	Natural	Kalnovik	(T)
Rudo	45		Reservoir	Rudo	HPP dam is on river Lim, (ST), (FR)
Donje Lake (V)	54	20	Reservoir	Visegrad	HPP dam is on river Drina, (ST), (FR)
Gornje Lake (V)	30	20	Reservoir	Visegrad	HPP dam is on river Drina, (ST), (FR)

Figure 12. Natural lakes and reservoirs in Sarajevo Macro Region

Legend: FR - Fish Rich, ST- possible sport tourism, T - tourism potential

2.2 CLIMATE IN THE SMR

Climate of Sarajevo Macro region is determined by its position and relief. The climate in some areas of this region is mostly determined by the under-sea level of some area and position with regards to the river valleys in the SMR. Generally, the climate is mainly characterized as a Continental with the characteristic four seasons (summer, autumn, winter and spring), with hot summers and cold winters. Highly elevated areas have short, cool summers and long, severe winters.

During the summer, temperature rises between 30 C° to 35 C° degrees in the cities and river valleys, and up to 25 C° in the mountains (depending on elevation level). During the winter, temperature goes under 0 C° up to -20 C° in the valleys and -28 C° in the mountains. During the winter, the whole region is covered with the snow in duration of about 100 days per year, but in the high mountains this even longer up to 170 days per year, with the approximately 1m to 2m deep snows.

There are several typical areas with regards to the climate as follows:

- Drina valley is characterized by a bit moderate climate considering the winter period and winter temperatures that are generally higher than in the rest of Sarajevo Macro Region. This is caused by the elevation and flow of warm air from the Mediterranean along the river valley. The spring season starts a bit earlier then in the rest of the SMR.
- Typical Continental climate with the hot summers and cold winters is the main characteristic of Bosna River valley, Fojnica River valley, Sarajevo Valley, and other areas.
- Mountainous areas and the areas with high elevation are characterized by the severe Continental climate and modification of alpine climate (depending of elevation level) with the very short cool summer and very long cold winters. On some mountain tops, the snow can be seen by the mid of May.

Below tables indicate typical values of meteorological data from three stations in the region:

- First station is in Sarajevo City and it shows the typical values of climate data in the areas with the lower elevation as well as in the river valleys
- The second station is in Bjelasnica Mountain and it gives the typical values of climate data in the areas with the high elevation that have severe mountainous alpine climate
- The third station is on Ivan Mountain in the western part of the region and it indicates the typical values of climate data of the mountain areas below 1500 m, with the slight influence of Mediterranean climate (border with the Herzegovina region).

Station Average Values Absolute values Winter Year Summer Precipitation Min Max Date Date  $C^{\theta}$  $C^{\theta}$  $C^{\theta}$  $C^{\theta}$  $C^{\theta}$  $l/m^2$ 9.7 0,5 -22 Sarajevo 18,6 18,6 38,2 04.07.2000 26.01.1954 Bjelasnica -5,9 9 9 24 -29,2 22.01.1963 1,1 19.07.1953 7,5 -1.3 16 35,2 Ivan 16 16.08.1952 | -26,2 12.01.1985

Figure 13. Meteorological data from the stations registered in the period 1951 – 2002 in Sarajevo Macro Region

Below table shows the data from station in Sarajevo City and the relevant data for the highly populated areas in the region with the low elevation level and within River valleys.

Values	2000	2001	2002			
Average ann	Average annual values					
Temperature of air $C^{\theta}$	11,3	10,3	11,0			
Annual	Values					
Absolutely minimum air temperature $C^{\theta}$	-21	-12,6	-17,4			
Absolutely maximum air temperature $C^{\theta}$	38,2	35,4	34,0			
Precipitation <i>l/m</i> <sup>2</sup>	694,8	1175,4	966,8			
Number of days with the precipitation	127	173	168			
Maximum days with the snow	68	64	41			
Maximum snow height m	0,75	0,40	0,33			
Sunny hours	2136,1	1828,2	1926,6			

Figure 14. Meteorological data from the Sarajevo Station are related to the highly populated areas in Sarajevo Macro Region with the low elevation levels in the river valleys

## 2.3 NATURAL RESOURCES IN SMR

## **2.3.1 Waters**

Water potential is quite abundant in this region due to a fair amount of seasonal rains and quite heavy snowfalls in winter. There are many natural ground springs, gasified water sources and geothermal springs especially due to a geothermal reservoir that runs diagonally through this SMR (and all BiH from the southeast to the northwest).

In many locations within the SMR there are underground reservoirs just below the surface level (less than a meter or two), which provide plenty of drinking water. The potential capacities and capabilities of the fresh water and fish industry are enormous. The waters and their flows have certain commercial capacities and capabilities which still need to be fully exploited within this SMR, and none of the communities from the SMR should have any problems related to the lack of this natural commodity that is essential for life. Some of the river flows in the Sarajevo Macro Region have potentials for electricity production and installation of HPP, while some of them have potentials for tourism, due to the very dramatic landscapes along these flows, especially along the small mountain rivers.

The largest rivers by its flow capacity in the Sarajevo Macro region are: Drina River, Bosna River, Cehotina River, Lim River, Praca River, Zeljeznica River, Fojnica River, Miljacka River and Misoca River. The long length of the flow and high flow capacity (m3/h) are the main characteristics pf River Drina, River Bosna, River Fojnica, River Zeljeznica and River Praca.

There are several glacial lakes on the mountains. However, the most dominant by its beauty as well as the magnificence of the surrounding landscape are the lakes on the mountains Vranica and Treskavica, so called "mountain eyes".

Within the whole region there are only a few artificial lakes used as accumulation for HPP. One of them is near Trnovo on river Zeljeznica, another is near Visegrad on the river Drina, and the third is in Rudo on the Lim River.

The rivers in the Sarajevo Macro region belong to the two different water flow systems:

- Black sea system
- Adriatic sea system

All the rivers in SMR are part of the black sea system with the two main rivers in the SMR, Drina and Bosna River (few the longest rivers in BiH), except for river Neretva, which springs out in the area of Kalnovik Municipality and which belongs to the Adriatic sea system of rivers.

## 2.3.2 Land

The land although rugged, hilly, mountainous, full of rocks and stones is arable with good natural nutrient and rich soils suitable for timber and related wood industries, agricultural farming and/or animal grazing. Terracing is done on a very rudimentary small scale, but could be expanded throughout the SMR where flat land is unavailable.

The rivers and their beds could support such things as dams for production of hydroelectric, reservoirs for storage of potable water reserves, recreation parks and facilities for water sports and related activities.

There is lots of land that is currently unused, under-utilized, or not used for the highest and best purposes as it should be done particularly with regards to agricultural planning, light or medium industry, National Forests or Wilderness Preserves, or even as developed housing communities.

The variety of available land within the SMR provides many different models and concepts for possible entrepreneurial ventures and activities to be undertaken, thus contributing to a diverse and more stable economic region.

There are several larger flat areas:

- Space along the Drina River that is well-known by fruit production (apples, plums, and pears), and that can be used for large-scale fruit and vegetable production.
- West and North West part of Sarajevo valley, which is not totally urbanized provides some possibility for large-scale vegetable production.
- Space along Bosna River near Visoko, which is not totally urbanized offers some possibility for large-scale vegetable production
- Highly elevated flat grasslands like Romanija and Nisici that provide possibilities for cattle farming and sheep pasturing, as well as production of some vegetables resistant to severe climate conditions

Within the whole SMR there is about 2040,13 km<sup>2</sup> of cultivable land for different purposes, which is about 23.4% of total SMR surface.

In the entire SMR, there is about 582,86 km<sup>2</sup> of arable land for different purposes, which is about 6,7% of total SMR land surface.

## **2.3.3 Woods**

The land under forests and other natural vegetation (i.e., wild blueberries, wild red berries, wild strawberries, mushrooms, herbs, flowers etc.) are rather insufficiently regulated, under-managed, and definitely under-exploited. The wood products are being destroyed due to non-viable State control and delayed forestation plan undertaken by any of the concessionaires. There are ongoing illegal activities related to timber cutting and taking away, without any legal enforcement in place or any consequences such as remedies.

The wood industry in this SMR like other MRs of BiH suffers greatly from the usual practice of operating only in the first stages of the process mostly in all cases (i.e. cutting, and saw milling to half products) and exporting to the countries where finished products are made instead of developing the own resource to its to the fullest potential, which brings the most profit and enables reinvestment into revitalization of the natural base resource.

Furthermore, there are extensive mountainous forests (Mountain Igman and Mountain Bjelasnica area or Mountains Zelengora, Maglic, Volujak and Cemerno) in this region, which should be protected by the State, not only as a National Forest, but as a Wilderness Preserve. This area covering a large part of this SMR could be developed and controlled to contribute to the environment and create natural wood lands for future generations to come and enjoy it.

Typical forests are the following: beech and oak forests in the lower areas and Greenleaf forests in higher areas.

Woods and forests are some of the most important natural resources that exist on the territory of the Sarajevo Macro Region. About 4477,44 km<sup>2</sup> of Sarajevo Macro Region is under forests, which is about 51,7% of SMR. Mainly, it is high-quality hardwoods.

Below figures present the surface of cultivable land, arable land, and surface under the forests within Sarajevo Macro Region.

Administrative	Municipality	Land Use		Forests
unit		Cultivable land km2	Arable lend km2	km2
Territory o	of current FBiH below			
Canton 4	Zeničko-Dobojski			
1.	Breza	34,79	1,5	31,33
2.	Olovo	94,5	20,3	329,2
3.	Vareš	86,9	8,8	260,3
4.	Visoko	98,84	78,72	125,1
Canton 5	Bosansko-Podrinjski	,	,	,
5.	Foča/Ustikolina	57,76	5,6	90
6.	Goražde			
7.	Pale/Prača	35	15	80
Canton 6	Srednje-Bosanski			
8.	Fojnica	40	20	165
9.	Kiseljak			0
10.	Kreševo	35	20	112
Canton 9	Sarajevo			
11.	Centre	3	1,5	1
12.	Hadžići	42,77	11,43	142,3
13.	Ilidža	70	50	50
14.	Ilijaš	132,1	34,5	187,8
15.	Novi grad	2,3	1,1	1,3
16.	Novo Sarajevo	1,9	1,9	1
17.	Stari grad	2,1	1	2
18.	Trnovo	90	12	183
19.	Vogošća	22,91	9,65	39,44
Total from FBi	H	849,87	293	1800,77
Territory of c	current RS belonging	to SMR in 1991		
20.	Čajniče	20,9	13	113,8
21.	Foča/Srbinje	316,56	34,05	679,13
22.	Goražde RS	24,57	2,34	27,06
23.	Ilidža RS	8,6	4,4	8,75
24.	Kalinovik	80	32	227,27
25.	Novo Sarajevo RS			
26.	Pale	124,97	21,94	350
27.	Rogatica	195	40	306
28.	Rudo	40	30	199,33
29.	Sokolac	205	45	356
30.	Stari grad RS	30,1	30,1	47,53
31.	Trnovo RS	36,69	4,43	97,81
32.	Višegrad	107,87	31,6	291,05
Total from RS		1190,26	289,86	2676,67
TOTAL FOR S	SMR	2040,13	582,86	4477,44

Figure 15. Cultivable and arable land and forests in 2002 in SMR

## 2.3.4 Minerals and Ores

With regards to minerals and ores, this region is not very rich. Intensive exploitation has been done on several locations, but mostly in the northern parts of the Sarajevo Macro Region and partially in the eastern part of SMR.

Given that minerals can be found on the various locations all over the region, there are also findings of stone dolomite and the exploitation of the same.

In the north part of the Sarajevo Macro region there are deposits of coal (hard high caloric coal) near the city of Breza, where the largest coal mine in SMR is located. There is also a source of iron ore near the city of Vares, where there are the largest exploitation sites in this Region. This part of the region also contains smaller and insufficiently exploited deposits of zinc and copper. Near Olovo city there are unused deposits and closed mines of zinc and plumb.

In the eastern part of Sarajevo Macro Region there are also deposits of coal as well as coal mines near the municipalities of Foca (brown coal) and Visegrad (also brown coal).

Mineral and thermal water springs that can be found in the North West part of Sarajevo Macro Region are also mentioned in this text as valuable resources. These springs have been used since the ancient times, and are still in use near Kiseljak (mineral water naturally gassed and with the natural CO<sub>2</sub>) and Fojnica (thermal water used in medical purposes for treatment of severe and rheumatic diseases). There is one thermal-mineral rehabilitation centre in the eastern part of the region, near Visegrad. There are particularly rich mineral springs in the Municipality of Vares.

The table below lists the deposits of different minerals and ores within Sarajevo Macro Region and gives the data on exploitation and reserves.

Mineral or ore Municipalities and/or Sub - regions in **Comments** Brown coal Breza (Prhinje, Vratnica, Potkraj, Smailbegovići) (E) (R 51012677t) : Foca/Srbinje (Miljevina) (E) (R 63891417t): Stone lime Breza (Zupca) (E) (R 6000000 m<sup>3</sup>): Vares (Stijene and Kota) (E) (RR): Hadzici (Dupovci) (E) Vares (Smreka, Brezik, Droškovac) (NA) (RR): Iron ore Cajnice (Luke) (NR) (SSU): Rudo (NR) Visgrad (River Vardiste Valley) (NR) Plumb and Zink Vares (Veovača, Borovica) (NA) (RR): Cainice (Mediuriecie – Zakalie): ore Foca Srbinje (Supla Stijena): Olovo (Olovo) (R 21200000t) (E) Vares (Veovača, Borovica) (NA) (RR): Barite Pale/Praca (Rasoha) (NR) (SSU): Fojnica (Dusina) (RR) (E) Chromate Vares (Duboštica) (NA) (RR): Vares (Kota) (E) (RR): Spilit (construction material) **Amphibolites** Vares (Vijaka) (NA) (RR): (Construction material) Ouartz sand Vares (Pobrin Han) (NA) (RR): Visoko (Golo Brdo) (E) (R 1760000 m<sup>3</sup>): Clay Foca/Ustikolina (Presjeka) (NR) (SSU) Gypsum Foca/Srbinje (NR) (SSU) Stone Calcium Foca/Ustikolina (Mjehovine) (NR) (SSU) Carbonate Stone mine Hadzici (Zovik) (E) Ilidza (Rakovica, Blazuj) (E) (dolomite) Trnovo (Presienica) (E) Ilidza RS (Krupac) (E) Visegrad (several locations) (NR) Fojnica (Gojevici) (RR) (E) Antimony Cajnice (Potkozara) (NR) (SSU) Rudo (Mioce, Jelici) (SSU) Mangan Rudo (Valley of the river Lim and Radojna Cuprum River) (SSU) (NR) Gold & Hg Fojnica (Bakovici& Cemernica) (NA) Rudo (Oskorusa) (SSU) (NR) Magnetite Construction stone | Stari Grad RS (Hres) (E) (RR)

Figure 16. Minerals and ores registered in 2002 within SMR

Legend: E – in exploitation, R – reserves, RR – researched reserves, NA – not active, NR – not researched, SSU – small scale use

Below table gives the data about thermal and mineral springs and waters within the SMR as well as data about the exploitation status and the reserves status.

Municipality	Mineral or Thermal water in Municipalities and/ or Sub - regions in	Comments
	SMR	
Vares	Mineral water (Okruglica) (Temperature of	
	the spring 10,6 C, PH-6,2, potable) (NC)	
	Mineral water (Dabravine 1) (Spring	
	capacity 0,04 l/s, potable) (NC)	
	Mineral water (Dabravine 2) (Spring	
	capacity 0,1 l/s, potable) (NC)	
	Thermal spring (Očevlja) (Water	
	temperature 24,8 C, PH -7,9, capacity 6l/s) (NC)	
Foca/Ustikolina	Mineral spring (Jabuka) (NR) (NC)	
Pale/Praca	Mineral water (Mihalj) (NR) (NC)	
	Thermal water (Toplik) (NR) (NC)	
Fojnica	Thermal mineral water (RR) (E)	
Olovo	Thermal mineral water (RR) (E)	_
Ilidza	Thermal mineral water (Ilidza) (RR) ) (E)	

Figure 17. Mineral and thermal waters registered in 2002 within SMR

Legend: NC – not commercialized, NR - not researched. RR – Researched, E –in exploitation

#### 2.4. TRAFFIC CHARACTERISTICS

At the very first glance, it can be seen that the main road communication through this region goes along the river valleys. The basic road routes through the region are the following:

- Sarajevo (Vogosca-Ilijas-Visoko) Zenica (part of the corridor CV north from Sarajevo)
- Sarajevo (Ilidza Hadzici) Mostar Ploce in Croatia (part of the corridor CV South West from Sarajevo)
- Sarajevo (Vogosca) Olovo Tuzla
- Sarajevo Podromanija (Sokolac) Rogatica Gorazde
- Sarajevo Podromanija (Sokolac) Rogatica Visegrad
- Sarajevo Trnovo Foca/Srbinje
- Uzice (S&Cg) Visegrad Gorazde Foca/Ustikolina Foca/Srbinje Podgorica (S&Cg)
- Sarajevo (Ilidza) Kiseljak- Travnik
- Foca/Ustikolina Kalnovik Mostar

Some of the municipal centres are excluded from the main communication routes or directions and rather isolated. Such a status is the most obvious in the cities such as: Vares, Fojnica, Kresevo, Rudo, Pale/Praca, etc.

With regards to the railroad traffic in Sarajevo Macro Region, there are only two main routes both in the corridor CV. The main routes are as follows:

- Sarajevo (Vogosca-Ilijas-Visoko) Zenica (part of the corridor CV north from Sarajevo)
- Sarajevo (Ilidza Hadzici) Mostar Ploce in Croatia (part of the corridor CV South West from Sarajevo)

There is only one, though not the main, but mostly industrial railroad:

- Vares – (Breza) - Ilijas – Sarajevo or Zenica

By the end of 70s, Sarajevo was connected with the Drina Valley and Eastern Bosnia with the railroad made during the Austro-Hungarian Empire. This railroad is not in use anymore, but the corridor is still there. This railroad route was:

- Sarajevo – Pale- Podgrab – Praca – Ustipraca Visegrad or Rudo

As for the air traffic, Sarajevo as a capital had the biggest airport with the biggest number of flights to different international destinations. Sarajevo Airport is positioned in the western part of Sarajevo City (practically in the City Centre) at the Sarajevo field and there is practically no additional space for any further extension of it. The main problems related to the capacity and position of Sarajevo airport is the following: many foggy days during the winter, surrounded with high mountains and highly populated settlements. Therefore, the construction of the new airport in Visoko (30 km from Sarajevo) has started during 1993. This airport is not finished yet.

There are no possibilities for the development of any kind of river or water traffic in this region mainly due to insufficient water quantity, insufficient depth of water, and speed of flows. Even the largest rivers in the region, such as Drina and Bosna do not provide possibilities for any type of

commercial river traffic due to their physical limitations. The only way of water transport that could be done on these rivers are small tourist boats and canoes.

### 2.5. SPECIAL POTENTIALS AND OBSTACLES TO REGIONAL DEVELOPMENT

The regional development of this SMR due to its diversity of landmass, availability of multiple natural resources, and general lack of strategically controlled development has great potential in the future. Specifically, the potentials stated herein provide opportunities for the following segments of: light/medium industries, Agricultural/farming industries, tourism industry, and sports/leisure recreation industries (winter, summer and possibly year round). There is no doubt that even other industries apart from the ones mentioned here could be developed as well.

The obstacles to any or all of these are quite numerous, but we will try to present them though not in a particular priority order or level of importance. There is obvious lack of a strategic plan at the Country/State level to be used as an overall guidance for all the regions with regards to the regional economic development; there is also evident lack of a operating legal system with the enforcement capabilities; there is a huge political interference from all the levels and into any segment of life; the coordination effort of the international donors are not sufficiently coordinated; "Privatization" has not been completed in ten years period; there is a huge import dumping on the BiH market and no Law on protection of domestic products in place yet; and finally BiH government is inept with its multiple layers of employees and bureaucracy. Another factor that needs to be examined is actual costs and market needs and requirements.

Regional economic development certainly relates to the domestic market, but also targets and wants to penetrate into the international markets as well.

Finally another set of obstacles that need to be stated is that the business community and the entrepreneurs therein lack the knowledge, education and experience (and certainly not the global nature today) to get together, design and more importantly implement a viable regional economic development. They lack the imagination and skills to follow up the entire implementation. Standards (including EU/EC and International), guidelines, and regulations need to be set and complied with in the form of a "Strategic Plan" for Regional Economic Development of BiH.

The set of targeted trainings for all levels of society have to be planned for, and implemented in the nearest future.

### 3. POPULATION IN SARAJEVO MACRO REGION

Three nationalities, Croats, Serbs and Bosniaks, live in B&H and consequently, in the Sarajevo Macro Region. All demographic changes are the result of historical and dramatic events that happened within the region. The current situation is the result of the last war (1992-1996). All the analyses of demographic situation in B&H are based on data from 1991 Census. However, reliable information on population can be obtained by using evaluation and calculation methods as well as field estimates at the municipal levels. New census has not been affected in B&H in 2003, because the return process of displaced and refugee population is not finished yet.

#### 3.1 DEMOGRAPHIC DATA FOR SMR IN TH YEAR 1991

It is possible to find relevant data from 1991 but only for 25 out of 32 municipalities from the current Sarajevo Macro Region. Today, Sarajevo Macro Region covers the area of 32 Municipalities, 19 from the FBiH and 13 from RS. The total surface covered by Sarajevo Macro Region is the same as it used to be in 1991, while the number of municipalities increased due to the fact that some municipalities are split between the entities after the Dayton Peace Agreement.

In 1991, 25 municipalities were in Sarajevo Macro Region, with the total surface of 8.613 km<sup>2</sup>. 838.216 inhabitants lived in this region, in fact 254.669 households with the average household size of 3,3 members and the average population density of 97,3 inh/km<sup>2</sup>.

These figures indicate that Sarajevo Macro Region in 1991 year presented 16,8% of the entire BiH territory and with regards to population it was about 19,2% of the whole BiH population or about 21,1% of the total number of households in BiH.

In 1991 average size of the household in Bosnia and Herzegovina was 3,6 members and average population density was 86 inh/km<sup>2</sup>.

Participation of male population in total population of Sarajevo Macro Region in 1991 was 49,3%, and in entire Bosnia and Herzegovina were 49,9%.

In Sarajevo Macro Region in 1991 12.062 inhabitants were born and 6.010 inhabitants died. Natural growth of population was 6.052 inhabitants. Rate of alive births per 1000 inhabitants was 14,4 %%, dead inhabitants 7,2 %%, same as rate of natural growth. In Bosnia and Herzegovina, in 1991, rate of alive births per 1000 inhabitants was 14,9 %%, dead inhabitants 7,2 %% and the rate of natural growth was 7,7 %%.

As for the ethical criteria in 1991, in Sarajevo Macro Region 51,6% were Bosniaks, 29,1% Serbs, 8,5% Croats, and 10,8% others.

In the 1991 within the territory covered by SMR there were 22,1% of population belonging to the age group 0-14, 69,2% of population in the age group 15-64, which is, in fact, active population, 6,4% of population over 65 years of age, and 2,3% of population of unknown age.

Within the territory covered by Sarajevo Macro Region in 1991 there were 1.608 settlements out of which 25 were urban settlements (cities). 64,9% of population lived in urban settlements. In the same year 39,5% of the entire BiH population lived in urban settlements (cities).

Lately, the estimates on population in Sarajevo Macro Region for 1991 have been made, but based

Lately, the estimates on population in Sarajevo Macro Region for 1991 have been made, but based on split municipalities in this region after the Dayton Peace Agreement, so that it is possible to track the various migrations until 2003.

Ma	Marriainalita	Population	Male	Surface	Density
No	Municipality	(Inhabitants)	(inhabitants)	$km^2$	inh/km²
1.	Centre	79.286	37.875	33	2.402,6
2.	Hadžići	24.200	12.299	273	88,6
3.	Ilidža	67.937	33.923	169	402,0
4.	Ilijaš	25.184	12.648	323	78,0
5.	Novi grad	136.616	67.229	48	2.846,2
6.	Novo Sarajevo	95.089	45.644	47	2.023,2
7.	Pale	16.355	8.115	555	29,5
8.	Stari grad	50.744	24.750	124	409,2
9.	Trnovo	6.991	3.484	451	15,5
10.	Vogošća	24.647	12.317	72	342,3
11.	Breza	17.317	8.645	73	237,2
12.	Čajniče	8.956	4.371	275	32,6
13.	Foča	40.513	20.352	1.266	30,4
14.	Fojnica	16.296	8.338	306	53,3
15.	Goražde	37.573	18.550	377	99,7
16.	Kalinovik	4.667	2.268	732	6,4
17.	Kiseljak	24.164	12.208	165	146,4
18.	Kreševo	6.731	3.352	149	45,2
19.	Olovo	16.956	8.569	408	41,6
20.	Rogatica	21.978	10.881	664	33,1
21.	Rudo	11.571	5.746	344	33,6
22.	Sokolac	14.883	7.363	689	21,6
23.	Vareš	22.203	11.102	390	56,9
24.	Visoko	46.160	23.148	231	199,8
25.	Višegrad	21.199	10.400	449	47,2
Tota	l for SMR	838.216	413.577	8.613	97,3
Total	for BiH	4.377.033	2.183.795	51.129	85,6

Figure 18. Number of population, surface of municipalities and density of population in 1991 within SMR

No	Municipality	Population (inhabitants)	No of households	Average size of household
1.	Centre	79.286	26.764	3,0
2.	Hadžići	24.200	6.681	3,6
3.	Ilidža	67.937	20.110	3,4
4.	Ilijaš	25.184	7.327	3,4
5.	Novi grad	136.616	41.452	3,3
6.	Novo Sarajevo	95.089	31.793	3,0
7.	Pale	16.355	4.983	3,3
8.	Stari grad	50.744	16.557	3,1
9.	Trnovo	6.991	2.113	3,3
10.	Vogošća	24.647	7.426	3,3
11.	Breza	17.317	5.177	3,3
12.	Čajniče	8.956	2.600	3,4
13.	Foča	40.513	12.003	3,4
14.	Fojnica	16.296	4.126	3,9
15.	Goražde	37.573	11.094	3,4
16.	Kalinovik	4.667	1.517	3,1
17.	Kiseljak	24.164	6.391	3,8
18.	Kreševo	6.731	1.930	3,5
19.	Olovo	16.956	4.526	3,7
20.	Rogatica	21.978	6.489	3,4
21.	Rudo	11.571	3.385	3,4
22.	Sokolac	14.883	4.443	3,3
23.	Vareš	22.203	6.742	3,3
24.	Visoko	46.160	12.710	3,6
25.	Višegrad	21.199	6.360	3,3
Total fo	r SMR	838.216	254.669	3,3
Total fo	r BiH	4.377.033	1.207.693	3,6

Figure 19. Number of households and average size of households in SMR for 1991

Ma	Marriainalita	Live	Death	Natural	1	Per 1000 in	habitants
No	Municipality	births	Death	growth	Live births	deaths	Natural growth
1.	Centre	1.829	870	959	23,0	11,0	12,1
2.	Hadžići	365	171	194	15,0	7,1	8,0
3.	Ilidža	1.077	334	743	15,9	4,9	10,9
4.	Ilijaš	363	190	173	14,4	7,5	6,9
5.	Novi grad	1.545	599	946	11,3	4,4	6,9
6.	Novo Sarajevo	1.208	681	527	12,7	7,2	5,5 6,5
7.	Pale	254	148	106	15,5	9,0	6,5
8.	Stari grad	703	453	250	13,9	8,9	4,9
9.	Trnovo	64	63	1	9,2	9,0	0,1
10.	Vogošća	351	135	216	14,2	5,5	8,8
11.	Breza	258	112	146	14,9	6,5	8,4
12.	Čajniče	117	81	36	13,1	9	4
13.	Foča	499	392	107	12,3	9,7	2,6
14.	Fojnica	262	111	151	16,1	6,8	9,3
15.	Goražde	498	283	215	13,3	7,5	5,7
16.	Kalinovik	36	45	-9		9,6	-1,9
17.	Kiseljak	356	144	212	14,7	6,0	8,8
18.	Kreševo	94	59	35	14,0	8,8	5,2
19.	Olovo	315	118	197	18,6	7,0	11,6
20.	Rogatica	300	183	117	13,7	8,3	5,3
21.	Rudo	139	159	-20	12	13,7	-1,7
22.	Sokolac	213	95	118	14,3	6,4	7,9
23.	Vareš	310	175	135	14,0	7,9	6,1
24.	Visoko	606	246	360	13,1	5,3	7,8
25.	Višegrad	300	163	137	14,2	7,7	6,5
Total	al for SMR	12.062	6.010	6.052	14,4	7,2	7,2
Tota	ıl for BiH	65.430	31.411	34.019	14,9	7,2	7,7

Figure 20. Births, deaths and natural growth in SMR for the year 1991

No	Municipality	Serbs	Bosniaks	Croats	Yugoslavs.	Others	Total
1.	Centre	16.631	39.761	5.428	13.030	4.436	79.286
2.	Hadžići	6.362	15.392	746	841	859	24.200
3.	Ilidža	25.029	29.337	6.934	5.181	1.456	67.937
4.	Ilijaš	11.325	10.585	1.736	1.167	371	25.184
5.	Novi grad	37.591	69.430	8.889	15.580	5.126	136.616
6.	Novo Sarajevo	32.899	33.902	8.798	15.099	4.391	95.089
7.	Pale	11.284	4.364	129	396	182	16.355
8.	Stari grad	5.150	39.410	1.126	3.374	1.684	50.744
9.	Trnovo	2.059	4.790	16	72	54	6.991
10.	Vogošća	8.813	12.499	1.071	1.730	534	24.647
11.	Breza	2.122	13.079	851	1.001	264	17.317
12.	Čajniče	4.709	4.024	5	77	141	8.956
13.	Foča	18.315	20.790	94	463	851	40.513
14.	Fojnica	157	8.024	6.623	407	1.085	16.296
15.	Goražde	9.843	26.296	80	789	565	37.573
16.	Kalinovik	2.826	1.716	17	46	62	4.667
17.	Kiseljak	740	9.778	12.550	600	496	24.164
18.	Kreševo	34	1.531	4.714	251	201	6.731
19.	Olovo	3.193	12.699	642	285	137	16.956
20.	Rogatica	8.391	13.209	19	186	173	21.978
21.	Rudo	8.150	3.130	5	106	180	11.571
22.	Sokolac	10.195	4.493	19	83	93	14.883
23.	Vareš	3.644	6.714	9.016	2.071	758	22.203
24.	Visoko	7.471	34.373	1.872	1.464	980	46.160
25.	Višegrad	6.743	13.471	32	319	634	21.199
Tota	l for SMR	243.676	432.797	71.412	64.618	25.713	838.216
Tota	l for BiH	1.365.093	1.898.963	759.906	242.032	111.039	4.377.033

Figure 21. Number of population per ethnic groups in 1991 within SMR

No	Municipality	Age 0-14	Age 15-64	Age 65 and more	Unknown age	Total
1.	Centre	15.854	54.898	6.733	1.801	79.286
2.	Hadžići	5.830	16.725	1.227	418	24.200
3.	Ilidža	15.874	47.728	3.059	1.276	67.937
4.	Ilijaš	5.552	17.858	1.475	299	25.184
5.	Novi grad	32.421	96.649	4.809	2.737	136.616
6.	Novo Sarajevo	18.330	67.637	7.094	2.028	95.089
7.	Pale	3.368	11.305	1.316	366	16.355
8.	Stari grad	10.707	34.363	4.364	1.310	50.744
9.	Trnovo	1.458	4.690	738	105	6.991
10.	Vogošća	6.037	17.096	970	544	24.647
11.		3.976	12.252	938	151	17.317
12.	Čajniče	1.908	6.132	806	110	8.956
13.	Foča	8.037	26.312	3.309	2.855	40.513
14.	Fojnica	4.028	11.030	882	356	16.296
15.	Goražde	8.778	25.937	2.268	590	37.573
16.	Kalinovik	747	3.015	730	175	4.667
17.	Kiseljak	6.020	15.978	1.345	821	24.164
18.	Kreševo	1.551	4.566	513	101	6.731
19.	Olovo	4.243	11.237	945	531	16.956
20.	Rogatica	4.753	14.810	1.831	584	21.978
21.	Rudo	2.347	7.813	1.264	147	11.571
22.	Sokolac	3.109	10.027	1.478	269	14.883
23.	Vareš	4.911	15.573	1.434	285	22.203
24.	Visoko	11.367	31.806	2.404	583	46.160
25.	Višegrad	4.320	14.751	1.730	398	21.199
Tota	l for SMR	185.526	580.188	53.662	18.840	838.216
Tota	l for BiH	1.027.391	2.962.815	284.365	102.462	4.377.033

Figure 22. Age structure of population in 1991 in SMR

No	Municipality	No of settlements	Population		settlements (cities)	Oth	er settlements
		settlements		No	Population	No	Population
1.	Centre	6	79.286	1	76.771	5	2.515
2.	Hadžići	62	24.200	1	5.639	61	18.561
3.	Ilidža	14	67.937	1	63.719	13	4.218
4.	Ilijaš	75	25.184	1	6.833	74	18.351
5.	Novi grad	3	136.616	1	136.321	2	295
6.	Novo Sarajevo	8	95.089	1	90.892	7	4.197
7.	Pale	69	16.355	1	7.384	68	8.971
8.	Stari grad	16	50.744	1	48.794	15	1.950
9.	Trnovo	59	6.991	1	2.099	58	4.892
10.	Vogošća	21	24.647	1	10.598	20	14.049
11.	Breza	28	17.317	1	4.121	27	13.196
12.	Čajniče	36	8.956	1	3.152	35	5.804
13.	Foča	120	40.513	1	14.335	119	26.178
14.	Fojnica	55	16.296	1	4.225	54	12.071
15.	Goražde	185	37.573	1	16.273	184	21.300
16.	Kalinovik	71	4.667	1	1.385	70	3.282
17.	Kiseljak	82	24.164	1	3.412	81	20.752
18.	Kreševo	27	6.731	1	1.433	26	5.298
19.	Olovo	44	16.956	1	3.311	43	13.645
20.	Rogatica	119	21.978	1	8.916	118	13.062
21.	Rudo	89	11.571	1	2.077	88	9.494
22.	Sokolac	88	14.883	1	5.562	87	9.321
23.	Vareš	85	22.203	1	5.888	84	16.315
24.	Visoko	87	46.160	1	13.663	86	32.497
25.	Višegrad	159	21.199	1	6.902	158	14.297
Tota	l for SMR	1.608	838.216	25	543.705	1.583	294.511
Tota	ıl for BiH		4.377.033		1.730.821		2.646.212

Figure 23. Type of settlements and population in 1991 in SMR

Administrative	Municipality	1991
unit		
		iH belonging to SMR in 1991
Canton 4	Zeničko-Dobojski	
1.	Breza	17.317
2.	Olovo	16.659
3.	Vareš	22.203
4.	Visoko	46.160
Canton 5	Bosansko-Podrinjski	
5.	Foča/Ustikolina	5.056
6.	Goražde	33.105
7.	Pale/Prača	2.044
Canton 6	Srednje-Bosanski	
8.	Fojnica	16.296
9.	Kiseljak	24.164
10.	Kreševo	6.731
Canton 9	Sarajevo	
11.	Centre	79.286
12.	Hadžići	24.200
13.	Ilidža	60.430
14.	Ilijaš	24.733
15.	Novi grad	135.578
16.	Novo Sarajevo	91.051
17.	Stari grad	49.632
18.	Trnovo	3.426
19.	Vogošća	24.647
Total from FBi	· ·	682.718
<b>y</b>		belonging to SMR in 1991
20.	Čajniče	8.956
2.1	Foča/Srbinje	35.491
22.	Goražde RS	4.468
22. 23. 24.	Ilidža RS	7.958
24.	Kalinovik	4.266
25.	Novo Sarajevo RS	5.076
26.	Pale	14.408
27.	Rogatica	21.881
28.	Rudo	11.571
29.	Sokolac	14.883
30.	Stari grad RS	1.112
31.	Trnovo RS	3.565
32.	Višegrad	21.199
Total from RS	, –	154.834
TOTAL FOR S	SMR	837.552

Figure 24. Population in SMR in 1991 split in 32 existing municipalities after the DPA

Administrat	i Municipality	Serbs	Bosniaks	Croats	Yugoslavs	Others	Total
ve units					1 agosiavs	Others	Total
	current FBiH belon	iging to S	MR in 199	1			Т
Canton 4	Zeničko-Dobojski						
1.	Breza	2.122	13.079	851	1.001	264	17.317
2.	Olovo	3.372	12.220	642	285	140	16.659
3.	Vareš	3.644	6.714	9.016	2.071	758	22.203
4.	Visoko	7.471	34.373	1.872	1.464	980	46.160
	Bosansko-						
Canton 5	Podrinjski						
5.	Foča/Ustikolina	1.455	3.531	0	13	57	5.056
6.	Goražde	9.071	22.676	76	764	518	33.105
7.	Pale/Prača	596	1.428	4	5	11	2.044
Canton 6	Srednje-Bosanski						
8.	Fojnica	157	8.024	6.623	407	1.085	16.296
9.	Kiseljak	740	9.778	12.550	600	496	24.164
10.	Kreševo	34	1.531	4.714	251	201	6.731
Canton 9	Sarajevo						
11.	Centre	16.631	39.761	5.428	13.030	4.436	79.286
12.	Hadžići	6.362	15.392	746	841	859	24.200
13.	Ilidža	19.367	27.923	6.835	4.914	1.391	60.430
14.	Ilijaš	11.299	10.162	1.736	1.167	369	24.733
15.	Novi grad	37.194	68.990	8.868	15.405	5.121	135.578
16.	Novo Sarajevo	29.249	33.707	8.760	15.015	4.320	91.051
17.	Stari grad	4.117	39.347	1.122	3.368	1.678	49.632
18.	Trnovo	663	2.703	2	29	29	3.426
19.	Vogošća	8.813	12.499	1.071	1.730	534	24.647
Total from I	FBiH	162.357	363.838	70.916	62.360	23.247	682.718
	Territory o	f current	RS belong	ing to SM	IR in 1991	•	•
20.	Čajniče	4.709	4.024	5	77	141	8.956
21.	Foča/Srbinje	16.869	17.284	94	450	794	35.491
22.	Goražde RS	772	3.620	4	25	47	4.468
23.	Ilidža RS	5.688	1.837	99	267	67	7.958
24.	Kalinovik	2.803	1.342	17	43	61	4.266
25.	Novo Sarajevo RS	4.047	635	59	259	76	5.076
26.	Pale	10.763	2.958	125	391	171	14.408
27.	Rogatica	8.316	13.187	19	186	173	21.881
28.	Rudo	8.150	3.130	5	106	180	11.571
29.	Sokolac	10.195	4.493	19	83	93	14.883
30.	Stari grad RS	1.033	63	4	6	6	1.112
31.	Trnovo RS	1.396	2.087	14	43	25	3.565
32.	Višegrad	6.743	13.471	32	319	634	21.199
Total from		81.484	68.131	496	2.255	2.468	154.834
TOTAL FO		243.841	431.969	71.412	64.615	25.715	837.552

Figure 25. Population per ethic groups in SMR in 1991 split in 32 existing municipalities after the DPA

Administrative structure	Serbs %	Bosniaks %	Croats %	Yugoslavs %.	Others %	Total %
Total from FBiH	23,8	53,3	10,4	9,1	3,4	100,0
Total from RS	52,6	44,0	0,3	1,5	1,6	100,0
Total in SMR	29,1	51,6	8,5	7,7	3,1	100,0
Total in BiH	31,2	43,4	17,4	5,5	2,5	100,0

Figure 26. Population per ethic groups in SMR in 1991 shown in %, divided in two entities after the DPA

### 3.2 POPULATION STRUCTURE IN SMR AFTER THE DAYTON PEACE AGREEMENT

After signing of the Dayton Peace Agreement, population structure per municipalities has been significantly changed. During the war in BiH and Balkan region there were lots of forced migrations of population within the Sarajevo Macro Region as well as in and out of the region. The data that we will take into consideration are based on statistical data and are combined with the data from the field (Municipalities), and sometimes with the estimates at the local level.

### 3.2.1 Structure per Nationalities in SMR

Administrative structure	Municipality	Serbs	Bosniaks	Croats	Others	Total
Mu	nicipalities that ar	e in FBi	H and within	Sarajevo	Macro Re	gion
Canton 4	Zeničko-Dobojski					
1.	Breza	235	13.741	514	162	14.652
2.	Olovo	129	12.255	516	0	12.900
3.	Vareš	61	7.938	3.842	84	11.925
4.	Visoko	629	41.775	531	230	43.165
Canton 5	Bosansko- Podrinjski					
5.	Foča/Ustikolina	1	1.191	0	0	1.192
6.	Goražde	65	51.769	32	31	51.897
7.	Pale/Prača	0	1.218	0	0	1.218
Canton 6	Srednje-Bosanski					
8.	Fojnica	18	10.218	124	0	10.360
9.	Kiseljak	8	3.766	18.000	268	22.042
10.	Kreševo	0	500	4.000	0	4.500
Canton 9	Sarajevo					
11.	Centre	6.325	57.933	4.922	2.044	71.224
12.	Hadžići	900	21.900	450	370	23.620
13.	Ilidža	3.062	32.335	2.232	0	37.629
14.	Ilijaš	417	11.562	427	118	12.524
15.	Novi grad	7.125	85.289	5.770	1.448	99.632
16.	Novo Sarajevo	5.606	44.276	6.024	1.249	57.155
17.	Stari grad	1.412	37.524	3.262	764	42.962
18.	Trnovo	0	822	0	0	822

19.	Vogošća	413	14.692	296	85	15.486
Total from	FBiH	26.406	450.704	50.942	6.853	534.905
	Municipalities tha	t are in RS	and within	n Sarajevo	Macro R	egion
20.	Čajniče	5700	-	5	-	5705
21.	Foča/Srbinje	23000	-	-	-	23000
22.	Goražde RS	6395	-	5	-	6400
22. 23.	Ilidža RS	18185	10	5	-	18200
24.	Kalinovik	2921	-	-	-	2921
24. 25.	Novo Sarajevo I	RS				
26.	Pale	35386	-	70	-	35456
27.	Rogatica	17000	-	-	-	17000
28.	Rudo	11480	-	-	-	11480
29.	Sokolac	14400	-	-	-	14400
30.	Stari grad RS	3482	3	15	-	3500
31.	Trnovo RS	2700	-	-	-	2700
32.	Višegrad	18608	100	-	-	18709
Total From	RS	159257	113	100	-	159471
TOTAL IN	SMR	185663	450817	51042	6853	694375

Figure 27. Ethnical breakdown in SMR in 1996 in 32 municipalities existing after the DPA

Administrative structure	Serbs %	Bosniaks %	Croats %	Others %	Total %
Total from FBiH	4,9	84,3	9,5	1,3	100,0
Total from RS	99,8	0,1	0,1	-	100,0
Total in SMR	26,8	64,9	7,4	0,9	100,0

Figure 28. Ethnical breakdown in SMR in 1996 shown in %, split in 32 existing municipalities after the DPA

Administrative structure	Municipality	Serbs	Bosniaks	Croats	Others	Total
	ı nicipalities that ar	e in FBil	H and within	Saraievo	Macro Re	gion
Canton 4	Zeničko-Dobojski					
1.	Breza	254	12.814	546	176	13.790
2.		42	12.612	309	0	12.963
3.	Vareš	121	7.010	2.891	97	10.119
4.	Visoko	714	38.611	554	278	40.157
	Bosansko-					
Canton 5	Podrinjski					
5.	Foča/Ustikolina	7	2.303	0	0	2.310
6.	Goražde	390	31.092	50	35	31.567
7.	Pale/Prača	21	1.360	0	0	1.381
Canton 6	Srednje-Bosanski					
8.	Fojnica	56	10.203	831	0	11.090
9.	Kiseljak	792	1.975	18.454	11	21.232
10.	Kreševo	11	794	5.042	114	5.961
Canton 9	Sarajevo					
11.	Centre	8.947	52.168	4.739	2.319	68.173
12.	Hadžići	703	18.449	402	410	19.964
13.	Ilidža	5.787	38.572	3.000	143	47.502
14.	Ilijaš	1.070	13.376	643	160	15.249
15.	Novi grad	13.101	93.309	7.292	2.586	116.288
16.	Novo Sarajevo		49.258	9.551	4.155	74.471
17.	Stari grad	2.015	35.138	779	217	38.149
18.	Trnovo	39	811	0	0	850
19.	Vogošća	1.633	17.648	451	120	19.852
Total from FB	iH	47.210	437.503	55.534	10.821	551.068
	unicipalities that a	re in RS	and within S	Sarajevo 1	Macro Reg	ion
	Čajniče	5180	101	5	-	5286
	Foča/Srbinje	22776	324	-	-	23100
22.	Goražde RS	5000	595	5	-	5600
	Ilidža RS	17080	100	20	-	17200
24.	Kalinovik	2900	-	-	-	2900
25.	Novo Sarajevo RS					
26.	Pale	28440	50	70	-	28560
27.	Rogatica	17050	50	-	-	17100
28.	Rudo	11000	-	-	-	11000
29.	Sokolac	14450	150	-	-	14600
30.	Stari grad RS	2032	3	15	-	2050
31.	Trnovo RS	2700	1000	10	-	3710
32.	Višegrad	18400	700	-	-	19100
Total From RS		147008	3073	125	-	150206
TOTAL IN SM	R	194218	440576	55659	10821	701274

Figure 29. Ethnical breakdown in SMR in 2001 split in 32 existing municipalities after the DPA

Administrative structure	Serbs %	Bosniaks %	Croats %	Others %.	Total %
Total from FBiH	8,6	79,4	10,1	2,0	100,0
Total from RS	97,8	2,1	0,1	-	100,0
Total in SMR	27,7	62,9	7,9	1,5	

Figure 30. Ethnical breakdown in SMR in 2001 shown in %, split in 32 existing municipalities after the DPA

Administrative structure	Municipality	Serbs	Bosniaks	Croats	Others	Total
	ı nicipalities that ar	∟ ø in FRil	⊥ Hand within	Saraievo	Macro Re	าสาก
Canton 4	Zeničko-Dobojski					
1	Breza	255	12.868	549	176	13.848
2.	Olovo	42	12.640	309	0	12.991
3.	Vareš	121	6.993	2.884	97	10.095
4.	Visoko	717	38.727	555	279	40.278
	Bosansko-					
Canton 5	Podrinjski					
5.	Foča/Ustikolina	7	2.294	0	0	2.301
6.	Goražde	390	31.113	50	35	31.588
7.	Pale/Prača	21	1.350	0	0	1.371
Canton 6	Srednje-Bosanski					
8.	Fojnica	56	10.232	834	0	11.122
9.	Kiseljak	795	1.983	18.526	11	21.315
10.	Kreševo	11	792	5.033	114	5.950
Canton 9	Sarajevo					
11.	Centre	8.945	52.151	4.737	2.318	68.151
12.	Hadžići	706	18.533	404	412	20.055
13.	Ilidža	5.806	38.695	3.010	143	47.654
14.	Ilijaš	1.072	13.401	644	160	15.277
15.	Novi grad	13.134	93.551	7.311	2.592	116.588
16.	Novo Sarajevo	11.511	49.273	9.553	4.156	74.493
17.	Stari grad	2.016	35.155	779	217	38.167
/18.	Trnovo	39	800	0	0	839
19.	Vogošća	1.636	17.686	452	120	19.894
Total from FB	iH	47.280	438.237	55.630	10.830	551.977
	unicipalities that a			Sarajevo 1	Macro Reg	ion
20.	Čajniče		250	5	-	5155
21.	Foča/Srbinje		439	-	-	23150
22.	Goražde RS	3495	1800	5	-	5300
23.	Ilidža RS	18010	150	40	-	18200
24.	Kalinovik	2900	-	-	-	2900
25.	Novo Sarajevo RS					
26.	Pale	29330	100	70	-	29500
27.	Rogatica	17050	100	-	-	17150
28.	Rudo	10950	100	-	-	11050
29.	Sokolac	14555	320	5	-	14780
30.	Stari grad RS	1731	22	12	-	1765
31.	Trnovo RS	2712	1163	10	-	3895
32.	Višegrad	18000	1000	-	-	19000
Total From RS		146344	5444	147	-	151935
TOTAL IN SM	R	193624	443681	55777	10830	703912

Figure 31. Ethnical breakdown in SMR in 2002 split in 32 existing municipalities after the DPA

Administrative structure	Serbs %	Bosniaks %	Croats %	Others %.	Total %
Total from FBiH	8,6	79,3	10,1	2	100,0
Total from RS	96,4	3,5	0,1	-	100,0
Total in SMR	27,5	63,1	7,9	1,5	100,0

Figure 32. Ethnical breakdown in SMR in 2002 shown in %, split in 32 existing municipalities after the DPA

	Serbs E		Bosn	iaks	Croats		Others		Total	
Year	from FBiH	from RS	from FBiH	from RS	from FBiH	from RS	from FBiH	from RS	from FBiH	from RS
1991	162.357	81.484	363.838	68.131	70.916	496	85.607	4.723	682.718	154.834
1996	26.406	159257	450.704	113	50.942	100	6.853	-	534.905	159471
2001	47.210	147008	437.503	3073	55.534	125	10.821	-	551.068	150206
2002	47.280	146344	438.237	5444	55.630	147	10.830	-	551.977	151935

Figure 33. Total population in SMR per ethic groups and per entities

Year	Serbs	Bosniaks	Croats	Others	Total
1991	243.841	431.969	71.412	90.330	837552
1996	185663	450817	51042	6853	694375
2001	194218	440576	55659	10821	701274
2002	193624	443681	55777	10830	703912

Figure 34. Total population in SMR per ethic groups

Administrative	M		Age group	S	T-4-1	
Units	Municipalities	0-14	15-64	65 and mor	e Total	
Mu	nicipalities that are	in FBiH ar	nd within Sara			
Canton 4	Zeničko-Dobojski					
1.	Breza	3.159	9.198	1.433	13.790	
2.	Olovo	3.022	7.809	2.132	12.963	
3.	Vareš	2.309	6.494	1.316	10.119	
4.	Visoko	9.027	26.052	5.078	40.157	
	Bosansko-					
Canton 5	Podrinjski					
5.	Foča/Ustikolina	311	1.652	347	2.310	
5.	Goražde	4.902	23.336	3.329	31.567	
7.	Pale/Prača	181	1.035	165	1.381	
Canton 6	Srednje-Bosanski					
3.	Fojnica	2.878	7.321	891	11.090	
9.	Kiseljak	4.664	14.418	2.150	21.232	
10.	Kreševo	1.012	3.468	1.481	5.961	
Canton 9	Sarajevo					
11.	Centre	10.965	46.302	10.906	68.173	
12.	Hadžići	4.070	14.050	1.844	19.964	
13.	Ilidža	9.868	30.786	6.848	47.502	
14.	Ilijaš	3.171	10.519	1.559	15.249	
15.	Novi grad	20.176	84.204	11.908	116.288	
16.	Novo Sarajevo	11.105	50.361	13.005	74.471	
17.	Stari grad	5.256	27.607	5.286	38.149	
18.	Trnovo	46	552	252	850	
19.	Vogošća	4.738	13.527	1.587	19.852	
Total from FBi		100.860	378.691	71.517	551.068	
	unicipalities that ar	e in RS and	d within Saraje	evo Macro Reg	gion	
20.	Čajniče	230	2356	2700	5286	
21.	Foča/Srbinje	2150	16500	4450	23100	
22.	Goražde RS	1200	3400	1000	5600	
23.	Ilidža RS	3950	10500	2750	17200	
24.	Kalinovik	140	1260	1500	2900	
25.	Novo Sarajevo RS					
26.	Pale	8642	15089	4829	28560	
27.	Rogatica	2700	8200	6200	17100	
28.	Rudo	850	4900	5250	11000	
29.	Sokolac	2338	7010	5252	14600	
30.	Stari grad RS	255	1452	343	2050	
31.	Trnovo RS	155	1635	1920	3710	
32.	Višegrad	1800	14500	2800	19100	
Total from RS	. <u> </u>	24410	86802	38994	150206	
TOTAL IN SM	R	125270	465493	110511	701274	

Figure 35. Population in SMR per age groups in 2001

Administrative *0-14 15-64* Total 65 and more structure Total from FBiH 100.860 378.691 551.068 71.517 Total from RS 38994 *150206* 24410 86802 Total in SMR 125270 110511 701274 465493

Figure 36a. Age breakdown in SMR in 2001

Administrative structure	<i>0-14</i> %	15-64 %	65 and more %	Total
Total from FBiH	18,3	<b>68,</b> 7	13	100,0
Total from RS	16,3	57,8	25,9	100,0
Total in SMR	17,9	66,4	15,7	100,0

Figure 36b. Age breakdown shown in % for SMR in 2001

### 3.2.3 Gender structure of SMR

Due to the lack of exact data about gender structure of population per municipalities in Sarajevo Macro Region, trend used for estimation is the one noticed in several municipalities from the Federation of BiH within Sarajevo Macro region and from the RS within Sarajevo Macro region.

This segment is reviewed per age groups. For the purpose of audit are used the age groups as shown below:

0 - 14 age, 15 - 64 age, >64

This data are not given for all municipalities and are not equal for all the municipalities. Below table shows data on gender structure per entities and in total for SMR, based on the average sum of 6 municipalities from RS and 7 municipalities from FBiH belonging to SMR.

FBiH Municipalities								
0-1	0-14 15-64				Over 64			
Male	Female	Male	Female	Male	Male Female			
56607	44253	193132	185559	33971				
52%	%     48%     51%     49%     47,5%     52,5%							
Figure 37. G	Figure 37. Gender structure per age groups in FBiH Municipalities within SMR for 2							

RS Municipalities							
0-	0-14 15-65 Over 65						
Male	Female	Female Male Female Male Fem					
11229	11229 13181 39061 47741 15988 230						
46%	54%	45%	55%	41%	59,5%		

Figure 38. Gender structure per age groups in RS Municipalities within SMR for 2001

Sarajevo Macro Region							
0-	0-14 15-65 Over 65						
Male	Female	Male	Female	Male	Female		
67836	57434	232193	233300	49959	60552		
54,1%	45,9	49,9	50,1	45,2	54,8		

Figure 39. Gender structure per age groups in SMR for 2001

### 3.3 POPULATION DENSITY OF SMR

Administrative	M 1''	Pol	oulation	in	h/km²
Units	Municipality	1991	2001	1991	2001
Munio	cipalities that are in F		hin Sarajevo	Macro Regi	on
Canton 4	Zeničko-Dobojski				
1.	Breza	17.317	13.790	237,5	189,2
2.	Olovo	16.659	12.963	40,9	31,8
3.	Vareš	22.203	10.119	56,9	25,9
4.	Visoko	46.160	40.157	200,0	174,0
Canton 5	Bosansko-Podrinjski	i			
5.	Foča/Ustikolina	5.056	2.310	29,8	13,6
6.	Goražde	33.105	31.567	133,1	126,9
7.	Pale/Prača	2.044	1.381	23,7	16,0
Canton 6	Srednje-Bosanski			,	,
8.	Fojnica	16.296	11.090	53,3	36,2
9.	Kiseljak	24.164	21.232	146,4	128,7
10.	Kreševo	6.731	5.961	45,2	40,0
Canton 9	Sarajevo			,	,
11.	Centre	79.286	68.173	2.402,6	2.065,8
12.	Hadžići	24.200	19.964	88,5	73,0
13.	Ilidža	60.430	47.502	421,4	331,3
14.	Ilijaš	24.733	15.249	80,1	49,4
15.	Novi grad	135.578	116.288	2.872,4	2.463,7
16.	Novo Sarajevo	91.051	74.471	9.197,1	7.522,3
17.	Stari grad	49.632	38.149	965,6	742,2
18.	Trnovo	3.426	850	10,1	2,5
19.	Vogošća	24.647	19.852	343,8	276,9
Total from FBiH		682.718	551.068	194,9	157,3
· ·	icipalities that are in I				
20.	Čajniče	8.956	5286	32,8	19,4
21.	Foča/Srbinje	35.491	23100	31,8	20,7
22.	Goražde RS	4.468	5600	36,3	45,5
23.	Ilidža RS	7.958	17200	346	747,8
24.	Kalinovik	4.266	2900	5,8	3,9
25.	Novo Sarajevo RS	5.076			- 9-
26.	Pale	14.408	28560	29,3	58,1
27.	Rogatica	21.881	17100	34,2	26,7
28.	Rudo	11.571	11000	33,6	31,9
29.	Sokolac	14.883	14600	21,6	21,2
30.	Stari grad RS	1.112	2050	10,59	19,52
31.	Trnovo RS	3.565	3710	25,8	26,9
32.	Višegrad	21.199	19100	47,3	42,6
Total from RS	Ι υ	154834	150206	29,9	29,06
TOTAL IN SMR		837552	701274	96,27	80,61

Figure 40. Population density per municipalities in SMR for 1991 and 2001

Administrative Units	Population	n number	st/km <sup>2</sup>		
	1991	2001	1991	2001	
Total from FBiH	682.718	551.068	194,9	157,3	
Total from RS	154834	150206	29,9	29,06	
Total in SMR	837552	701274	96,27	80,61	

Figure 41. Population Density in SMR

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### 3.4 DEMOGRAPHIC CHANGES

During the last 10 years Sarajevo Macro region has been exposed to significant demographic changes due to the war in Balkan Region. The total number of population is decreased in some areas while natural growth has been slowed down, due to high unemployment rates and unfavourable economic situation all over the country. The most significant changes happened in the ethnic structure of the population in some parts of the region.

### 3.4.1 Natural Growth

	inistrative	Municipality		1996	T		1000 inha	
	units		Live births	Deaths	Natural growth	Live births	Deaths	Natural growth
	1	unicipalities that a		i BiH and w		ievo Macro	Region	810 11 111
Canto		Zeničko-Dobojski					legion	
1.		Breza	259	114	145	17.7	7.8	9.9
2.		Olovo	284	93	191	22.0	7.2	14.8
3.		Vareš	167	82	85	14.0	6.9	7.1
4.		Visoko	676	226	450	15.7	5.2	10.4
Canto	n 5	Bosansko- Podrinjski						
5.		Foča/Ustikolina	8	3	5	6.7	2.5	4.2
6.		Goražde	476	207	269	9.2	4.0	5.2
7.		Pale/Prača	7	0	7	5.7	0.0	5.7
Canto	n 6	Srednje-Bosanski	<u> </u>		,			
8.	0	Fojnica Fojnica	191	78	113	18.4	7.5	10.9
9.		Kiseljak	390	215	175	17.7	9.8	7.9
10.		Kreševo	86	46	40	19.1	10.2	8.9
Canto	n 9	Sarajevo						
11.		Centre	942	589	353	13.2	8.3	5.0
12.		Hadžići	277	93	184	11.7	3.9	7.8
13.		Ilidža	257	231	26	6.8	6.1	0.7
14.		Ilijaš	120	78	42	9.6	6.2	3.4
15.		Novi grad	1,014	642	372	10.2	6.4	3.7
16.		Novo Sarajevo	749	434	315	13.1	7.6	5.5
17.		Stari grad	576	383	193	13.4	8.9	4.5
18.		Trnovo	0	6	-6	0.0	7.3	-7.3
19.		Vogošća	119	82	37	7.7	5.3	2.4
Total	from FBiH		6,598	3,602	2,996	12.3	<b>6.</b> 7	5.6
		Municipalities that	are in R	S and wit	thin Saraj	evo Macro R	egion	•
20.	Čajniče	•	35	40	-5	6,11	6,97	-0,86
21.	Foča/Srb	pinje	275	195	80	11,95	8,47	3,48
22.	Goražde	RS	55	50	5	8,55	7,81	0,74
23.	Ilidža RS	S	171	128	43	9,4	7,03	2,37
24.	Kalinovi	k	6	22	-16	2,05	7,53	-5,48
25.	Novo Sa	rajevo RS						
26.	Pale		436	295	141	12,3	8,33	3,97
27.	Rogatica		111	117	-6	6,55	6,90	-0,35
28.	Rudo		79	82	-3	6,88	7,11	-0,23
29.	Sokolac		349	157	192	24,26	10,93	13,33
30.	Stari gra	d RS	17	18	-1	4,86	5,14	-0,28
31.	Trnovo I	RS	14	22	-8	5,18	8,15	-2,97
32.	Višegrad	<u> </u>	104	112	-8	5,55	5,98	-0,43
Total j	from RS		1652	1238	414	10,36	7,76	2,6
TOTA	L IN SMR		8250	4840	3410	11,88	6,97	5,01

Figure 42. Natural growth per Municipalities in SMR in 1996

Administrative	1996			per 1000 inhabitants			
units	Live	Deaths	Natural	Live births	Deaths	Natural	
	births		growth			growth	
Total from FBiH	6,598	3,602	2,996	12.3	<b>6.</b> 7	5.6	
Total from RS	1652	1238	414	10,36	7,76	2,6	
Total in SMR	8250	4840	3410	11,88	6,97	5,01	

Figure 43. Natural growth in SMR in 1996

Administrative	e Municipality		2001		per	1000 inha	bitants
units		Live	Deaths	Natural	Live	Deaths	Natural
		births		growth	births		growth
Mi	unicipalities that ar	e in FB	iH and w	ithin Sar	ajevo Mac	ro Region	ı
Canton 4	Zeničko-						
	Dobojski						
1.	Breza	185	150	35	13.4	10.9	2.5
2.	Olovo	135	104	31	10.4	8.0	2.4
3.	Vareš	125	117	8	12.4	11.6	0.8
4.	Visoko	498	247	251	12.4	6.2	6.3
Canton 5	Bosansko-						
	Podrinjski						
5.	Foča/Ustikolina	11	21	-10	4.8	9.1	-4.3
6.	Goražde	268	190	78	8.5	6.0	2.5
7.	Pale/Prača	9	0	9	6.5	0.0	6.5
Canton 6	Srednje-Bosanski						
8.	Fojnica	189	138	51	17.0	12.4	4.6
9.	Kiseljak	217	151	66	10.2	7.1	3.1
10.	Kreševo	61	50	11	10.2	8.4	1.8
Canton 9	Sarajevo						
11.	Centre	604	664	-60	8.9	9.7	-0.9
12.	Hadžići	223	149	74	11.2	7.5	3.7
13.	Ilidža	517	343	174	10.9	7.2	3.7
14.	Ilijaš	163	92	71	10.7	6.0	4.7
15.	Novi grad	1,072	816	256	9.2	7.0	2.2
16.	Novo Sarajevo	661	615	46	8.9	8.3	0.6
17.	Stari grad	450	417	33	11.8	10.9	0.9
18.	Trnovo	13	28	-15	15.3	32.9	-17.6
19.	Vogošća	176	132	44	8.9	6.6	2.2
Total from FB			4,424	1,153	10.1	8.0	2.1
	Iunicipalities that a						1-1-
20. Čajnič		32	34	-2	6,05	6,43	-0,38
21. Foča/S		194	189	5	8,48	8,18	0,3
22. Goražo		49	46	3	8,75	8,21	0,54
23. Ilidža		107	127	-20	5,88	6,98	-1,1
24. Kalino		8	28	-20	2,76	9,65	-6,89
		0	0	0	2,70	7,03	0,07
26. Pale	3		313	77	13,6	10,96	2,64
			105	-6	5,79	6,14	-0,35
			84	-7	7,0	7,64	-0,55
			116	64	12,13	7,93	4,20
		180 15	24	-9	7,31	11,71	-4,4
	30. Stari grad RS Trnovo RS		23	-5	4,58	-	
		17 69	88			6,2	-1,62
	au			-19	3,61	4,61	-1,0
Total from RS	(D	1237	1177	61	8,23	7,83	0,4
TOTAL IN SM	!K	6814	5601	1213	9,71	7,98	1,73

Figure 44. Natural growth per Municipalities in SMR in 2001

Administrative	2001			Per 1000 inhabitants			
units	Live	Deaths	Natural	Live births	Deaths	Natural	
	births		growth			growth	
Total from FBiH	5,577	4,424	1,153	10.1	8.0	2.1	
Total from RS	1237	1177	61	8,23	7,83	0,4	
Total in SMR	6814	5601	1213	9,71	7,98	1,73	

Figure 45. Natural growth in SMR in 2001

### 3.4.2 Migrations

Sarajevo Macro Region is faced with a high level of migrations during the last 10 to 14 years, or more precisely since the war in BiH started. There are several types of migration data recorded in SMR in the past period:

- Forced migration of non-Serb population from the territory currently recognized as Republic of Srpska, especially its eastern parts, to the territory of the current Federation of Bosnia and Herzegovina since the mid of 1992 and throughout the war. Particularly intensive was the movement of the Bosniak population from Podrinje towards Sarajevo City.
- Migrations of domicile population from Sarajevo City that was under the siege for 4 years, and under the very difficult living conditions (without water, heating, food, electricity, etc.).
- Forced migration of the Bosniak population from Central Bosnia and Zenicko-Dobojski Canton municipalities with the major Croat population to the municipalities with the major Bosniak population and vice-verse.

In most of the cases the above migrations that happened in the period between 1992 and 1995 resulted with major fluctuations of population, which, to some extent, led to the creation of exclusively clean ethnic territories. The only exception from this war cliché was Sarajevo City that tried to keep its multiethnic, multi-religious and multicultural character in tact.

During the post Dayton period in BiH, slowly but evidently has started the process opposite to the above movements – the return processes of return of refugees and displaced population to their pre-war homes. However in some cases this seems to be one-way return or no return at all, due to those who were returning only to claim their property and immediately sell or rent it. This process goes rather slowly due to the delayed property return process and unsustainable return process. It is not sustainable because of non-applied democratic reforms, lack of participation of returnees in economic processes within the communities. The concept of regional development has a chance to speed up these processes focused on opening of local communities towards new and contemporary approaches and on encouragement of the entire population to integrate into the communities and to participate in social and economic within their community.

There is another type of so called economic migration of the population, which has happened in the period between 1996 and 2003 and after. The young and educated people who live in the Region and the country are searching for better opportunities and living conditions. This has led to an extensive "brain drain" resulting with losses of valuable and talented young people. Once these young and educated people leave the country, it is very unlikely that they would ever return.

There is increasingly evident migration from the rural areas and smaller cities to the urban centres and big cities. It is particularly the case in Sarajevo City, which nowadays attracts newcomers like a magnet. Even whole families sometimes decide to move to the City of Sarajevo and to get away from their previous environments in the suburban and semi-urban areas, where they used to live without basic living conditions, without proper employment and without possibilities to earn money for living. They worked basically whatever they could, mainly in agriculture, but since the soil is used up, there is no working capital for 'mini' farms, and no viable future without the assistance in technology, training, financing, and modern equipment or viable re invigorated lands to farm on. This undereducated and unskilled population present s a, so called "social bomb", while this region and the entire country has no social "net" to help resolving this problem.

Administrati	Municipality	1	996	2	2000		2001
ve units		R	D	R	D	R	D
	Municipalities that ar	e in FB	iH and v	vithin Sa	rajevo Mac	ro Regio	n
Canton 4	Zeničko-Dobojski						
1.	Breza	106	1989	24	691	27	631
2.	Olovo	-	-	-	-	-	-
3.	Vareš	-	-	-	-	-	-
4.	Visoko	153	7600	125	3954	76	3248
Canton 5	Bosansko-Podrinjski						
5.	Foča/Ustikolina	1080	40	2580	67	2671	_
6.	Goražde						
7.	Pale/Prača	350	82	120	32	43	32
Canton 6	Srednje-Bosanski				0		
8.	Fojnica	2633	56	407	-	277	-
9.	Kiseljak						
10.	Kreševo	-	1000	1596	112	80	-
Canton 9	Sarajevo						
11.	Centre	-	14051	3686	6469	849	4591
12.	Hadžići	294	2	731	4544	800	1923
13.	Ilidža	7974	-	678	192	710	146
14.	Ilijaš	9857	70	289	153	243	140
15.	Novi grad	-	16072	6052	18873	4134	10120
16.	Novo Sarajevo						
17.	Stari grad	279	-	146	-	173	-
18.	Trnovo	-	-	1098	-	1230	-
19.	Vogošća	-	-	664	8064	686	5311
Total from 1	FBiH	22726	40962	18196	43151	11999	26142
	Municipalities that a	re in R	S and w	ithin Sara	ajevo Macr	o Region	•
20.	Čajniče	-	1500	100	1100	250	850
21.	Foča/Srbinje	-	4823	324	4723	439	4500
22.	Goražde RS	-	-	595	2000	1205	1800
23.	Ilidža RS	-	10000	120	9000	190	10000
24.	Kalinovik	-	-	-	-	-	-
25.	Novo Sarajevo RS						
26.	Pale	-	15000	50	9700	100	-
27.	Rogatica	_	_	-	-	-	-
28.	Rudo	-	-	-	-	-	-
29.	Sokolac	1	-	36	-	130	-
30.	Stari grad RS	3	-	23	-	-	-
31.	Trnovo RS	-	-	400	250	1000	25
32.	Višegrad	100	-	500	-	400	-
Total from 1		104	31323	2148	26773	3714	17175
J		1			1	1	1

Figure 46. Returnees and displaced persons per Municipalities in SMR in 2001

Legend: R – Returnees, D – Displaced persons

Administrative	Municipality	Private	property
units		Requests for return	Returned
Canton 4	Zeničko-Dobojski		
1.	Breza	204	204
2.	Olovo	957	957
3.	Vareš	-	-
4.	Visoko	1076	1076
Canton 5	Bosansko-Podrinjski		
5.	Foča/Ustikolina	519	519
6.	Goražde		
7.	Pale/Prača	-	-
Canton 6	Srednje-Bosanski		
8.	Fojnica	501	501
9.	Kiseljak		
10.	Kreševo	130	130
Canton 9	Sarajevo		
11.	Centre	904	891
12.	Hadžići	1860	1849
13.	Ilidža	2223	2223
14.	Ilijaš	1448	1448
15.	Novi grad	2131	2131
16.	Novo Sarajevo		
17.	Stari grad	411	408
18.	Trnovo	230	230
19.	Vogošća	1428	1428
Total from FBil		14022	13995
		and within Sarajevo Macr	o Region
20.	Čajniče	350	350
21.	Foča/Srbinje	4764	4764
22.	Goražde RS	_	-
23.	Ilidža RS	1392	1329
24.	Kalinovik	35	35
25.	Novo Sarajevo RS		
26.	Pale	1910	1910
27.	Rogatica	-	-
28.	Rudo	-	-
-29.	Sokolac	1329	1329
30.	Stari grad RS	-	-
31.	Trnovo RS	-	-
32.	Višegrad	3779	3779
Total from RS		13559	13496
TOTAL IN SMI	?	28017	27491
	-	I ·	1

Figure 47. Property return per Municipalities in SMR in 2001

## 3.5. ACTIVE POPULATION

Administrative Units	Municipality	2000	2001	2002
Mu	nicipalities that are in F	BiH and within	Sarajevo Macro	Region
Canton 4	Zeničko-Dobojski			
1.	Breza	9,173	9,198	9,237
2.	Olovo	7,781	7,809	7,826
3.	Vareš	6,508	6,494	6,479
4.	Visoko	25,873	26,052	26,131
Canton 5	Bosansko-Podrinjski			
5.	Foča/Ustikolina	1,653	1,652	1,646
6.	Goražde	23,259	23,336	23,351
7.	Pale/Prača	1,031	1,035	1,027
Canton 6	Srednje-Bosanski			
8.	Fojnica	7,319	7,321	7,341
9.	Kiseljak	14,172	14,418	14,475
10.	Kreševo	3,430	3,468	3,463
Canton 9	Sarajevo			
11.	Centre	45,797	46,302	46,287
12.	Hadžići	13,799	14,050	14,114
13.	Ilidža	29,825	30,786	30,885
14.	Ilijaš	10,170	10,519	10,538
15.	Novi grad	81,706	84,204	84,421
16.	Novo Sarajevo	48,644	50,361	50,376
17.	Stari grad	27,334	27,607	27,619
18.	Trnovo	520	552	545
19.	Vogošća	13,211	13,527	13,556
Total from FBi		371,205	378,691	379,317
	unicipalities that are in l			/
20.	Čajniče	2331	2356	2367
21.	Foča/Srbinje	16600	16500	16650
22.	Goražde RS	3387	3400	3420
23.	Ilidža RS	10345	10500	10628
24.	Kalinovik	1272	1260	1245
25.	Novo Sarajevo RS	0	0	0
26.	Pale	15004	15089	15579
27.	Rogatica	8120	8200	8218
28.	Rudo	4897	4900	4982
29.	Sokolac	7098	7010	7112
30.	Stari grad RS	1444	1452	1124
31.	Trnovo RS	1612	1635	1656
32.	Višegrad	14620	14500	14330
Total from RS	1 -5	86730	86802	87311
TOTAL IN SMI	R	457935	465493	466628

Figure 48. Active population (age group15-65) per Municipalities in SMR

Administrative Units 2000 *2001* 2002 Total from FBiH 371,205 378,691 379,317 Total from RS 86730 86802 87311 Total in SMR 457935 465493 466628

Figure 49. Active population (age group 15-65) in SMR

# 3.5.1. Unemployed population

Administrative	Municipality	2000	2001	2002
Unit	* * **,* ,* ,* ,*	ED:II I :	1: 6 : 14	n ·
	inicipalities that are in	FBiH and with	hin Sarajevo Macr	o Region
Canton 4	Zeničko-Dobojski	1.505	1 170	1.260
1.	Breza	1,505	1,172	1,269
2.	Olovo	1,521	1,382	1,485
3.	Vareš	1,067	1,010	1,176
4.	Visoko	4,860	5,226	5,904
Canton 5	Bosansko-Podrinjski			
5.	Foča/Ustikolina	327	363	466
6.	Goražde	2,310	2,419	3,241
7.	Pale/Prača	92	98	101
Canton 6	Srednje-Bosanski			
8.	Fojnica	1,174	1,225	1,489
9.	Kiseljak	1,482	1,682	2,163
10.	Kreševo	437	427	513
Canton 9	Sarajevo			
11.	Centre	5,800	6,170	6,338
12.	Hadžići	3,687	3,914	4,142
13.	Ilidža	8,201	7,954	8,958
14.	Ilijaš	3,273	3,329	3,693
15.	Novi grad	14,457	14,432	15,257
16.	Novo Sarajevo	7,221	7,482	8,109
17.	Stari grad	4,371	4,677	5,310
18.	Trnovo	0	25	288
19.	Vogošća	4,021	4,077	4,424
Total from FBi		65,806	67,064	74,326
	unicipalities that are i		,	Region
20.	Čajniče	610	612	644
21.	Foča/Srbinje	1831	2032	1825
22.	Goražde RS	457	468	475
23.	Ilidža RS	1940	1988	2005
24.	Kalinovik	152	163	155
25.	Novo Sarajevo RS			
26.	Pale	3740	3599	3101
27.	Rogatica	1398	1436	1447
28.	Rudo	825	846	855
29.	Sokolac	1269	1210	1045
30.	Stari grad RS	845	821	805
31.	Trnovo RS	146	186	201
32.	Višegrad	3025	2297	1928
Total from RS	1.1000144	16238	15658	14486
TOTAL IN SM.	R	82044	82722	88812
E' 50 H	41		5) 1/22	CMD

Figure 50. Unemployed population (age group 15-65) per Municipalities in SMR

Administrative Units	2000	2001	2002
Total from FBiH	65,806	67,064	74,326
Total from RS	16238	15658	14486
Total in SMR	82044	82722	88812

Figure 51. Unemployed population (age group 15-65) in SMR

Admin. Units	Municipality	NSS+NKV KV +PKV	SSS	VKV	VŠS	VSS	A
	Municipalities th	at are in FBiH a	nd within	Sarajevo M	lacro Res	gion	
Canton 4	Zeničko-Dobojski			,			-
1.	Breza	878	343	24	16	5	-
2.	Olovo	1208	260	6	6	5	-
3.	Vareš	905	238	15	9	10	-
4.	Visoko	4887	934	18	32	33	-
Canton 5	Bosansko-Podrinjski						
5.	Foča/Ustikolina	393	67	5	1	0	-
6.	Goražde	2581	623	22	6	9	-
7.	Pale/Prača	96	5	-	-	-	-
Canton 6	Srednje-Bosanski						
8.	Fojnica	1180	268	5	12	4	-
9.	Kiseljak	2860	441	11	17	14	-
10.	Kreševo	373	134	1	3	2	-
Canton 9	Sarajevo						
11.	Centre	4009	1765	62	145	357	-
12.	Hadžići	3376	697	23	22	24	-
13.	Ilidža	6665	1856	125	108	104	-
14.	Ilijaš	3148	490	25	20	10	-
15.	Novi grad	10490	3924	275	152	416	-
16.	Novo Sarajevo	4988	2455	216	97	353	-
17.	Stari grad	3652	1358	44	91	165	-
18.	Trnovo	257	24	4	1	2	-
19.	Vogošća	3501	820	31	28	44	-
Total fron		55447	16702	912	766	1557	-
<i>J</i>	Municipalities t	hat are in RS an		Sarajevo M	acro Regi	ion	- 1
20.	Čajniče	176	418	5	8	11	-
21.	Foča/Srbinje	462	1290	37	36	-	-
22.	Goražde RS	132	295	20	22	-	-
23.	Ilidža RS	249	1647	-0	45	59	-
24.	Kalinovik	49	104	1	2	1	
25.	Novo Sarajevo RS						
26.	Pale	607	2166	114	57	81	1
27.	Rogatica	917	440	38	27	25	-
28.	Rudo	285	545	10	9	8	-
29.	Sokolac	202	821	24	47	23	-
30.	Stari grad RS	98	650	41	8	8	
31.	Trnovo RS	69	128	-0	3	1	-
32.	Višegrad	481	1294	99	32	10	-
Total fron		3727	9798	389	296	227	1
TOTAL II		59147	26500	1301	1062	1784	1

Figure 52. Unemployed population (age group 15-65) per Municipalities and per qualifications in SMR for the year 2002

Administrative Units	NSS+NKV KV +PKV	SSS	VKV	VŠS	VSS	$\boldsymbol{A}$
Total from FBiH	55447	16702	912	766	1557	-
Total from RS	3727	9798	389	296	227	1
Total in SMR	59147	26500	1301	1062	1784	1

Figure 53. Unemployed population (age group15-65) in SMR per qualification structure in 2002

# 3.5.2. Employed population

Administrative	Municipality	2000	2001	2002
Unit		ED'H 1 24	· C · · M	<b>D</b> • •
	inicipalities that are in	I FBIH and with	un Sarajevo Macro	o Region
Canton 4	Zeničko-Dobojski	2.250	2 100	2 000
1.	Breza	3,250	3,190	2,909
2.	Olovo	2,257	2,382	2,291
3.	Vareš	2,525	2,500	2,379
4.	Visoko	8,631	8,774	7,910
Canton 5	Bosansko-Podrinjski			
5.	Foča/Ustikolina	146	108	122
6.	Goražde	4,272	4,159	4,029
7.	Pale/Prača	79	76	80
Canton 6	Srednje-Bosanski			
8.	Fojnica	2,620	2,840	2,693
9.	Kiseljak	2,206	2,463	2,605
10.	Kreševo	953	988	1,140
Canton 9	Sarajevo			
11.	Centre	30,622	30,094	29,641
12.	Hadžići	2,236	2,294	2,545
13.	Ilidža	7,398	7,414	8,004
14.	Ilijaš	958	1,012	998
15.	Novi grad	13,727	14,428	14,218
16.	Novo Sarajevo	18,258	18,239	17,931
17.	Stari grad	10,072	10,177	10,357
18.	Trnovo	198	183	150
19.	Vogošća	2,427	2,032	2,168
Total from FBi		112,835	113,353	112,170
	unicipalities that are i			
20.	Čajniče	1300	1250	1100
21.	Foča/Srbinje	2614	2612	2766
22.	Goražde RS	336	411	474
23.	Ilidža RS	2002	2004	2013
24.	Kalinovik	280	263	264
25.	Novo Sarajevo RS	0	0	0
26.	Pale	6100	6437	7569
27.	Rogatica	2554	2597	2602
28.	Rudo	833	792	197
29.	Sokolac	3327	3535	3204
30.	Stari grad RS	319	320	319
31.	Trnovo RS	240	286	300
32.	Višegrad	955	1056	981
Total from RS	, 150 <u>B</u> 144	20860	21563	21789
TOTAL IN SM	R	133695	134916	133959
I O I / IL II I SIVI	41	133073	137/10	133737

Figure 54. Employed population (age group 15-65) per Municipalities in SMR

Administrative Units	2000	2001	2002
Total from FBiH	112,835	113,353	112,170
Total from RS	20860	21563	21789
Total in SMR	133695	134916	33959

Figure 55. Employed population (age group 15-65) in SMR

# 3.5.3. Net salaries

Administrative	Municipality	2000	2001	2002
Unit		TDITT 1	11. 6 1. 15	
	unicipalities that are in	FBiH and with	hin Sarajevo Macr	o Region
Canton 4	Zeničko-Dobojski	12760		
1.	Breza	376.8	317.4	373.1
2.	Olovo	344.1	340.9	360.5
3.	Vareš	447.8	466.9	536.3
4.	Visoko	326.2	358.6	393.2
Canton 5	Bosansko-Podrinjski			
5.	Foča/Ustikolina	380.0	363.9	398.7
6.	Goražde	371.6	417.3	452.4
7.	Pale/Prača	358.9	369.8	388.2
Canton 6	Srednje-Bosanski			
8.	Fojnica	356.4	361.8	414.2
9.	Kiseljak	312.1	417.0	456.5
10.	Kreševo	313.5	328.4	374.7
Canton 9	Sarajevo			
11.	Centre	531.3	603.1	662.3
12.	Hadžići	390.1	537.3	540.0
13.	Ilidža	411.6	450.6	474.6
14.	Ilijaš	393.8	439.6	434.5
15.	Novi grad	430.9	485.6	543.4
16.	Novo Sarajevo	564.1	635.0	711.3
17.	Stari grad	502.6	549.8	589.3
18.	Trnovo	450.0	491.5	519.3
19.	Vogošća	376.8	317.4	373.1
Total from FB	iH .	412.8	458.4	525.4
M	Iunicipalities that are in	n RS and with	in Sarajevo Macro	Region
20.	Čajniče	255,6	259,3	286,7
21.	Foča/Srbinje	171,2	164,5	187,1
22.	Goražde RS	242,2	276,1	296,4
23.	Ilidža RS	420,8	471,1	493,3
24.	Kalinovik	393,2	382,6	324,2
25.	Novo Sarajevo RS			
26.	Pale	277,2	284,6	311,3
27.	Rogatica	240,2	266,1	286,4
28.	Rudo	235,2	256,1	276,4
29.	Sokolac	201,1	233,1	375,76
30.	Stari grad RS	230,9	271,3	277,3
31.	Trnovo RS	164,3	176,6	183,2
32.	Višegrad	243,3	268,8	298,2
Total from RS		255,44	272,83	314,2
TOTAL IN SM	TR	388,27	428,74	491,04

Figure 56. Net salaries per Municipalities in SMR

Administrative Units	2000	2001	2002
Total from FBiH	412.8	458.4	525.4
Total from RS	255,44	272,83	314,2
Total in SMR	388,27	428,74	491,04

Figure 57. Net salaries in SMR

## 4. INFRASTRUCTURE

# 4.1 TRAFFIC INFRASTRUCTURE

#### 4.1.1 Roads in SMR

The roadway system and all the roads throughout this country are some of the worst in Europe if not in the entire world. In the SMR the roads are poorly maintained, rarely repaired, and insufficiently engineered from the very beginning. There seems to be no real government master plan for this area or obvious lack of funds that might be used in this purpose.

Most of the roads do not comply with any applicable standard: they lack breakdown shoulders; there are frequent temporary repairs or loads of potholes without any repair undertaken; the roads are uneven and usually insufficiently wide for normal two way traffic. Many of the roads were designed and constructed with lots of unnecessary curves and bends, referred to as "Tito's Twists".

Many of the roads have insufficient or none guardrail protections, particularly in the mountainous and rural areas. Snowing during the winter is rarely done, rather poorly and without any quality, if done at all. The roadway network needs to be thoroughly reassessed in order to determine its viability, and certain standards must be set and complied with for the safety of all future travels, particularly due to the increasing number of cars and commercial vehicles (it doubled during the past ten years) especially in this SMR.

There are only few major improvements in this sector and it is around Sarajevo City (West entrance highway) and small part of corridor CV (highway) that is under construction in the direction of Sarajvo – Zenica (only about 20 km have been constructed so far).

The table below lists the main road communication characteristics per Municipalities:

Administrative Unit	Municipality	Main roads km	Local roads km	Density of road infrastructure km/100 km²
Mu	nicipalities that are in	FBiH and within S	arajevo Macro Re	gion
Canton 4	Zeničko-Dobojski			
1.	Breza	17,6	99	159,72
2.	Olovo	20	139,45	39,17
3.	Vareš	87	143	61,79
4.	Visoko	38	57	41,1
Canton 5	Bosansko-Podrinjski			
5.	Foča/Ustikolina	35	150	98,4
6.	Goražde			
7.	Pale/Prača	39	48	66,9
Canton 6	Srednje-Bosanski			
8.	Fojnica	20	60	25,9
9.	Kiseljak			
10.	Kreševo	21	73	63,5
Canton 9	Sarajevo			,
11.	Centre	7,34	187,32 (UC)	589,9
12.	Hadžići	52	20	26,4
13.	Ilidža	40	100	97,9
14.	Ilijaš	30	177	64,1
15.	Novi grad	7,8	258,54 (UC)	564,2
16.	Novo Sarajevo			
17.	Stari grad	13	268,8 (UC)	518,0
18.	Trnovo	85	126	62,7
19.	Vogošća	17	113	179,5
Total from FBil	Н	529,74	2020,11	72,2
Mi	unicipalities that are in	RS and within Sa	rajevo Macro Reg	ion
20.	Čajniče	35	115	54,5
21.	Foča/Srbinje	110	184	26,4
22.	Goražde RS	35	65	81,3
23.	Ilidža RS	7.5	54,4	269,1
24.	Kalinovik	119	50	24,6
25.	Novo Sarajevo RS			
26.	Pale	112	98	42,6
27.	Rogatica	39	228	41,7
28.	Rudo	70	62	38,3
29.	Sokolac	70	301	53,8
30.	Stari grad RS	1	10	10,48
31.	Trnovo RS	30	32	44,9
32.	Višegrad	46	150	43,7
Total from RS		674,5	1349,4	39,2
TOTAL IN SMI	?	1204,24	3369,51	52,57

Figure 58. Road communications and density of road network per Municipalities in SMR for the year 2002

Administrative Units	Main roads km	Local roads km	Density of road infrastructure km/100 km²
Total from FBiH	529,74	2020,11	72,2
Total from RS	674,5	1349,4	39,2
Total in SMR	1204,24	3369,51	52,57

Figure 58a. Road communications and density of road network in SMR for the year 2002

Administrativ	Municipality	Sarajevo			Mostar	Other
e Unit		km	km	km	km	km
	<i>Aunicipalities that are</i>	<u>in FBiH an</u>	d within S	Sarajevo .	<u>Macro Re</u>	egion
Canton 4	Zeničko-Dobojski					
1.	Breza	28	65	127	146	Visoko (13)
2.	Olovo	56	110	75	174	Zavidovici (71)
3.	Vareš	50	150	80	168	
4.	Visoko	29	56	140	141	
Canton 5	Bosansko-Podrinjski					
5.	Foča/Ustikolina	82	167	214	202	Gorazde (23)
6.	Goražde	116	211	248	236	
7.	Pale/Prača	36	121	165	156	
Canton 6	Srednje-Bosanski					
8.	Fojnica	46	131	175	151	
9.	Kiseljak	29	69	168	122	
10.	Kreševo	44	129	173	144	
Canton 9	Sarajevo					
11.	Centre	0	85	132	120	( +/- 10 km)
12.	Hadžići	22	100	154	137	( +/- 10 km)
13.	Ilidža	10	85	132	115	( +/- 10 km)
14.	Ilijaš	21	64	127	151	( +/- 10 km)
15.	Novi grad	0	85	132	137	( +/- 10 km)
16.	Novo Sarajevo	0	85	132	137	( +/- 10 km)
17.	Stari grad	0	85	132	137	( +/- 10 km)
18.	Trnovo	33	110	155	155	( +/- 10 km)
19.	Vogošća	13	72	119	150	( +/- 10 km)
Total from FB						
,	Municipalities that are	e in RS and	within S	araievo N	lacro Res	gion
20.	Čajniče	120	249	270	179	Gorazde (20)
21.	Foča/Srbinje	85	199	220	160	
22.	Goražde RS	95	230	251	192	Gorazde (4)
23.	Ilidža RS	4	89	136	124	/
24.	Kalinovik	66	149	195	100	
25.	Novo Sarajevo RS	0	85	132	120	( +/- 10 km)
26.	Pale	16	101	148	136	, ,
27.	Rogatica	65	150	197	185	Gorazde (30)
28.	Rudo	140	261	282	235	Gorazde (43)
29.	Sokolac	50	135	116	170	( )
30.	Stari grad RS	10	95	142	130	
31.	Trnovo RS	33	110	155	155	( +/- 10 km)
32.	Višegrad	130	200	240	250	
Total from RS		120				
TOTAL IN SM		+				
	stance of municipalities		<del></del>	I	· CMD fo	n tha nagn 2002

Figure 59. Distance of municipalities from major urban centres in SMR for the year 2002

4.1.2 Railway Routes

Sarajevo is the centre or hub of the railway line with tracks and electrification all over the network. The tracks are extended to Mostar and Ploce (coast); to Zenica, Doboj and Banja Luka and across the

border to Croatia; Samac and across the border to Croatia and to Tuzla and Brcko, and Belgrade.

Despite the available track system and existing machinery, when it comes to practical purposes, the system is rather non-functional. Privatisation process has not been completed yet. The railway system in BiH is old and outdated, meaning that it is in definite need for repair and renovation, as well as in need for major capital investments in order to be able to start in its full capacity. Privatization of this company has not been completed and the deadline for its completion is unknown. The war brought to breaking of the system's function, and currently the truckers are keeping the railway system closed for all other practical purposes except for some small transport of local commuters.

Another problem that influences the railway system function is the issue related to the agreement on Port of Ploce, which should solidify the access to the sea and command high traffic and significant revenues for the rail system. If this railway system re-starts soon, it would be a major contribution to this economy and all MRs, but most importantly to this region and the region of Tuzla.

The railway line can be an effective link to Europe and other countries for trade and commerce purposes at reasonable rates where the domestic products from the region would have a better chance of competing with the products at the destinations either inside of BiH or at the markets abroad.

Administrative Unit	Municipality	Main railways km	Industrial railways	Density of railway infrastructure km/100 km <sup>2</sup>
Mu	nicipalities that are in	FBiH and within S	arajevo Macro R	egion
Canton 4	Zeničko-Dobojski		,	
1.	Breza	6,6 (NE)	4	14,5
2.	Olovo	0	0	0
3.	Vareš	17 (NE)	5	6,2
4.	Visoko	15	1	6,9
Canton 5	Bosansko-Podrinjski			
5.	Foča/Ustikolina	0	0	0
6.	Goražde	0	0	0
7.	Pale/Prača	0	0	0
Canton 6	Srednje-Bosanski			
8.	Fojnica	0	0	0
9.	Kiseljak	0	0	0
10.	Kreševo	0	0	0
Canton 9	Sarajevo			
11.	Centre	4	0	12,1
12.	Hadžići	25	2	9,8
13.	Ilidža	15	0	10,4
14.	Ilijaš	22	9	9,5
15.	Novi grad	10	3,5	28,6
16.	Novo Sarajevo			
17.	Stari grad	0	0	0
18.	Trnovo	0	0	0
19.	Vogošća	5	60	89,7
Total from FBil		104,6	79,55	5,21
	unicipalities that are in			
20.	Čajniče	0	0	0
21.	Foča/Srbinje	0	0	0
22.	Goražde RS	0	0	0
23.	Ilidža RS	0	0	0
24.	Kalinovik	0	0	0
25.	Novo Sarajevo RS	0	0	0
26.	Pale	0	0	0
27.	Rogatica	0	0	0
28.	Rudo	6	0	1,7
29.	Sokolac	0	0	0
30.	Stari grad RS	0	0	0
31.	Trnovo RS	0	0	0
32.	Višegrad	0	0	0
Total from RS		6	0	0,12
TOTAL IN SMI	R	110,6	79,55	2,19

Figure 60. Railway communications and density of railway network per Municipalities in SMR for the year 2002

	Main railways km	Industrial railways	Density of railway
			infrastructure km/100
Administrative Units			km <sup>2</sup>
Total from FBiH	104,6	79,55	5,21
Total from RS	6	0	0,12
Total in SMR	110,6	79,55	2,19

Figure 60a. Railway communications and density of railway network in SMR for the year 2002

#### 4.1.3 River and Sea Traffic

This SMR has no commercial river or sea traffic. It also does not have river ports or seaports within its geographical boundaries. The rivers are to shallow, insufficiently wide or not connected to any significant commercial centres/locations. Despite the fact that this SMR has many rivers and waters, no commercialization or transport traffic has been attempted nor any type of recreational activities exist. The only possible way of water or river transport today is only for tourism development purposes (small boats and canoes as well as other resort or camping activities).

#### 4.1.4 Air Traffic

The only airport that exists in the SMR is in Illidza, known as Sarajevo International Airport. This airport has insufficient capacities for the commercial needs and requirements to be fully viable for the development of the region, due to the various limitation and restrictions of this airport and its facilities. Primarily, this airport has unfavourable location in a valley between two restrictive mountain ranges, limited land disallowing further expansion of the airport or runway (which would enable bigger and modern transport airplanes to land).

The facilities have restrictions, thus not being in compliance with the international standards. During the winter months, the airport is frequently closed due to intensive fog which prevents normal landing and take-off as well as the international aviation control standards. Although this airport has been mostly rebuilt and equipped since the war ended and qualified personnel has been recruited, physical and climate restrictions cause that this airport has severe limitations.

Reconstruction of the new airport has started in Visoko area, and it is still ongoing.

Below table shows the distance of the Municipalities in the region from the Sarajevo international Airport.

Administrative Unit	Municipality	Distance from the Sarajevo International Airport
Canton 4	Zeničko-Dobojski	
1.	Breza	28
2.	Olovo	63
3.	Vareš	50
4.	Visoko	30
Canton 5	Bosansko-Podrinjski	
5.	Foča/Ustikolina	82
6.	Goražde	
7.	Pale/Prača	55
Canton 6	Srednje-Bosanski	
8.	Fojnica	60
9.	Kiseljak	24
10.	Kreševo	45
Canton 9	Sarajevo	
11.	Centre	8
12.	Hadžići	17
13.	Ilidža	3
14.	Ilijaš	25
15.	Novi grad	2
16.	Novo Sarajevo	5
17.	Stari grad	12
18.	Trnovo	25
19.	Vogošća	13
Total from FBil	H	
20.	Čajniče	120
21.	Foča/Srbinje	80
22.	Goražde RS	100
23.	Ilidža RS	2
24.	Kalinovik	62
25.	Novo Sarajevo RS	3
26.	Pale	30
27.	Rogatica	77
28.	Rudo	140
29.	Sokolac	52
30.	Stari grad RS	18
31.	Trnovo RS	27
32.	Višegrad	140
Total from RS		
TOTAL IN SME	?	

Figure 61. Distance of the Municipalities in SMR from Sarajevo International Airport in SMR

#### 4.2 WATER SUPPLY AND WASTE WATERS

## 4.2.1 Water Supply

There are many issues related to the water supplies and its distribution. Generally speaking, quantities of the resources are far beyond the actual needs and requirement, but the existing infrastructure does not adequately or sufficiently channels the water to the end user. Modernization and upgrading need to be considered and implemented in all the communities within the SMR as well as the entire country.

Water supply systems are poorly managed and mostly utilised by the public companies. The problem is not lack of the resources, but the management itself as well as interference of daily politics into the operation and management of the system. Prices are determined by the municipalities or cantons (in some cases). It reflects a state social policy and disallows this sector to develop into one of the most profitable sectors. The companies have a problem with the revenues collection from the citizens, and public administration and local governments are not ready to take any radical measures to resolve it.

Down below are described the utility systems of Municipalities within Sarajevo Macro Region.

Administrative Unit	Municipality	Water supply	Problem with the Supply
Canton 4	Zeničko-Dobojski		
1.	Breza	1 (MS) (MPC)	(NES), (PNNR)
2.	Olovo	1 (MS) (MPC) (JCC)	(RCWP), (NES)
3.	Vareš	2 (MS) (JCC) (MPC)	(RCWP)
4.	Visoko	1 (MS) (JCC) (MPC), 200 (LS)	(RCWP), (NNS)
Canton 5	Bosansko-Podrinjski		
5.	Foča/Ustikolina	1 (MS) (JCC) (MPC),	(NES)
6.	Goražde		
7.	Pale/Prača	1 (MS) (JCC) (MPC),	(RCWP)
Canton 6	Srednje-Bosanski		
8.	Fojnica	1 (MS) (JCC) (MPC),	
9.	Kiseljak		
10.	Kreševo	1 (MS) (JCC) (MPC),	
Canton 9	Sarajevo		
11.	Centre	1 (MS) (MPC), 5 (LS)	
12.	Hadžići	13 (MS) (MPC), 50 (LS)	
13.	Ilidža	1 (MS) – Supply for Sarajevo City	
14.	Ilijaš	1 (MS) (MPC) (JCC)	(RCWP)
15.	Novi grad	1 (MS) (MPC) 2 (LS)	(NES)
16.	Novo Sarajevo		
17.	Stari grad	2 (MS) (MPC)	(PNNR)
18.	Trnovo	1(MC) (MPC) (JCC)	(RCWP)
19.	Vogošća	1(MC) (MPC)	
Total from FBil			
20.	Čajniče	1(MC) (MPC) (JCC)	(RCWP)
21.	Foča/Srbinje	1(MC) (MPC) (JCC)	(NES), (RCWP)
22.	Goražde RS	1(MC) (MPC) (JCC)	(NES)
23.	Ilidža RS	1(MC) (MPC) (JCC)	(NES)
24.	Kalinovik	1(MC) (MPC) (JCC)	
25.	Novo Sarajevo RS		
26.	Pale	5 (MC) (MPC)	(PNNR)
27.	Rogatica	1(MC) (MPC) (JCC)	(RCWP)
28.	Rudo	1(MC) (MPC) (JCC)	(NES), (RCWP)
29.	Sokolac	1(MC) (MPC) (JCC)	(RCWP)
30.	Stari grad RS	1(MC) (MPC)	(PNNR)
31.	Trnovo RS	1(MC) (MPC) (JCC)	(RCWP)
32.	Višegrad	1(MC) (MPC) (JCC)	(NES), (RCWP)
Total from RS	-		, , ,
TOTAL IN SMI	?		

Figure 62. Water supply per Municipalities in SMR for the year 2002

Legend: MS – main system, MPC – managed by Public company, MC – Managed by concessionaire, NES – not enough supply, PNNR - Pipe network need reconstruction, JCC - Just for city centre, RCWP – Rural communities water problem, NNS – need new springs

# 4.2.2 Waste Waters, sewage systems

Waste waters represent a serious problem and there seems to be no enforcement to curb its effects. The pollution laws do exist to some extent, but the quality of enforcement is still missing. Contamination of potable ground waters is possible and probably it happens.

The available installed capacities are insufficient for the needs of the citizens from the SMR. Most of the waste water today comes from households. There is only one processing plant for waste water in the entire region in Sarajevo City, but it is out of function since the war.

Sewage systems in the SMR are insufficient and available only in the bigger towns and cities, but even there some streets still lack sewage system or sewage house connections. The cities have old and insufficiently maintained systems that have been built centuries ago, so that today they have no capacity to cover the current needs or they have simply decayed and corroded over use and time and in definite need for upgrading or replacement.

The rural communities, or in some cases sub-urban communities around large cities, use septic systems, leaching fields, or simple run-offs to anywhere. These unsanitary and unhealthy conditions obviously contaminate the ground water which leads to contamination of the wells and potable water sources. Final outcome of the above situation is sickness, disease and possible epidemic outbreaks.

The main reason for this problem is that limited funds are allocated from the municipal budgets for proper maintenance, repair, renewal or new reconstruction on the sewage systems. This is a serious environmental issue for this SMR.

The other problem in the urban areas is drainage of the natural rain-waters. These systems exist but only in urban centres and large cities. There is no planning or initiative to develop flood control system for eventual disasters that happen in the SMR almost every year. There is no civil defence at any level to recover from emergencies that inevitably happen over and over again in the SMR. Huge amounts of top soil is lost annually with no recovery efforts due to the run-off from the mountains especially in areas where the land has been rapped of its trees, foliage, shrubs, and grasses, all due to the lack of a planned reforestation, related control and management.

### 4.3 DISPOSAL OF SOLID WASTE AND WASTE MANAGEMENT

Each municipality or canton has a public or semi-public company engaged in the transport and disposal of solid waste. These companies suffer mostly due to insufficient funds which prevent and disable proper operations, which results with bad reputation of those public companies and their inability to collect fees from the citizens for their services. The law does provide for such companies to be privatized or to engage private companies who might have more success in performing such services, and so far no municipality has undertaken any measures with regards to this issue.

The depots or disposal sites are in many cases "makeshift", without any consideration to the standards or regulations governing such sites that poorly managed and/or maintained. Thus, pollution of the soil, ground waters and possibly air can easily happen causing the outbreak of sickness and disease. The environment and its protection are the real issues which will have to be properly addressed.

Solid waste and the management is a significant issue within the SMR as well as in all other regions of this country. It seems that the city of Sarajevo has progressed significantly in this by establishing a proper collection system and disposal at a quality sanitary landfill that meets most of the standards, regulations and laws for these types of services. Majority of other communities being too small to afford a proper sanitary landfill site suffer from illegal dumping of solid wastes of all kinds. This is a serious issue that needs particular attention, assessment and possible solution applicable to this entire region.

Sarajevo Canton and its municipalities have a bit better-organized process of solid waste collection and disposal than the rest of the region. The only sanitary land filling site in the region is in Sarajevo City. Even in this Canton there are several irregular waste sites or "wild/illegal" waste disposals locations

The table below shows waste management situation in the municipalities in Sarajevo Macro Region

Administrative Unit	Municipality	Waste management	Problem with waste
Canton 4	Zeničko-Dobojski		
1.	Breza	(MPC) 1(UWS),	4(WD)
2.	Olovo	(MPC) 1(UWS),	
3.	Vareš	(MPC) 1(RWS) (JCC),	(WD), (RCWP)
4.	Visoko	(MPC) 1(UWS) (JCC),	(WD), (RCWP), (NLWSN)
Canton 5	Bosansko-Podrinjski		
5.	Foča/Ustikolina	(MPC) 1(RWS),	
6.	Goražde		
7.	Pale/Prača	(MPC) 1(RWS)	
Canton 6	Srednje-Bosanski		
8.	Fojnica	(MPC) 1(RWS),	
9.	Kiseljak		
10.	Kreševo	(MPC) 1(RWS),	
Canton 9	Sarajevo		
11.	Centre	(MPC) 1(SL)	
12.	Hadžići	(MPC) 1(SL)	(WD)
13.	Ilidža	(MPC) 1(SL), (MC)	(WD)
14.	Ilijaš	(MPC) 1(SL) (JCC)	(WD), (RCWP)
15.	Novi grad	(MPC) 1(SL)	
16.	Novo Sarajevo		
17.	Stari grad	(MPC) 1(SL)	
18.	Trnovo	(MPC) 1(UWS),	(RCWP)
19.	Vogošća	(MPC) 1(SL)	
Total from FBil	H		
20.	Čajniče	(MPC) (UWS) (JCC),	(WD), (RCWP), (NLWSN)
21.	Foča/Srbinje	(MPC) (UWS) (JCC)	(WD), (RCWP), (NLWSN)
22.	Goražde RS	(MPC) (UWS)	(WD),
23.	Ilidža RS	(MPC) 1(RWS)	(WD),
24.	Kalinovik	-	(WD), (RCWP), (NLWSN)
25.	Novo Sarajevo RS		
26.	Pale	(MPC) 1(UWS),	(WD)
27.	Rogatica	(MPC) 1(SL)	(WD), (RCWP),
28.	Rudo	(MPC), (JCC)	(RCWP),
29.	Sokolac	(MPC) 1 (UWS)	
30.	Stari grad RS	No centralised trash	No centralised trash
		collection	collection
31.	Trnovo RS	(MPC) 1 (UWS)	(RCWP),
32.	Višegrad	(MPC) 1 (UWS) (JCC)	(WD), (RCWP),
Total from RS			
TOTAL IN SMI	?		

Figure 63. Waste management and disposals in SMR for the year 2002

Legend: WD – wild disposal, RWS – Regulated waste site, UWS - Unregulated waste site, MPC – managed by Public company, MC – Managed by concessionaire, SL Sanitary land field, JCC - Just for city centre, RCWP – Rural communities waste collection problem, NLWSN – New location for waste site needed

#### 4.4 ELECTRICITY-POWER SYSTEM

All cities in Sarajevo Macro Region have electricity grids and there is no a single house without electricity supply in every settled place. The problem is the same in the whole Bosnia and Herzegovina, and it is the quality of electricity supplied by the electric companies with particular regards to the stable voltage losses protection, which is very poor. The transmission and distribution system is based on 5 voltage level (400 kV, 220 kV, 110 kV, 35 KV, 10 KV), and 220 V voltage in the final use.

The territory of Sarajevo Macro region is supplied with the electricity by the three public (state) electricity production and distribution companies. There are two public suppliers and producers in FBiH: Elektroprivreda BiH and Elektroprivreda HZHB, and in Elektroprivreda RS in Republic of Srpska.

The street lights are also managed by these companies. The same as other public utilities, electricity pricing for companies and households is greatly influenced by the current politics and social status of the population as perceived and controlled by the government.

This Region has potentials for electricity production in small Hydropower plants, but these potentials are almost unused. There are only two installed capacities for electricity production in the entire Sarajevo Macro Region and both are HPPs. One small HPP is HPP Bogatici near Trnovo, another HPP Hrid in the centre of Sarajevo, while large one is HPP Visegrad. Perhaps, introduction of modern technologies should be considered, such as wind machines and solar power as well.

Plant	River	Put in Operatio n	Plant type	Turbine Type	Usable storage	Designed head	Installed flow	Medium flow	Installed capacity
					hm <sup>3</sup>		$m^3/s$	$m^3/s$	MW
Višegrad RS	Drina	1989	PA	Kaplan	101	43	3x267	342	3x105
TOTAL BiH					2.043				2.042

Figure 64. Installed HPPs in SMR

Legend: P - run-of river, DP - derivation run-of-river, RHE - reversible, PA - storage

SHPP Hrid:

Gross installed capacity: 2x0,2 MW

Net installed capacity (at the beginning): 0,4 MW

River: Sarajevo old water supply system

SHPP Bogatići:

Gross installed capacity: 2x3,5 MW

Net installed capacity (at the beginning): 7 MW

River: Zeljeznica

### SHPP Mesici.

Small Hydro Power Plants in BiH cover about 24 MW of installed capacity. It is evident that only about 16% of installed HPP capacities are located in this region and about 29% of all installed small size HPPs.

The Sarajevo Macro Region is a large importer of different types of energy including the electricity. Perhaps, with some ingenuity and proper planning along with technological advancements, the issues of the high cost of imported power could be a good argument for replacing the import with domestic regional production and supplies. This concept might even increase once utilization of some domestic unused capacities result with the export.

#### 4.5 HEATING ENERGY

The SMR has a variety of methods and energies for the production of heating systems. The larger housing complexes are usually heated through a central system utilized by a heating plant that uses a gas as the energy source (Sarajevo Canton), coal, oil or in some cases as in Vares or Sokolac wood.

The gas system is very developed in Sarajevo Canton and gas is one of the main energy sources for heating, both in the central district heating systems and individual households. The system is managed by public companies called BiH gas (importer) and Sarajevo Gas (local distributor)

Other parts of the region do not have gas systems at all. In most of the cases, people use wood (for households) and oil or coal (for the larger central systems).

The smaller households are individually heated by internal stoves or heating systems which use oil, coal, gas (Sarajevo Canton), or wood and perhaps augmented with small movable electrical heaters. However, the cheapest energy source is the most frequently used, and it is wood (in some cases even burning of trash and dried grasses), due to the low income per-capita within this region. The use of solar energy is an unknown concept, but due to the climate conditions and available sunny days, this might be an alternative source of energy.

Commercial buildings, schools, hospitals and similar institutions have their own in heating facilities using mostly gas (Sarajevo Canton), oil or coal as energy sources.

#### 4.6 TELECOMMUNICATIONS

The telecommunication system of fixed phones and mobile phones is also divided into three parts as everything else. There are three public companies (not privatized) engaged in telecommunications (Eronet and B&H Telekom in F BIH and Telekom RS in RS municipalities). These companies mostly part control the landline telephone systems, the mobile phone systems, and even the internet systems. The sector of fixed telephony is totally developed and covers even the remotest villages. In some cases phone switchboards are old-fashioned and these companies have to renew the entire system part by part.

In this region, the mobile telephony is very developed and the main road communications and settled places are totally covered with the signal of one of the three operators. In FBiH dominant operator is GSM BiH for the most of Sarajevo Macro Region. Another service provider in FBiH is Eronet. In RS dominant operator is MOBIS RS. It is important to mention that in urban and populated areas all three signals are available.

Internet has been in use since the end of the war in this region and it is possible to make internet connection from every settlement that has fixed telephone lines. There are three main operators – public companies: BIHNET (BH Telekom), ERONET, and TEOLNET (Telekom RS). In Sarajevo City where the internet use is progressing rapidly, there are several private internet providers with very high standards: Smartnet, Logosoft, etc. All these private Internet providers all have to operate through the public-state companies, which have a monopoly.

The systems, though fairly new and improved since the end of the war, are putting all the efforts in order to match the needs and requirements of all the SMR citizens and commercial companies.

Administrative	Municipality	Fixed tel	ephony	Mobile	Internet providers	
Unit		Number of users	Price for line KM	telephony		
Canton 4	Zeničko-Dobojski					
1.	Breza	(BHT) 4304	297	(BHT) 501	(BHT) 210	
2.	Olovo	(BHT) 3602	297	(BHT) 457	(BHT) 198	
3.	Vareš	(BHT) 2600,	300	(BHT) 307	(BHT) 205	
		(HPT) 150	350	(HPT) 240		
4.	Visoko	(BHT) 11204	250	(BHT) 1890	(BHT) 590	
Canton 5	Bosansko-Podrinjski					
5.	Foča/Ustikolina	(BHT) 717	297	(BHT) 110	(BHT) 15	
6.	Goražde				,	
7.	Pale/Prača	(BHT) 340	350	(BHT) 75	(BHT) 3	
Canton 6	Srednje-Bosanski					
8.	Fojnica	(BHT) 2829	350	(BHT) 478 (HPT) 339	(BHT) 130	
9.	Kiseljak					
10.	Kreševo	(BHT) 50,	200	(BHT) 600	(HPT) 50	
		(HPT) 1500	300	(HPT) 50		
Canton 9	Sarajevo					
11.	Centre	(BHT) 24210	297	(BHT) 8320	(BHT) 1936	
12.	Hadžići	(BHT) 6223	297	(BHT) 2012	(BHT) 265	
13.	Ilidža	(BHT) 14507	297	(BHT) 3115	(BHT) 1023	
14.	Ilijaš	(BHT) 2302	297	(BHT) 718	(BHT) 109	
15.	Novi grad	(BHT) 32245	297	(BHT) 7425	(BHT) 2339	
16.	Novo Sarajevo		297			
17.	Stari grad	(BHT) 11603	297	(BHT) 2579	(BHT) 969	
18.	Trnovo	(BHT) 202	300	(BHT) 116	(BHT) 10	
19.	Vogošća	(BHT) 5459	85	(BHT) 2553	(BHT) 189	
Total from FBiH	,	98301	228	31885	6840	
20.	Čajniče	(TRS) 810	165	(TRS) 800	(TRS) 50	
21.	Foča/Srbinje	(TRS) 4908	165	(TRS) 633	(TRS) 231	
22.	Goražde RS	(TRS) 650	120	(TRS) 1000	(TRS) 0	
23.	Ilidža RS	(TRS) 2000	150	(TRS) 500 (BHT) 30	(TRS) 75	
24.	Kalinovik	(TRS) 496	165	(TRS) 112	(TRS) 29	
25.	Novo Sarajevo RS				, ,	
26.	Pale	(TRS) 5444	150	(TRS) 6200	(TRS) 980	
27.	Rogatica	(TRS) 2886	165	(TRS) 4800	(TRS) 88	
28.	Rudo	(TRS) 593	150	(TRS) 748	(TRS) 64	
29.	Sokolac	(TRS) 5257	160	(TRS) 5650	(TRS) 365	
30.	Stari grad RS	(TRS) 240	165	(TRS) 150	(TRS) -	
31.	Trnovo RS	(TRS) 408	250	(TRS) 159	(TRS) -	
32.	Višegrad	(TRS) 3148	165	(TRS) 5124	(TRS) 231	
Total from RS		17976	172	22831	1728	
TOTAL IN SMR		116227	200	54716	8568	

Figure 65. Telephony and Internet providers per municipalities in 2002 for SMR

Legend: BHT – BH Telekom, TRS - Telekom RS, HPT – Hrvatske posts and telecommunication Mostar,

Administrative Unit	Municipality	Public TV/Radio	Private TV/Radio		
Canton 4	Zeničko-Dobojski				
1.	Breza	FTV, TV OBN, TVSA, (R) Breza (S),	TVH,		
2.	Olovo	FTV,	TVH		
3.	Vareš	FTV, TV OBN	(R) Bobovac (S)		
4.	Visoko	FTV, RTV Visoko (S)	(R) Naba (S), (R) Q (S), TVH		
Canton 5	Bosansko-Podrinjski				
5.	Foča/Ustikolina	FTV, TVBPK			
6.	Goražde				
7.	Pale/Prača	FTV, TVBPK, (R) Praca (S)			
Canton 6	Srednje-Bosanski				
8.	Fojnica	FTV, TV OBN	TVH, KISS, S99		
9.	Kiseljak				
10.	Kreševo	FTV, TV OBN			
Canton 9	Sarajevo				
11.	Centre	FTV, TVSA, BHR, OBN, R 202, RTVV	TVH, S99, RSG, RM, TVP, TVI, RK		
12.	Hadžići	FTV, TVSA, BHR, OBN,	TVH, S99, RSG, RM, TVP, TVI (S), RK		
13.	Ilidža	FTV, TVSA, BHR, OBN, RTRS, R202	TVH, S99, RSG, RM, TVP, TVI, KISS, (R) Diss (S), (R) Ask (S), RK		
14.	Ilijaš	FTV, TVSA, BHR, OBN, RTRS, (R) Ilijas (S)	TVH, RSG, RM, TVP, RK		
15.	Novi grad	FTV, TVSA, BHR, OBN, R202, RTVV	TVH, S99, RSG, RM, TVP, TVI, TV Fiva (S), RK		
16.	Novo Sarajevo		. ,		
17.	Stari grad	FTV, TVSA, BHR, OBN, R202, RTRS, RTVV	TVH, S99, RSG, RM, TVP, TVI, RK		
18.	Trnovo	FTV, BHR, OBN, RTRS,	RSG, (R) Ask,		
19.	Vogošća		TVH, S99, RSG, RM, TVP, RK		
Total from FBil	Н	` ,			
20.	Čajniče	FTV, RTRS, OBN	TVP		
21.	Foča/Srbinje	RTRS, OBN, (R) Foca/Srbinje (S)	TVP, RSG		
22.	Goražde RS	RTRS, TVBPK, FTV			
23.	Ilidža RS	FTV, RTRS, OBN, TVSA	RTV Osm, TVH, TVP, (R) Komet,		
24.	Kalinovik	RTRS	,		
25.	Novo Sarajevo RS				
26.	Pale	FTV, RTRS, OBN, TVBPK	TVP, (R) Sveti Jovan (S), RTV Osm (S),		
27.	Rogatica	TVRS	BNTV, TVP, (R) 303, (R) Kometa		
	i e	•	•		

Figure 66. TV and radio stations coverage per Municipalities in SMR

Private TV/Radio Public TV/Radio Administrative Municipality Unit 28. Rudo FTV, RTRS, OBN, RTS TVP 29. FTV, RTRS, Sokolac TVP 30. Stari grad RS RTRS, FTV, TV OBN TVH, (R) Sveti Jovan, TVP 31. Trnovo RS FTV, RTRS, TVP 32. Višegrad RTRS Total from RS TOTAL IN SMR

Figure 66a. TV and radio stations coverage per Municipalities in SMR

Legend: S – with the headquarter in the Municipality, FTV – Federal Radio TV, TVOBN – TV OBN, NTVH – NTV Hayat, TVSA – Television of Srajevo Canton, R – Radio, TV BPK – Television of Podrinje Canton, S99 – RTV Studio 99, BHR – BiH Radio, RSG Radio Stari Grad, RM – Radio M, TVP – TV PINK BiH, TVI – TV Igman, RTRS – Radio TV of Republic of Srpska, KISS – TV Kiseljak, R202 – Radio 202, RTVV – Radio TV Vogosca, RK - Radio Kalman, RTS – Radio TV Serbia

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#### 4.7 INDUSTRIAL INFRASTRUCTURE

The SMR has some industrial zones (communities of Illidza, Vogosca, Ilijas, Vares, Hadzici and others) as well as some industrial parks (though unofficial), especially in the Municipalities surrounding Sarajevo City, but this is not well planned or sufficiently developed in most of the municipalities. Many municipalities have buildings and land suitable for these purposes with lots of infrastructure in place, but the facilities are either destroyed, unused, not properly maintained, or not registered or planned in the Municipal Urban Plan. There is little or no Urban or city planning at all in any of the communities.

There are no defined zones or zoning standards (not residential, not Industrial, not commercial, not tax free zones etc.). It is important for these municipalities to evaluate, design and establish everything according to the relevant standards and regulation such urban zones and particularly to determine "the highest and best use" of the land within the jurisdiction of their municipality.

Municipality	Type of infrastructure	m2	Comments
Breza	(IZ) Marinkovaca	18000	Restitution issue (NIU)
Breza	(IZ) Gornja Breza	220000	(P), (NIU)
Breza	(IZ) Koritnik	310000	(P), (NIU)
Olovo	IZ (Sip)	36000	(PIU)
Olovo	IZ (Olovo)	162000	(P)
Vares	(IZ) Vares	450000	(NU) 8
Visoko	(IZ) Vispak & Velepromet	53100	(P), (PU)
Visoko	(IZ) Vitex	284000	(P), (PU)
Visoko	(IZ) Klas	439900	(PU)
Visoko	(IZ) Donji Porijecani	15300	(P)
Visoko	(IZ) Donja Vratnica	52900	(P)
Visoko	(IZ) Buci	44800	Restitucija
Visoko	(IZ) Cajno	73500	(P) (PU)
Visoko	(IZ) Uvorici	172200	(P), Private land
Visoko	(IZ) Radovlje	30000	(P), Private land
Visoko	(IZ) Cekrecije	163900	(P), Private land
Visoko	(IZ) Cekrecije&Prijeko	80000	(P) (PU)
Visoko	(IZ) Dobrinje	38200	(P) (PU)
Visoko	(IZ) Kalici&Tuljici	72000	(P)
Visoko	(IZ) Mokronosko polje	200000	(P) (PU)
Visoko	(IZ) Dobrinje 2	67500	(P)
Visoko	(IZ) Banjersko polje	67500	(P)
Visoko	(IZ) Grab	25000	(P)
Visoko	(HCZ) Sebilj 2	3500	(P) (PU)
Visoko	(FZ) Visoko	50000	(NU) 29
Pale/Praca	(IZ) Pale/Praca	10000	(NU) 1
Fojnica	(IZ) Fojnica	17000	(NU) 10

Figure 67. Industrial, handicraft and commerce zones in SMR

Municipality	Type of infrastructure	m2	Comments
Kresevo	(IZ) Kresevo	200000	(NU) 15
Centre	(IZ) Bosnalijek	90000	(NU) 1
Hadzici	(IZ) Binjezevo	235000	(NU) 7
Ilidza	(IZ) Famos	80000	(NU) 80
Ilidza	(HCZ)	70000	
Ilijas	IZ (steel factory)	308000	(NU) 26
Ilijas	(HCZ) Ilijas	300	(NU) 15
Novi Grad	IZ (Djemala Bijedica)	150000	
Novi Grad	Tram depots Gras	2000	(NU) 1
Stari Grad	(HCZ) Bascasija	200000	
Vogosca	(IZ) Vogosca	1400000	(NU) 30
Vogosca	(TP) Vogosca	7500	(P)
Vogosca	(FZ) Vogosca	85500	(PU)
Total from FBil	H	5984600	
Cajnice	(IZ) Cajnice	10000	(NU) 1
Pale	(IZ) Sumbulovac	200000	(P), (PU)
Pale	(IZ) Ljubogosta	200000	(P), (PU)
Pale	(IZ) Famos	7500	(NU) 1
Pale	(IZ) Pretis	10000	(NU) 1
Sokolac	(IZ) Sokolac	31440	(P), (PU)
Sokolac	(HCZ) Sokolac	24850	(P)
Trnovo RS	IZ (Trnovo)	6000	(NIU)
Total from RS		489790	
Total in SMR		6474390	

Figure 67a. Industrial, handicraft and commerce zones in SMR

Municipality	$m^2$	km <sup>2</sup>
Total from FBiH	5984600	5,984600
Total from RS	489790	0,4489790
Total in SMR	6474390	6,474390

Figure 67b. Industrial, handicraft and commerce zones in SMR

### **5 SOCIAL INFRASTRUCTURE**

#### **5.1 POVERTY**

The poverty in Bosnia and Herzegovina is a significant problem today. The studies done during the year 2000 showed that in BiH 19,5% of the entire population can be defined as poor or rather below the world poverty standards. The number of poor population in Bosnia and Herzegovina is not extreme, but the number of population that is just above the poverty line is very high, about 30 % of the population. This trend of 30 % population just above the poverty line is serious and dangerous, with a major treat that those 30% of population can go below the poverty line very soon and easily given the limited socio-economic or political destabilization. There are over 1.000.000 inhabitants that might instantly turn into very poor population due to the socio-economic turbulences.

Generally speaking, the poverty rate in the Republic of Srpska is much higher than in the Federation of Bosnia and Herzegovina. In RS 25% of population is considered to be poor while the same percentage in the FBiH is about 16%.

There are two definitions of poverty: General line of poverty and Extreme line of poverty.

General line of poverty is the line that takes into consideration, not only monetary value of minimum food needed for survival, but also a monetary value of other household needs where the food needs are minimum (such as minimum amount for clothes, apartment and utilities, and other basic minimum needs). The General line of poverty in Bosnia and Herzegovina in the year 2000 was 2.198 KM/ person,.

The line of extreme poverty is the line that includes monetary value of food needed for survival of one person in one year. That line of poverty in Bosnia and Herzegovina in 2000 was 760 KM/ person,.

In this region, poverty is visible at almost every door step in Sarajevo City. The poorest population are returnees and demobilized soldiers, especially in the area of Sarajevo Macro Region that covers the part of the Republic of Srpska. Domicile population in RS municipalities within SMR is in a bit better situation (major ethnic groups), but basically, there are some municipalities that might be defined as generally very poor. One of the reasons for this is that they were overlooked from the International Community during the after war period due to the lack of understanding of the necessary democratization process and human rights issues.

The need for organized approach through the regional development strategy towards developing of the entire Sarajevo Macro Region is obvious. It can be one of the ways for bridging the gap between very poor peripheral communities and Sarajevo City, which is basically the most developed area in the entire BiH.

#### **5.2 HEALTH CARE**

Health care in Sarajevo Macro Region is organized at the three levels:

- State hospitals (clinical centres) at the regional level in the Republic of Srpska or at the Cantonal level in the Federation of Bosnia and Herzegovina. The competencies at this level of health care are at the Canton level in the FBiH and at the entity level in RS. Funding of these institutions in the FBiH comes from the Cantonal budgets and in the RS from the entity budgets.
- State ambulances (polyclinics) at the Municipality level in the FBiH and RS. The competencies at this level of health care are at the Canton level in the FBiH and at the municipal level in RS. Funding of these institutions in the FBiH comes from the Cantonal budgets and in the RS from the entity budget.
- Municipal branch/field ambulantas (polyclinics) are structured as organizational units of the municipal ambulantas (polyclinics). Those are the only sub-organizational parts of the above mentioned municipal ambulantas.

It might be worth mentioning few significant institutions of the health care sector in SMR:

- University Medical Centre Kosevo in Sarajevo City, with the most modern departments and many specialized clinics within the Centre. This is most contemporary and most significant Medical Centre in the entire Bosnia and Herzegovina.
- State hospital in Sarajevo City as another significant medical centre
- Medical Centre in Foca/Srbinje (small capacities)
- Medical Centre in Srpsko Sarajevo (Kasindo) (small capacities)

There is a famous rehabilitation centre in Sarajevo Macro Region and it is in Fojnica.

Administrative Municipality Public hospitals Private **Comments** Unit clinics Canton 4 Zeničko-Dobojski Breza (PHC) 1 (FA) 2. Olovo (PHC) 1, (FA) 3 (PP) 1 (PHC) 1, (FA) 9 3. Vareš 4. Visoko (PHC) 1, (FA) 9 (EP) 1 Canton 5 Bosansko-Podrinjski Foča/Ustikolina (PHC) 1 6. Goražde Pale/Prača (PHC) 1 Srednje-Bosanski Canton 6 (PHC) 1, (RHC) 1 8. Fojnica (FA) 3 9. Kiseljak 10. Kreševo (PHC) 1 Canton 9 Sarajevo 11. Centre (RHC) 5, (PHC) 1 (FA) 12. (RHC) 1, (PHC) 1 Hadžići (FA) 13. Ilidža (PHC) 1 (FA) 14. Ilijaš (PHC) 1, (FA) 1 15. (PHC) 2, (FA) 10 (PP) 12 Novi grad 16. Novo Sarajevo 17. (PHC) 1, (FA) 2 Stari grad 18. Trnovo (PHC) 1, (FA) 4 (EP) 1 19. Vogošća (PHC) 1, (PP) 3 (FA) Total from FBiH (PHC) 17, (RHC) 7 20. Čajniče (PHC) 1, 21. (RHC) 1, (PHC) 1 (FA) Foča/Srbinje (PP) 5 22. Goražde RS (PHC) 1 23. Ilidža RS (PRHC) 1, (FA)1 (PP) 3 24. Kalinovik (PHC) 1, 25. Novo Sarajevo RS (PP) 9 26. Pale (PHC) 1, (FA) 1 27. (PHC) 1 Rogatica (PP) 3 28. Rudo (PHC) 1 29. Sokolac (RHC) 3, (PHC) 1 (PP) 2 30. Stari grad RS (PHC) 1 31. Trnovo RS (PHC) 1 32. Višegrad (FA) (PHC) 1 Total from RS (PHC) 13 (RHC) 5 TOTAL IN SMR (PHC) 30, (RHC) *12* 

Figure 68. Health care infrastructure in SMR in the year 2002

Legend: PHC – Primary health care centre, FA – Field ambulantas, RHC – Regional health care centre (Hospital or institution), PP – Private practice, EP - Emergency Service

#### **5.3 SOCIAL WELFARE SERVICES**

Due to very strict control of the municipal budgets done by the Canton level in the Federation of Bosnia and Herzegovina and by the Entity in the Republic of Srpska, the municipalities are not capable or able to allocate any significant amount of money for social welfare services. Mostly, the Cantons and Entities are responsible for the social welfare services while in some cases the municipalities are used only as a facilitator for the Canton or Entity funds. There is no official, planned or designed program, procedures or Standards for any type of "social welfare network" or social welfare at any government level in this country, including the territory of the SMR.

Services that the Municipalities are authorized and competent to provide are as follows:

- One-time help to the vulnerable persons
- Grants to non-profit organizations
- Grants to political parties

Services that Municipalities are used to facilitate are as follows:

- additional support to children without parents
- additional support to old people as well as additional care for their welfare
- etc.

#### **6 EDUCATION SYSTEMS IN SMR**

The education system is divided into three segments: primary education, secondary education and high education.

In primary education there are regular schools, special schools (for children with special needs) and additional primary schools. In these schools, education of children starts at the age of 7 and finishes at the age of 15 (8 years of primary education).

The secondary education is divided in two types: regular secondary education and special secondary education (children with special needs). Depending on the type of secondary education the student requires, the duration is from 3 to 4 years. For practical-professional education it lasts three years while for the general education (gymnasium type) it lasts for four years. In these schools education of children starts at the age of 15 and finishes at the age of 18 or 19, depending again on the type of secondary education required.

High school education is provided at the level of University. There are no age limits for this type of education. The largest University in Bosnia and Herzegovina is Sarajevo University comprising of the different faculties and the main campus, which is again in the SMR with many branch departments throughout the country.

The competencies for all three official education levels in the Federation of Bosnia and Herzegovina are at the Canton Level, while the funding of these educational institutions (schools and Universities) comes from the cantonal budgets.

The competencies for all three official education levels in the Republic of Srpska are at the Entity Level and the funding of these educational institutions (schools and Universities) comes the Entity Budgets.

# **6.1 PRIMARY EDUCATION**

Admin.	Municipalities		lar educ		Special education			Additional education		
Units	-	No of Pupil No o						No of	Pupils	No of
		schoo		teachers		1	teachers		1	teachers
		S								
	Municipa	lities t	hat are i	n FBiH a	nd withir	n Sarajev	o Macro R	Region	•	•
Canton 4	Zeničko-Dobojski									
1.	Breza	8	1,623	89	-	-	-	1	37	3
2.	Olovo	10	1,578	94	=	-	-	-	_	-
3.	Vareš	15	1,109	99	-	-	-	-	-	-
4.	Visoko	16	4,604	254	2	13	3	1	123	12
Canton 5	Bosansko-									
	Podrinjski									
5.	Foča/Ustikolina	2	178	16	-	-		-	-	-
6.	Goražde	12	2,474	172	1	7	3	1	169	8
7.	Pale/Prača	1	112	8	-	-	-	-	-	-
Canton 6	Srednje-Bosanski				1	-	-	-	-	-
8.	Fojnica	11	1,426	69	1	15	2	-	-	-
9.	Kiseljak	12	2,567	173	-	_	-	-	-	-
10.	Kreševo	2	581	24	_	_	_	_	_	-
Canton 9	Sarajevo									
11.	Centre	11	5,797	365	1	60	18	-	-	-
12.	Hadžići	7	2,450	135	1	33	13	_	_	-
13.	Ilidža	11	5,865	338	1	9	1	1	308	22
14.	Ilijaš	10	1,905	100	_	-	_	_	-	-
15.	Novi grad	14	10,613	567	1	74	23	_	_	_
16.	Novo Sarajevo	10	5,346	323	1	83	24	1	214	21
17.	Stari grad	8	3,086	185	1	111	19	2	346	32
18.	Trnovo	2	94	10	-	_	-	-	-	-
19.	Vogošća	5	2,575	144	_	_	_	_	_	_
Total from		_		3,165	10	405	106	7	1197	98
							Macro Re	egion	,,	1
20.	Čajniče	1			-	-	-	-	_	_
21.	Foča/Srbinje	2			_	_	-	_	_	_
22.	Goražde RS	2			_	_	-	_	_	_
23.	Ilidža RS	3			_	_	-	_	_	_
24.	Kalinovik	2			_	_	-	_	_	_
25.	Novo Sarajevo RS				_	_	-	_	_	_
26.	Pale	9				_	_	_	-	-
27.	Rogatica	1	<u> </u>	<u> </u>	_	1_	_	_	<u> </u> _	1_
28.	Rudo	2	<del>                                     </del>		_	<u> </u>	_	_	-	-
29.	Sokolac	1	-	-		<u> </u>			<u> </u>	1_
30.	Stari grad RS	4(E)	-		<u> </u>	<u> -</u>		<u> </u>	<u> </u>	-
		1			<u> </u>	<u> </u>		<u> </u>	<u> </u>	_
	LI movo RS				•		1 -			1-
31.	Trnovo RS	1			_	1_	_	_	<u> </u>	
	Višegrad	1 29			-	-	-	-	-	_

Figure 69. Primary education per Municipalities in SMR for the year 2002

Administrative	Regular education	Special education	Additional education
Unit	No of schools	No of schools	No of schools
Total from FBiH	167	10	7
Total from RS	29	-	-
Total in SMR	196	10	7

Figure 70. Primary education in SMR in the year 2002

•

# **6.2 SECONDARY EDUCATION**

Admin.	Municipalities	Regular educa	ition		
Units	•	No of schools		Pupils	No of teachers
	Municipalities	that are in FE	BiH and	within Sarajevo Macro Reg	gion
Canton 4	Zeničko-Dobojsl	ki			
1.	Breza	2	2	878	72
2.	Olovo	1		632	41
3.	Vareš	1		380	43
4.	Visoko	2	2	2,070	105
Canton 5	Bosansko-Podrir	njski			
5.	Foča/Ustikolina	C	)	0	0
6.	Goražde	3	3	1,504	118
7.	Pale/Prača	C	)	0	0
Canton 6	Srednje-Bosansk	i			
8.	Fojnica	1		657	36
9.	Kiseljak	2	2	1,078	57
10.	Kreševo	1		416	28
Canton 9	Sarajevo				
11.	Centre	1	13	8,125	578
12.	Hadžići	1		949	49
13.	Ilidža	2	2	1,297	78
14.	Ilijaš	2	2	827	79
15.	Novi grad	3	3	2,331	135
16.	Novo Sarajevo	7	7	4,752	341
17.	Stari grad	5	5	3,538	256
18.	Trnovo	C	)	0	0
19.	Vogošća	1		805	42
Total fron	n FBiH	4	<b>1</b> 7	30,239	2,058
	Municipalities	s that are in R	S and v	vithin Sarajevo Macro Regi	ion
20.	Čajniče	1		,	
21.	Foča/Srbinje	2	2		
22.	Goražde RS	1			
23.	Ilidža RS	1			
24.	Kalinovik	1			
25.	Novo Sarajevo R	RS			
26.	Pale	1			
27.	Rogatica	1			
28.	Rudo	1			
29.	Sokolac	1			
30.	Stari grad RS	C	)		
31.	Trnovo RS	C	)		
32.	Višegrad	1			
Total fron		1	11		
TOTAL II			58		

Figure 71. Regular secondary education per Municipalities in SMR for the year 2002

Administrative Unit
Regular education
No of schools

Total from FBiH
47

Total from RS
11

Total in SMR
58

Figure 72. Secondary education in SMR for the year 2002

#### 6.3 UNIVERSITY EDUCATION

The University in Sarajevo comprises of over 30 high school institutions all over the FBiH. It is the largest university in Bosnia and Herzegovina with a great overall influence and enormous reputation in the world of science and high education, as well as long tradition. The number of students in the year 2003 was 31.782.

In Sarajevo town there are 26 High school institutions and faculties, which make Sarajevo well known University City. There are about 30.527 students attending about 26 high school institutions in Sarajevo town.

In SMR there is one smaller university in Srpsko Sarajevo (RS), established during the war period in BiH and the University clinical centre in Foca/Srbinje (RS).

Universities in Bosnia and Herzegovina are under the government competencies and authority. In the Federation of BiH the competent/authority level is the Canton. Finances for the University in the FBiH come from the cantonal budgets. In the Republic of Srpska, the competence/authority rests with the Entity government and the finances for the University come from the entity budget.

The table below shows faculties and high educational/university institutions that existed in Sarajevo Macro Region in 2002.

Municipality	Faculty and university educational institutions	Comments
Breza	No Faculties or high university educational institutions	
Olovo	No Faculties or high university educational institutions	
Vares	No Faculties or high university educational institutions	
Visoko	No Faculties or high university educational institutions	
Foca/Ustikolina	No Faculties or high university educational institutions	
Gorazde	No Faculties or high university educational institutions	
Pale Praca	No Faculties or high university educational institutions	
Fojnica	No Faculties or high university educational institutions	
Kiseljak	No Faculties or high university educational institutions	
Kresevo	No Faculties or high university educational institutions	
Centre	Faculty of Medicine, Dentist, Architecture faculty,	
	Civil engineering faculty, University clinical centre	
	Kosevo, Law faculty, Sarajevo university headquarter,	
	Mechanical faculty institute for vehicles for transport	
	of dangerous materials, Faculty of philosophy	
	(psychology, literature, foreign languages, etc.),	
	Pedagogical Academy,	
Hadzici	No Faculties or high university educational institutions	
Ilidza	Institute for agronomy,	
Ilijas	No Faculties or high university educational institutions	
Novi Grad	Catholic theology faculty, Institute for geo-mechanic	

Figure 73. Faculties and high educational/university institutions per Municipalities in SMR for the year 2002

Municipality Faculty and university educational institutions Comments Mechanical engineering faculty. Electric engineering Novo Sarajevo faculty, Veterinarian faculty, Faculty for traffic management, Criminology, Natural science faculty (mathematic, physic, chemistry, geography, etc) Stari Grad Faculty for economy, Faculty for Islam theology, Music Academy, Institute for economy, Faculty of political sciences (political science, journalism, sociology, etc.) Trnovo No Faculties or high university educational institutions Vogosca No Faculties or high university educational institutions Cajnice No Faculties or high university educational institutions Medical faculty, Dentists, Orthodox theology faculty Foca/Srbinje Gorazde RS No Faculties or high university educational institutions Ilidža RS No Faculties or high university educational institutions Kalinovik No Faculties or high university educational institutions Novo Sarajevo RS Law faculty, Philosophy, Faculty for sport, Economy Pale faculty No Faculties or high university educational institutions Rogatica No Faculties or high university educational institutions Rudo Sokolac No Faculties or high university educational institutions Stari grad RS No Faculties or high university educational institutions Trnovo RS No Faculties or high university educational institutions Višegrad No Faculties or high university educational institutions

Figure 73a. Faculties and high educational/university institutions per Municipalities in SMR for the year 2002

## 6.4 TRAINING CENTERS AND OTHER EDUCATIONAL INFRASTRUCTURE

The sector of informal education is not so well developed in this region. During the past period, there have been certain signs of this sector development and it has been primarily led by NGOs. There are several educational centres that provide informal education in the Sarajevo Region and most of them are in the city of Sarajevo. People are most interested in attending informal education based on courses during their free time. The population is the most interested in the courses from the following fields of interest:

- English language courses
- German, French, Italian language courses
- Courses for agricultural production and land cultivation
- Courses for honey bee keeping
- Courses for fruit production
- Computer literacy courses
- Some courses for vocational training e.g. on handicraft level
- Etc

There are some professional profit organizations in the SMR particularly in the city of Sarajevo providing this type of informal education, with acceptable prices for the participants.

## 7. SPORT INFRASTRUCTURE

## 7.1. RECREATION CENTERS, SPORT FIELDS

Sarajevo and surrounding municipalities enjoy fairly well established sport infrastructure. Most outlying communities have limited sports and recreation facilities and activities. Many of the sports fields, facilities and other related activities are not improperly managed or promoted and insufficiently maintained.

Typical example is Zetra and Skenderija complexes in Sarajevo that have tennis courts, soccer pitches, handball courts, basketball courts, ice hockey, swimming and diving facilities, weight and exercise rooms, shower and locker facilities and much more including sports medical clinic, but their use is below 9% of the available capacities and even less in time of actual use. This is a great loss of activities, potential revenues, and citizen's services.

In this region there are lots of recreation areas, especially around Sarajevo town, such as the area of Ilidza, Bentbasa, Barice, etc.. However, all these are usually not maintained properly and stagnate in terms of sport and recreation development as well as development of new and contemporary possibilities that could be provided to all the citizens.

With regards to the sport fields in the entire region, there are only few proper football stadiums, and most of them are in Sarajevo, such as Kosevo, Zeljeznicar, Otoka, etc. In Sarajevo town and surrounding communities there are lots of soccer fields (small fields for recreation purposes). As a essential part of every school in the region, there is open-type playground for basketball, soccer and handball. Very soon, every school will have a closed sport winter hall, mostly for children training in athletics.

There are just a few tennis courts, since most of them are privatised and there is one private golf club in Sarajevo.

In other cities of the region, general sport infrastructure insufficiently developed. Those facilities are usually part of the schools, which are not properly maintained (due to the budgetary constraints) and there is no systematically organised sport infrastructure.

In the entire Sarajevo Macro Region, there is only one closed swimming pool in Sarajevo town and another that is under construction, in Sarajevo too. Sarajevo and its surrounding communities have several open swimming pools such as Ilidza, Bentbasa, Pale, Srednje, etc. In other cities from the region, currently there are no swimming pools.

Municipality	Sport infrastructure	Winter sports Infrastructure
Breza	(SC) 1, (S small) 2, (MCSH) 4, (SP) 1, (MH) 1, (FH) 1, (HH) 1	
Olovo	(SC) 2, (S) 1, (SP) 2, (MCSH) ,1 (MSF) 1	
Vares	(SF) 1, (MSF) 3, (MCSH) 3, (MH) 1, (FH) 1, (HH) 1	(SL small) 1
Visoko	(SC) 3, (S small) 9, (S) 1, (MSF) 2, (MCSH) 7, (MH) 2, (FH) 1,	
Foca/Ustikolina	(S small) 1, (MSF) 2, (MCSH) 2, (HH) 2	
Gorazde		
Pale Praca	(SC – planed ) 1, (SF) 1, (MSF) 2, (MCSH) 1,	
Fojnica	(SC) 1, (MSF) 3, (MCSH) 3, (MH) 2,	(SL 1,5km) 1
Kiseljak		
Kresevo	(SC) 1, (SF) 1, (MSF) 1, (MCSH) 1, (TF) 1,	(SL 1,5km) 1
Centre	(SC) 3, (MSF) 25, (S large) 1, (SF) 1, (TF) 1, (SP – not in use) 1, (MCSH) 25, Golf field 1,	
Hadzici	(SC) 2, (MSF) 8, (MCSH) 3, (TF) 1,	Igman (SL 600m + ski jumps 70&90 m, (SL) 300m,
Ilidza	(SC) 2, (S small) 4, (MSF) 10, (SF) 3, (MCSH) 9, (SP) 2, (TF) 2, (Fitness centre) 4, (Hippodrome) 1, (Bowling centre) 1	
Ilijas	(S small) 1, (MSF) 6, (MCSH) 5	
Novi Grad	(S – large) 1, (MSF) 19, (MCSH) 11, (SP plan) 1	
Novo Sarajevo		
Stari Grad	(SC) 2, (MSF) 8, (MCSH) 8, (SP) 1	
Trnovo	Bjelasnica: (TF,SF, MSF) 1, (MSF1)	Bjelasnica (SL) 3, Igman ski walking, biathlon.
Vogosca	(SC) 1, (S) 2, (TF) 1, (MSF) 3, (MCSH) 5, (SP - ruined) 1, (Bowling centre) 1	Winter centre for children – red cross
Cajnice	(SC) 1, (S) 1, (MSF) 3, (MCSH) 1, (SP) 1	(SL) 800m - ruined
Foca/Srbinje	(S) 1, (MSF) 4, (SP) 1, (MH) 1	
Gorazde RS	(MSF) 3	
Ilidža RS	(SC) 1, (MSF) 4, (MCSH) 3, (HH) 1	
Kalinovik	(MFS) 4, (MCSH) 1,	(SL)>1
Novo Sarajevo		
RS	(SC) 2 (SE) 1 (MSE) 2 (MCSH) 2 (TE) 4 (SD)	(CI) 10, 151m Jaharina
Pale	(SC) 2, (SF) 1, (MSF) 2, (MCSH) 3, (TF) 4, (SP) 1, (Trim) 1,	(SL) 10, 15km Jahorina, (Biathlon) Jahorina
Rogatica	(SC) 1, (MSF) 2, (MCSH) 3	(SL) 400m
Rudo	(SC) 1, (MSF) 1, (Other sport infrastructure) 3	
Sokolac	(SC) 2, (S) 1, (MCSH) 2, (MSF) 3,	(Ski walking) 1
Stari grad RS	(MSF) 1	
Trnovo RS	(MCSH) 1, (MSF) 9, (MH) 2,	(SL) 1
Višegrad	(SC) 1, (S) 1, (MCHS) 1, (MFS) 2	

Figure 74. Sports infrastructure per Municipalities in SMR for the year 2002

Legend: SC – Sport and recreation centre, SF – Soccer field, S – stadium, MSF – Multipurpose open sport fields, MCSH – Multipurpose closed sport halls, MH - Mountain house, HH – Hunting House, FH – Fishing house, SP – Swimming pool, SL – ski lift, SP – Shoot practicing centre, TF – Tennis fields

# 7.2. WINTER TOURISM AND POTENTIALS

Winter sports and tourism potentials are very wide given that there numerous major and minor ski resorts for down hill skiing, cross country skiing, ski jumping, snow boarding, skimobile, general winter hiking and climbing in the SMR, but the problems and obstacles related to those are enormous. Big portion of the land in these areas is not de-mined which restricts and limits the potential capacities. Privatization of majority of these areas and facilities is virtually non-existing, which leads to a void for future funding, investment and/or development.

In many of these potential tourism locations the infrastructure, facilities and equipment is destroyed, unusable or completely missing. It is evident that bigger capital injections would be necessary to bring the capabilities and capacities to the normal and acceptable standards. These locations have very limited or non-existent overnight capabilities, restaurants, and other amenities required for this type of resort. Finally, due to a general delay in privatization, as well as illegal management and control of these winter resort resources (i.e. ZOI 84/99), it is obvious that the perspective of these facilities is not good unless put as a priority in the SMR, as well as the entire country.

No investors either local or foreign, have not been willing so far to get involved whatsoever in the recovery, restoration, designing and development, or improvement of operations and management in any of these potential lucrative resorts.

Major potentials in the SMR are the Olympic Mountains such as Jahorina, Bjelasnica and Igman. Some infrastructure has been repaired (i.e., famous hotel etc.) and on these mountains some of the skiing potentials are in use, but not in full capacities or capabilities. The vicinity of the resorts to Sarajevo town as the capital of BiH provides additional potential for development of winter tourism in the surrounding Olympic Mountains. So far, these mountains are in a state of limbo without any type of future plans.

8. AGRICULTURE IN SMER

#### 8.1. LAND USE

It does not make any sense to describe the quality of land use in the SMER as the" highest and best use". The cities comprise of the residential areas mixed with industrial, commercial and residential areas with houses built on the top of each other, without any consideration for neighbours or privacy, without zoning or planning, without standards/regulations or codes complied with, as well as without any enforcement and with the corruption present everywhere.

More rural or agricultural communities are faced with similar problems as the big cities with the bunch of housing near the centres. However, major problem is, not caused by the war, various ethnic migrations to the cities for safety and work purposes, as a result of the lack of commercial bank funding programs and proper planning and management of the available agricultural land. War destruction happened in many areas of the SMR and there were lots of people who worked on land, but without IC and government promotion, without domestic product protections, enforced laws and regulations, and adopted standards, the land will never be put to the highest and best use, if used at all. In the SMR, there is little land favourable for farming and animal herding and as recently experienced, the land is rather sold for housing and commercial plants, thus permanently diminishing and decreasing the agricultural potential and capacities.

The process of return is still not completed nor fully implemented. Hence, there are citizens who can not access their properties, work on their land and create revenues. The additional issue is that many displaced persons have acostumed to leaving in new community, and they will probably not return back to their original communities.

There is available humanitarian aid from a number of NGO's for the "lucky ones" that do mange to claim the right and access to their property, to rebuild the destroyed houses, but no sustainability support to restart their businesses in order to become self-sustainable upon the return home.

Improper use of agricultural land is extensive and the main problem in some areas is that the small agricultural producers have no or have limited knowledge or support from existing Cooperatives and agriculture producer associations. Another limiting factor is a weak food processing industry that is just starting to develop. In the areas around the urban centres there is again population and the agriculture land available in semi-urban or sub-urban areas that are not good for extensive agricultural production.

Few areas in Sarajevo Macro Region that are not urban or semi-urban or forest and mountain areas can be used for intensive agricultural production:

- Sarajevo Filed –west part can be used for vegetable production and greenhouses
- Drina river valley can be used for vegetable production and greenhouses as well as fruit production
- North part of Bosna river valley can be used for vegetable production and greenhouses, as well as fruit production
- Romanija plateau can be used for cattle growing and sheep pasturing
- River valleys between high mountains can be used for cattle growing and sheep pasturing

#### 8.2. LEVEL OF AGRICULTURAL PRODUCTION IN SMER

The agriculture production levels in the SMER are far below the potential and/or pre-war capacities. This was caused primarily due to the migrations resulting from the recent war, but also due to the loss of markets. The agricultural businesses in the past period that used to be rather profitable, currently suffers from non-profitability and cannot be maintained by selling domestic products at the open markets.

Most of the agricultural business activities in the SMER were mainly small private farms before the war that were limited according to the law saying that only 10 hectares or less could be owned with less than 3.2 hectors on average being farmed. Currently, the amount of useable agricultural land being actively farmed is even lower in hectares than before the war.

The methods are old and inefficient, the soil is used up and farmers are mostly old people trying to survive from the land. They lack updated training, modern knowledge, modern equipment, modern business practices, and any entrepreneurial spirit or encouragement. They also suffer from the lack of domestic production protections (as well as no related incentives) by the government in relation to the foreign imports and dumping of cheep products to this market.

Below tables present the data on the level of agricultural activities in the Sarajevo Macro Region per Municipalities.

This table gives the different types of agricultural associations and farmers association in Sarajevo Macro Region. Most of these associations are at the municipal level. The role of the farmers Association does not relate only to farmers, but also to livestock producers in some cases. Sometimes the Farmers Association is at the same time the association of honeybee producers and livestock producers.

Municipality Association of agricultural producers **Comments** Breza (AF) 1, (AHP) 1 Olovo (AF) 2, (AHP) 1 Vares 0 Visoko (AF) 1 Foca/Ustikolina (AF) 1 Gorazde Pale Praca 0 **Fojnica** (AF) 1 **Kiseljak** Kresevo 0 0 Centre Hadzici (AF) 1 Ilidza (AF) 3 Ilijas (AF) 2 Novi Grad 0 Novo Sarajevo 0 Stari Grad 0 Trnovo (AF) 1 Vogosca (AF) 1, (AHP) 1 Total from FBiH (AF) 14, (AHP) 3 Cajnice (AF) 1, (AHP) 1 Foca/Srbinje (AF) 1, (AHP) 1, (ALP) 1 Gorazde RS 0 Ilidža RS 0 Kalinovik (AF) 1 Novo Sarajevo RS Pale (AF) 3 Rogatica (AF) 3 Rudo (AF) 1, (AHP) 1, (AFP) 1 Sokolac (AF) 2 Stari grad RS 0 Trnovo RS 0 Višegrad (AF) 2 Total from RS (AF) 14, (AHP) 3, (ALP) 1, (AFP) 1 Total in SMR (AF) 28, (AHP) 6, (ALP) 1, (AFP) 1

Figure 75. Associations of agricultural producers per Municipalities in SMR for the year 2002

Legend: AF-Association of farmers, AHP-Association of honeybee producers, ALP-Association of livestock producers, AFP-Association of fruit producers

Tables below show the structure of the land use in Sarajevo Macro Region per Municipalities.

		Municipality Vis	soko		
Type		roperty (ha)		operty (ha)	TOTAL
	Cultivated	Not cultivated	Cultivated	Not cultivated	
Fields	3528	1678	30	2636	7872
Fruit	535	440	-	455	1420
Grass	1380	-	-	116	1496
Grassland	509	-	-	253	762
High cultivated	-	-	-	-	-
(greenhouses)					
Meliorated land.	-	-	-	-	
Forests	-	4745	-	7765	12510
TOTAL	5952	6863	30	11225	24070
Not arable land		792	-	-	792
	Muni	cipality Foca/U	stikolina	1	
Туре		roperty (ha)		operty (ha)	TOTAL
	Cultivated	Not	Cultivated	Not cultivated	
		cultivated			
Fields	100	10	20	3	133
Fruit	240	60	-	-	300
Grass	50	-	-	-	50
Grassland	40	300	-	-	340
High cultivated	0,1	-	-	-	0,1
(greenhouses)					
Meliorated land.	1	-	-	-	1
Forests	-	-	-	9000	9000
TOTAL	531,1	370	20	9003	9924,1
Not arable land	-	-	-	-	
	<u> </u>	Gorazde		<u> </u>	
Туре	Private pr	roperty (ha)	Public property (ha)		TOTAL
	Cultivated	Not cultivated	Cultivated	Not cultivated	
Fields					
Fruit					
Grass					
Grassland					
High cultivated					
(greenhouses)					
Meliorated land.					
Forests					
TOTAL					
Not arable land					

Figure 76c. Land use for in agriculture sector and forestry per Municipalities in SMR for 2002

	Mı	unicipality Pale/	Praca		
Туре	Private property (ha)			operty (ha)	TOTAL
	Cultivated	Not cultivated	Cultivated	Not cultivated	
Fields	90	44	-	-	134
Fruit	234	-	-	-	234
Grass	70	320	-	-	390
Grassland	870	210	-	-	1090
High cultivated	-	-	-	-	-
(greenhouses)					
Meliorated land.	-	-	-	-	
Forests	-	-	-	8000	8000
TOTAL	1273,1	574	-	8000	9847,1
Not arable land	-	-	-	-	-
	N	Aunicipality Foj	nica		
Туре		roperty (ha)		operty (ha)	TOTAL
	Cultivated	Not	Cultivated	Not cultivated	
		cultivated			
Fields	1915	500	-	48	2463
Fruit	168	-	-	15	183
Grass	1355	303	16	41	1715
Grassland	576	-	700	1100	2376
High cultivated	-	-	-	-	-
(greenhouses)					
Meliorated land.	-	-	-	-	-
Forests	1310	-	22021	-	23331
TOTAL	5324	803	22737	1204	30068
Not arable land	-	153	-	332	485
	N	<b>Iunicipality Kis</b>	eljak		
Type	Private pr	roperty (ha)	Public pr	operty (ha)	<b>TOTAL</b>
	Cultivated	Not cultivated	Cultivated	Not cultivated	
Fields					
Fruit					
Grass					
Grassland					
High cultivated					
(greenhouses)					
Meliorated land.					
Forests					
TOTAL					
Not arable land					

Figure 76d. Land use for in agriculture sector and forestry per Municipalities in SMR for 2002

	N	<i>Junicipality Kre</i>	sevo		
Туре	Private property (ha)		_	operty (ha)	TOTAL
71	Cultivated	Not cultivated	Cultivated	Not cultivated	
Fields	2166	-	-	-	2166
Fruit	102	-	-	-	102
Grass	591	-	40	-	631
Grassland	293	-	285	-	578
High cultivated	-	-	-	-	-
(greenhouses)					
Meliorated land.	-	-	-	-	-
Forests	672	-	10400	-	11072
TOTAL	3824	-	10725	-	14549
Not arable land	240	-	-	-	240
	Ĩ	Municipality Cel	ntar		
Туре	Private pr	roperty (ha)	Public pr	operty (ha)	TOTAL
	Cultivated	Not	Cultivated	Not cultivated	
		cultivated			
Fields	96,6	208,4	-	55,0	360
Fruit	205,0	70,0	-	58,0	333
Grass	5,0	459,0	-	-	464
Grassland	-	142,0	-	234,0	376
High cultivated	-	-	-	-	-
(greenhouses)					
Meliorated land.	-	-	-	-	-
Forests	294,0	40,0	697,0	30,0	1061
TOTAL	645,6	919,4	697,0	377,0	2594
Not arable land	-	163,0	-	473,0	636
	Λ	Aunicipality Had	dzici	•	
Туре		roperty (ha)	Public property (ha)		TOTAL
7-	Cultivated	Not	Cultivated	Not cultivated	
		cultivated			
Fields	1100	11	32	-	1143
Fruit	15	3	2	-	20
Grass	2800	194	120	-	3114
Grassland	4905	50	5	-	4960
High cultivated	-	-	-	-	-
(greenhouses)					
Meliorated land.	-	-	-	-	-
Forests	1420	-	12810	-	14230
TOTAL	10240	258	12969	-	23467
Not arable land	-	500	-	3351	3851

Figure 76e. Land use for in agriculture sector and forestry per Municipalities in SMR for 2002

	1	Municipality Ilid	lza		
Туре		operty (ha)		operty (ha)	TOTAL
• •	Cultivated	Not	Cultivated	Not cultivated	
		cultivated			
Fields	1.446,00	540,62	265,00	298,26	2.545,88
Fruit	364,29	-	159,32	-	523,61
Grass	696,00	-	302,22	-	998,22
Grassland	282,00	-	302,49	-	584,49
High cultivated	-	-	-	-	-
(greenhouses)					
Meliorated land.	-	-	-	-	-
Forests	1.748,84	-	5.008,35	-	6.757,19
TOTAL	4.537,13	540,62	6.037,38	298,26	11.409,39
Not arable land	-	288,74	-	975,60	1.264,34
		Municipality Ilij	as	1	
Туре		operty (ha)		operty (ha)	TOTAL
	Cultivated	Not	Cultivated	Not cultivated	
		cultivated			
Fields	417	2865	-	173	3455
Fruit	358	-	-	11	396
Grass	5527	-	-	126	5653
Grassland	1179	1525	-	919	3703
High cultivated	-	-	-	-	-
(greenhouses)					
Meliorated land.	-	-	-	-	-
Forests	-	-	-	18780	18780
TOTAL	7481	4390	-	20009	31880
Not arable land	-	-	-	-	
	Mu	nicipality Novi	Grad	l l	
Type		operty (ha)		operty (ha)	TOTAL
	Cultivated	Not	Cultivated	Not cultivated	
		cultivated			
Fields	924	-	-	210	1.134
Fruit	375	-	-	25	400
Grass	461	-	-	154	615
Grassland	167	-	-	42	209
High cultivated	-	-	-	-	-
(greenhouses)					
Meliorated land.	-	-	-	-	-
Forests	1.038	-	-	257	1.295
TOTAL	2.965	-	-	688	3.653
Not arable land	285	-	_	857	1.143

Figure 76f. Land use for in agriculture sector and forestry per Municipalities in SMR for 2002

Municipality Novo Sarajevo **Type** Private property (ha) Public property (ha) **TOTAL** Cultivated Not Cultivated Not cultivated cultivated Fields Fruit Grass Grassland High cultivated (greenhouses) Meliorated land. Forests TOTAL Not arable land Municipality Stari Grad *Type* Private property (ha) Public property (ha) **TOTAL** Not cultivated **Cultivated** Not **Cultivated** cultivated Fields 98 354 32 484 -298 47 43 388 Fruit -2405 96 2502 Grass -1423 Grassland 1061 2484 0.1 0,1 High cultivated (greenhouses) Meliorated land. \_ \_ 200 200 Forests -396.1 1794 6057,1 3867 TOTAL -666 666 Not arable land Municipality Trnovo FBiH Private property (ha) Type Public property (ha) **TOTAL** Not cultivated Cultivated Not Cultivated cultivated Fields 75 3 78 417 4237 3820 Fruit \_ 5788 7156 12944 Grass Grassland High cultivated (greenhouses) 1023 17368 18391 Meliorated land. 1000 17300 18300 Forests 13047 40876 40876 TOTAL Not arable land

Figure 76g. Land use for in agriculture sector and forestry per Municipalities in SMR for 2002

		unicipality Vogo	osca		
Туре		operty (ha)	Public property (ha)		TOTAL
	Cultivated	Not cultivated	Cultivated	Not cultivated	
Fields	565	178	-	47	790
Fruit	319	248	-	33	600
Grass	727	106	-	68	901
Grassland	39	29	-	46	114
High cultivated	-	-	-	-	-
(greenhouses)  Meliorated land.	_	_	_	_	_
Forests	1100	1120		1704	3944
TOTAL	2750	1681	_	1898	6329
	120	170		290	290
Not arable land			•	290	290
Tuna		Iunicipality Cajn		on outs. (lea)	TOTAL
Type	Cultivated	operty (ha) Not	Cultivated	operty (ha) Not cultivated	IOIAL
		not cultivated	Cuitivatea	Noi cultivatea	
Fields	1000	-	-	-	1000
Fruit	160	107	-	-	267
Grass	1500	1404	-	-	2904
Grassland	1817	-	-	-	1817
High cultivated	10	-	-	-	10
(greenhouses)					
Meliorated land.	-	-	-	-	-
Forests	2513	-	-	8867	11380
TOTAL	7000	1511	-	8867	17378
Not arable land	223	-	-	-	
	Mun	icipality Foca/S	rbinje		
Туре		operty (ha)		operty (ha)	TOTAL
•	Cultivated	Not	Cultivated	Not cultivated	
		cultivated			
Fields	14087	-	-	-	14.087
Fruit	2682	-	-	-	2.682
Grass	3405	-	-	-	3.405
Grassland	10482	-	-	-	10.482
High cultivated	-	-	-	-	-
(greenhouses)					
Meliorated land.	-	-	-	-	-
Forests	-	-	-	68000	68000
TOTAL	30656	-	-	68000	98656
Not arable land	-	-	-	3.869	3.869

Figure 76h. Land use for in agriculture sector and forestry per Municipalities in SMR for 2002

	Mi	unicipality Gora	zde RS		
Type	Private pro			roperty (ha)	TOTAL
•	Cultivated	Not cultivated	Cultivated	Not cultivated	
Fields	51-	-	-	2691	2742
Fruit	5	-	-	-	5
Grass	-	-	-	-	-
Grassland	-	-	-	-	-
High cultivated	-	-	-	-	-
(greenhouses)					
Meliorated land.	-	-	-	-	-
Forests	-	-	-	2706	2706
TOTAL	56	-	-	5397	5453
Not arable land	-	-	-	-	-
	N	Aunicipality Kal	lnovik		
Туре	Private pro	operty (ha)	Public p	property (ha)	TOTAL
	Cultivated	Not	Cultivated	Not cultivated	
		cultivated			
Fields	410	325	-	570	1305
Fruit	128	22	-	8	158
Grass	44	-	-	68	
Grassland	88	560	-	1008	2068
High cultivated	-	-	-	-	-
(greenhouses)					
Meliorated land.	-	-	-	-	-
Forests	-	307	-	19712	22772
TOTAL					
Not arable land	-	331	-	1311	1642
		<i><b>Junicipality Ilid</b></i>	za RS		
Туре	Private pro	operty (ha)	Public p	TOTAL	
	Cultivated	Not	Cultivated	Not cultivated	
		cultivated			
Fields	550	-	550	-	1100
Fruit					
Grass					
Grassland	-	-	-	-	-
High cultivated	-	-	-	-	-
(greenhouses)					
Meliorated land.	-	-	-	-	-
Forests	435	-	-	440	875
TOTAL	985	-	550	440	1975
Not arable land	-	-	-	235	235

Figure 76i. Land use for in agriculture sector and forestry per Municipalities in SMR for 2002

		ripality Novo Sai			
Type	Private property (ha)			operty (ha)	TOTAL
	Cultivated	Not cultivated	Cultivated	Not cultivated	
Fields					
Fruit					
Grass					
Grassland					
High cultivated					
(greenhouses)					
Meliorated land.					
Forests					
TOTAL					
Not arable land					
	L	Municipality Pa	ale	1	
Type	Private pr	roperty (ha)		operty (ha)	TOTAL
<b>71</b>	Cultivated	Not	Cultivated	Not cultivated	
		cultivated			
Fields	2082	-	-	112	2194
Fruit	248	-	-	4	252
Grass	9880	-	-	621	10501
Grassland	2157	-	-	3669	5826
High cultivated		-	-	-	-
(greenhouses)					
Meliorated land.		-	-		
Forests	2932	-	-	32660	35592
TOTAL	17299	-	-	37066	54365
Not arable land	-	294	-	883	1177
1100 010010 10110		 Iunicipality Rog	atica		
Туре		roperty (ha)		operty (ha)	TOTAL
1Jpc	Cultivated	Not	Cultivated	Not cultivated	101112
		cultivated		1100 0000000000000000000000000000000000	
Fields	5689	-	-	326	6015
Fruit	296	_	-	18	314
Grass	11258	_	-	984	12242
Grassland	3410	_	-	4809	8219
High cultivated	-	_	_	-	-
(greenhouses)					
Meliorated land.	_	-	-	-	
Forests	3283	-	_	32479	
TOTAL	23936	-	-	38616	62552
Not arable land	23730	-	-	1066	1066

Figure 76j. Land use for in agriculture sector and forestry per Municipalities in SMR for 2002

		Municipality Ru	do		
Туре		roperty (ha)		operty (ha)	TOTAL
21	Cultivated	Not cultivated	Cultivated	Not cultivated	
Fields	2614	-	-	130	2744
Fruit	555	-	-	34	589
Grass	3491	-	-	119	3610
Grassland	2570	-	-	3103	5673
High cultivated (greenhouses)	-	-	-		-
Meliorated land.	-	-	-	-	-
Forests	3334	-	-	17195	20529
TOTAL	12564	-	-	20581	33145
Not arable land		444	-	764	1208
TYOU WING TO TWILD	<i>N</i>		olac	<u> </u>	l
Type		roperty (ha)	1	operty (ha)	TOTAL
JF	Cultivated	Not	Cultivated	Not cultivated	
		cultivated			
Fields	-	-	-	-	-
Fruit	135	-	2	-	137
Grass	-	-	-	-	-
Grassland	6347	-	5938	-	12285
High cultivated	-	-	-	-	-
(greenhouses)					
Meliorated land.	-	-	-	-	-
Forests	5019	-	-	30558	35577
TOTAL	11501	-	5940	30558	47999
Not arable land	-	288	-	585	873
	Mui	nicipality Stari G	rad RS		
Туре		roperty (ha)		operty (ha)	TOTAL
	Cultivated	Not cultivated	Cultivated	Not cultivated	
Fields	120	80	_	200	400
Fruit	65	-	-	-	65
Grass	85	_	_	_	85
Grassland	500	2000	_	1500	4000
High cultivated	-	-	-	-	-
(greenhouses)	_				
Meliorated land.		-	_	_	_
Forests	-	450	-	4300	4750
TOTAL	770	2530		6000	.750
			-	1200	1200
Not arable land	-	-	-	1200	1200

Figure 76k. Land use for in agriculture sector and forestry per Municipalities in SMR for 2002

	Mul	nicipality Trnove	o RS		
Туре	Private pro			operty (ha)	TOTAL
	Cultivated	Not cultivated	Cultivated	Not cultivated	
Fields	-	-	-	-	-
Fruit	3	3	-	-	6
Grass	-	-	-	-	-
Grassland	-	1348	-	2262	3610
High cultivated (greenhouses)	-	-	-	-	-
Meliorated land.	-	-	-		-
Frosts	-	306	-	9475	19781
TOTAL	3	1657	-	11737	23397
Not arable land	-	-	-	-	-
	Mı	inicipality Viseg	rad		
Туре	Private pro	perty (ha)	Public pr	TOTAL	
	Cultivated	Not cultivated	Cultivated	Not cultivated	
Fields	815	2315		31	3161
Fruit	-	1878	_	68	1946
Grass	-	5584		96	5680
Grassland	-	2217	-	570	2787
High cultivated	-	-	-	-	-
(greenhouses)					
Meliorated land.	-	-	-	-	-
Forests	-	5268	-	23837	29105
TOTAL	815	17262	-	24602	42679
Not arable land	-	279	-	1824	2103

Total for Municipalities in FBiH within SMR							
Туре	Private pr	roperty (ha)	Private p	roperty (ha)	Total		
	Cultivated	Not cultivated	Cultivated	Not cultivated			
Fields	17142,5	7691,02	377	3594,26	28804,78		
Fruit	7888,39	918	161,32	1058	10025,71		
Grass	25899	4787	478,22	6410	38830,49		
Grassland	12410	3420	1292,49	6172	23294,49		
High cultivated	0,2	-	-	-			
(greenhouses)					0,2		
Meliorated	1024	-	-	-			
land.					1024		
Forests	16894,84	6305	75936,38	75609	174745,2		
TOTAL	81258,93	23121,02	78245,41	92843,26	275468,6		
Not arable	120	3566,74	-	11944,6	45213,8		

Figure 76l. Land use for in agriculture sector and forestry per Municipalities in FBiH in SMR for 2002

Total for Municipalities in RS within SMR							
Type	Private pro	operty (ha)	Private pr	operty (ha)	Total		
	Cultivated	Not cultivated	Cultivated	Not cultivated			
Fields	27418	2720	550	4060	34748		
Fruit	4277	2010	2	132	6421		
Grass	29663	6988	-	1888	41169		
Grassland	27371	6125	5938	16921	56355		
High cultivated	-	-	-	-			
(greenhouses)					0		
Meliorated	-	-	-	-			
land.					0		
Forests	17516	6331	-	250229	274076		
TOTAL	106245	24174	6490	273230	410139		
Not arable	223	1636	-	11737	11737		

Figure 76m. Land use for in agriculture sector and forestry per Municipalities in RS in SMR for 2002

Total for SMR					
Туре	Private property (ha)		Private p	roperty (ha)	Total
	Cultivated	Not cultivated	Cultivated	Not cultivated	
Fields	44560,5	10411,02	927	7654.26	63552,78
Fruit	12165,39	2928	163,32	1190	16446,71
Grass	56725,89	13339,02	478,22	8298	79999,49
Grassland	39781	9545	7230,49	23093	79649,49
High cultivated					
(greenhouses)	0,2	-	-	-	0,2
Meliorated					
land.	1024	-	-	-	1024
Forests	34410,84	12636	75936,38	325838	448821,2
TOTAL	187503,9	47295,02	84735,41	366073,3	685607,6
Not arable	221914,8	5202,74	_	23681,6	56950,8

Figure 76n. Land use for in agriculture sector and forestry per Municipalities in SMR for 2002

The tables below present types of cultures planted in the Sarajevo Macro Region per municipalities in the year 2002.

	Municipality	Breza	
Type of cultures	Private (u ha)	State (u ha)	TOTAL
Wheat	35	-	35
Industrial plants	-	-	-
Vegetables	167	-	167
Tea and spices	-	-	-
Grass	850	-	850
Strawberry's and other	5,5	-	5,5
Livestock food	1.400	-	1.400
Other	714	-	714
	Municipality	Olovo	
Type of cultures	Private (u ha)	State (u ha)	TOTAL
Wheat	44	, ,	- 44
Industrial plants	-		
Vegetables	69	1	50 219
Tea and spices	-		
Grass	80		- 80
Strawberries and other	-		
Livestock food	-		
Other	-		
	Municipality	Vares	
Type of cultures	Private (u ha)	State (u ha)	TOTAL
Wheat	28	-	28
Industrial plants	-	-	-
Vegetables	90	-	90
Tea and spices	-	-	-
Grass	94	-	94
Strawberries and other	-	-	-
Livestock food	-	-	-
Other	-	-	-
	Municipality 1	Visoko	
Type of cultures	Private (u ha)	State (u ha)	TOTAL
Wheat	792	9	801
Industrial plants	-	-	-
Vegetables	935	21	956
Tea and spices	-	-	-
Grass	1496	-	1496
Strawberries and other	10	-	10
Livestock food	3699	-	3699
Other	-	-	-

Figure 77a. Types of cultures planted per Municipalities in SMR for the year 2002

Municipality Foca/Ustikolina Private (u ha) **TOTAL** Type of cultures State (u ha) 20 20 Wheat Industrial plants -45 45 Vegetables \_ Tea and spices 40 40 Grass \_ Strawberries and other 3 3 5 5 Livestock food \_ 2 2 Other Municipality Gorazde **TOTAL** Type of cultures Private (u ha) State (u ha) Wheat Industrial plants Vegetables Tea and spices Grass Strawberries and other Livestock food Other Municipality Pale/Praca **TOTAL** Type of cultures Private (u ha) State (u ha) 1,2 1,2 Wheat Industrial plants 1.5 1.5 Vegetables Tea and spices 3,2 3,2 Grass Strawberries and other 1,5 1,5 1,7 1,7 Livestock food Other Municipality Centre Type of cultures Private (u ha) State (u ha) **TOTAL** 1,0 1,0 Wheat Industrial plants \_ Vegetables 76,1 76,1 Tea and spices --50.0 50.0 Grass Strawberries and other 19,5 19,5 Livestock food Other

Figure 77b. Types of cultures planted per Municipalities in SMR for the year 2002

	Municipality I	Hadzici	
Type of cultures	Private (u ha)	State (u ha)	TOTAL
Wheat	156	25	181
Industrial plants	-	-	-
Vegetables	532	5	537
Tea and spices	-	30	-
Grass	58	5	63
Strawberries and other	7	-	7
Livestock food	60	-	60
Other	80	-	80
	Municipality	Ilidza	
Type of cultures	Private (u ha)	State (u ha)	TOTAL
Wheat	160	-	160,00
Industrial plants	-	-	-
Vegetables	789	-	789,00
Tea and spices	-	-	-
Grass	696,00	302,22	998,22
Strawberries and other	11,00	-	11,00
Livestock food	497,00	265,00	762,00
Other	-	-	-
	Municipality	Ilijas	
Type of cultures	Private (u ha)	State (u ha)	TOTAL
Wheat	56	-	56
Industrial plants	-	-	-
Vegetables	306	-	306
Tea and spices	-	-	-
Grass	27	-	27
Strawberries and other	-	-	-
Livestock food	28	-	28
Other	-	-	-
	Municipality No	ovi Grad	
Type of cultures	Private (u ha)	State (u ha)	TOTAL
Wheat	86	-	-
Industrial plants	-	-	-
Vegetables	949	-	-
Tea and spices	-	-	-
Grass	461	154	615
Strawberries and other	46	-	-
Livestock food	98	-	-
Other	-	-	-

Figure 77c. Types of cultures planted per Municipalities in SMR for the year 2002

		Municipality Nove	Sarajevo		
Type of cultures		Private (u ha)	State (u ha)		TOTAL
Wheat		·	, , ,		
Industrial plants					
Vegetables					
Tea and spices					
Grass					
Strawberries and other					
Livestock food					
Other					
		Municipality Sta	uri Grad	l .	
Type of cultures		Private (u ha)	State (u ha)		TOTAL
Wheat		3	, , ,	-	3
Industrial plants		-		-	-
Vegetables		90		-	90
Tea and spices		-		-	-
Grass		6		-	6
Strawberries and other		-		-	-
Livestock food		-		-	-
Other		-		-	-
	•	Municipality T	Trnovo	•	
Type of cultures		Private (u ha)	State (u ha)		TOTAL
Wheat	19		-	19	
Industrial plants	-		-	-	
Vegetables	45		-	45	
Tea and spices	-		-	-	
Grass	150		-	150	
Strawberries and other	25		-	25	
Livestock food	5		-	5	
Other	-		-	-	
		Municipality V	ogosca		
Type of cultures		Private (u ha)	State (u ha)		TOTAL
Wheat		109,4	-		109,4
Industrial plants		-	-		-
Vegetables		367	-		367
Tea and spices		-	-		-
Grass		54	-		54
Strawberries and other		9,6	-		9,6
Livestock food		25	-		25
Other	-		_	-	

Figure 77d. Types of cultures planted per Municipalities in SMR for the year 2002

	Municipality	Cajnice	
Type of cultures	Private (u ha)	State (u ha)	TOTAL
Wheat	230		- 230
Industrial plants	-		
Vegetables	120		- 120
Tea and spices	-		
Grass	-		
Strawberries and other	10		- 10
Livestock food	10		- 10
Other	2		- 2
	Municipality Fo	ca/Srbinje	
Type of cultures	Private (u ha)	State (u ha)	TOTAL
Wheat	421		
Industrial plants	-		
Vegetables	369		
Tea and spices	-		
Grass	43		
Strawberries and other	-		
Livestock food	-		
Other	-		
	Municipality Go	orazde RS	<u> </u>
Type of cultures	Private (u ha)	State (u ha)	TOTAL
Wheat	22	-	22
Industrial plants	-	-	-
Vegetables	20	-	20
Tea and spices	-	-	-
Grass	-	-	-
Strawberries and other	5	-	5
Livestock food	4	-	4
Other	5	-	5
	Municipality I	lidza RS	
Type of cultures	Private (u ha)	State (u ha)	TOTAL
Wheat	6	2	8
Industrial plants	-		-
Vegetables	120	-	120
Tea and spices	-	-	-
Grass	-	-	-
Strawberries and other	5		5
Livestock food	32	-	32
Other	150	-	150

Figure 77e. Types of cultures planted per Municipalities in SMR for the year 2002

	Municipality K	alnovik	
Type of cultures	Private (u ha)	State (u ha)	TOTAL
Wheat	45	-	45
Industrial plants	-	-	-
Vegetables	220	-	220
Tea and spices	-	-	-
Grass	33	-	33
Strawberries and other	3	-	3
Livestock food	10	-	10
Other	2	-	2
	Municipality Novo S	Sarajevo RS	1
Type of cultures	Private (u ha)	State (u ha)	TOTAL
Wheat			
Industrial plants			
Vegetables			
Tea and spices			
Grass			
Strawberries and other			
Livestock food			
Other			
	Municipality	Pale	1
Type of cultures	Private (u ha)	State (u ha)	TOTAL
Wheat	32	-	32
Industrial plants	-	-	-
Vegetables	442	-	442
Tea and spices	-	-	-
Grass	145	-	145
Strawberries and other	8	-	8
Livestock food	-	-	-
Other	-	-	-
	Municipality R	ogatica	
Type of cultures	Private (u ha)	State (u ha)	TOTAL
Wheat	429	39	468
Industrial plants	-	-	-
Vegetables	390	36	426
Tea and spices	-	-	-
Grass	25	-	-
Strawberries and other	5	-	5
Livestock food	5	-	5
Other	-	-	-

Figure 77f. Types of cultures planted per Municipalities in SMR for the year 2002

	Municipality	Rudo	
Type of cultures	Private (u ha)	State (u ha)	TOTAL
Wheat	255	-	255
Industrial plants	-	-	-
Vegetables	335	-	335
Tea and spices	-	-	-
Grass	3491	-	3491
Strawberries and other	18	-	18
Livestock food	24	-	24
Other	-	-	-
	Municipality S	okolac	
Type of cultures	Private (u ha)	State (u ha)	TOTAL
Wheat	17	-	17
Industrial plants	-	-	-
Vegetables	156	15	171
Tea and spices	-	-	-
Grass	60	838	898
Strawberries and other	-	-	-
Livestock food	15	-	15
Other	-	-	-
	Municipality Sta	ari Grad	1
Type of cultures	Private (u ha)	State (u ha)	TOTAL
Wheat	-	-	-
Industrial plants	-	-	-
Vegetables	85	-	85
Tea and spices	-	-	-
Grass	223	-	223
Strawberries and other	-	-	-
Livestock food	18	-	18
Other	14	-	14
	Municipality Tr	novo RS	•
Type of cultures	Private (u ha)	State (u ha)	TOTAL
Wheat	-	-	-
Industrial plants	-	-	-
Vegetables	70	-	70
Tea and spices	-	-	-
Grass	1868	-	1868
Strawberries and other	-	-	-
Livestock food	8	-	8
Other	10	-	10

Figure 77g. Types of cultures planted per Municipalities in SMR for the year 2002

Municipality Visegrad					
Type of cultures	Private (u ha)	State (u ha)	TOTAL		
Wheat	430	-	430		
Industrial plants	-	-	-		
Vegetables	350	-	350		
Tea and spices	-	-	-		
Grass	25	-	25		
Strawberries and other	-	-	-		
Livestock food	-	-	-		
Other	-	-	-		

Figure 77h. Types of cultures planted per Municipalities in SMR for the year 2002

Total for Municipalities in FBiH within SMR Type of cultures Private (u ha) State (u ha) **TOTAL** 1510,6 34 Wheat 1544,6 Industrial plants Vegetables 4461,6 176 4637,6 Tea and spices 30 30 Grass 4065,2 461,22 4526,42 Strawberries and other 118,6 118,6 4439,6 265 4704,6 Livestock food 796 796 Other

Figure 77i. Types of cultures planted per Municipalities in FBiH within SMR for the year 2002

Total for Municipalities in RS within SMR				
Type of cultures	Private (u ha)	State (u ha)	TOTAL	
Wheat	1887	41	1928	
Industrial plants	-	-	-	
Vegetables	2677	51	2728	
Tea and spices	-	0	-	
Grass	5853	838	6691	
Strawberries and other	54	-	54	
Livestock food	126	-	126	
Other	183	-	183	

Figure 77j. Types of cultures planted per Municipalities in RS within SMR for the year 2002

Total for SMR				
Type of cultures	Private (u ha)	State (u ha)	TOTAL	
Wheat	3397,6	75	3472,6	
Industrial plants		0	0	
Vegetables	7138,6	227	7365,6	
Tea and spices		30	30	
Grass	9918,2	1299,22	11217,42	
Strawberries and other	172,6	0	172,6	
Livestock food	4565,6	265	4830,6	
Other	979	0	979	

Figure 77k. Types of cultures planted in SMR for the year 2002

The tables below show live stock fund and type of domestic animals farming in the Sarajevo Macro Region in 2002 per Municipalities.

	Municipality	Breza	
Type of livestock and domestic animals	Private (no)	State (no)	TOTAL
Cattle	1.910	-	1.910
Pigs	-	-	-
Poultry	13.000	-	13.000
Sheep	4.100	-	4.100
Goats	400	-	400
	Municipality	Olovo	-
Type of livestock and	Private (no)	State (no)	TOTAL
domestic animals			
Cattle	2.700	-	2.700
Pigs	-	-	-
Poultry	35.000	-	35.000
Sheep	6.000	-	6.000
Goats	300	-	300
	Municipality	Vares	-1
Type of livestock and	Private (no)	State (no)	TOTAL
domestic animals			
Cattle	2.181	-	2.181
Pigs	274	-	274
Poultry	11.100	-	11.100
Sheep	6.693	-	6.693
Goats	290	-	290
	Municipality	Visoko	1
Type of livestock and domestic animals	Private (no)	State (no)	TOTAL
Cattle	4700	-	4700
Pigs	-	-	-
Poultry	25000	-	25000
Sheep	9000	-	9000
Goats	500	-	500
	Municipality Foca	/Ustikolina	
Type of livestock and	Private (no)	State (no)	TOTAL
domestic animals			
Cattle	280	-	280
Pigs	7	-	7
Poultry	6 000	-	6 000
Sheep	1 700	-	1 700
Goats	350	-	350

Figure 78a. Cattle, pigs, poultry, sheep and goats per municipalities in SMR for the year 2002

	Municipality G	orazde	
Type of livestock and domestic animals	Private (no)	State (no)	TOTAL
Cattle			
Pigs			
Poultry			
Sheep			
Goats			
	Municipality Pal	le/Praca	
Type of livestock and domestic animals	Private (no)	State (no)	TOTAL
Cattle	300	-	300
Pigs	-	-	-
Poultry	4500	-	4500
Sheep	2800	-	2800
Goats	100	-	100
	Municipality F	ojnica e e e e e e e e e e e e e e e e e e e	<u> </u>
Type of livestock and domestic animals	Private (no)	State (no)	TOTAL
Cattle	2.378	-	2.378
Pigs	276	-	276
Poultry	9.660	-	9.660
Sheep	5.580	-	5.580
Goats	370	-	370
	Municipality K	iseljak	
Type of livestock and domestic animals	Private (no)	State (no)	TOTAL
Cattle			
Pigs			
Poultry			
Sheep			
Goats			
	Municipality K		
Type of livestock and	Private (no)	State (no)	TOTAL
domestic animals			
Cattle	590	-	590
Pigs	200	-	200
Poultry	5000	-	5000
Sheep	950	-	950
Goats	160	-	160

Figure 78b. Cattle, pigs, poultry, sheep and goats per municipalities in SMR for the year 2002

	Municipality (	Centre				
Type of livestock and domestic animals	Private (no)	State (no)	TOTAL			
Cattle	218	-	218			
Pigs	10	-	10			
Poultry	2000	-	2000			
Sheep	929	-	929			
Goats	100	-	100			
	Municipality H	<i>Hadzici</i>	-			
Type of livestock and domestic animals	Private (no)	State (no)	TOTAL			
Cattle	2371	-	2371			
Pigs	18	-	18			
Poultry	77440	-	77440			
Sheep	3346	-	3346			
Goats	280	-	280			
	Municipality Ilidza					
Type of livestock and domestic animals	Private (no)	State (no)	TOTAL			
Cattle	852	620	1.472			
Pigs	233	-	233			
Poultry	16.878	-	16.878			
Sheep	1.789	-	1.789			
Goats	194	-	194			
	Municipality	Ilijas				
Type of livestock and domestic animals	Private (no)	State (no)	TOTAL			
Cattle	1726	-	1726			
Pigs	67	-	67			
Poultry	9954	-	9954			
Sheep	5397	-	5397			
Goats	180	-	180			
	Municipality No	ovi Grad				
Type of livestock and	Private (no)	State (no)	TOTAL			
domestic animals		. ,				
Cattle	700	-	700			
Pigs	75	-	75			
Poultry	16.000	-	16.000			
Sheep	560	-	560			
Goats	390	-	390			

Figure 78c. Cattle, pigs, poultry, sheep and goats per municipalities in SMR for the year 2002

	Municipality Nove	Sarajevo	
Type of livestock and domestic animals	Private (no)	State (no)	TOTAL
Cattle			
Pigs			
Poultry			
Sheep			
Goats			
	Municipality Sta	uri Grad	<u> </u>
Type of livestock and	Private (no)	State (no)	TOTAL
domestic animals		, ,	
Cattle	248	-	248
Pigs	4	-	4
Poultry	2453	-	2453
Sheep	1022	-	1022
Goats	121	-	121
	Municipality Trne	ovo FBiH	<u>.</u>
Type of livestock and	Private (no)	State (no)	TOTAL
domestic animals			
Cattle	750	-	750
Pigs	-	-	-
Poultry	700	-	700
Sheep	6000	-	6000
Goats	-	-	-
	Municipality V	ogosca	
Type of livestock and domestic animals	Private (no)	State (no)	TOTAL
Cattle	603	-	603
Pigs	-	-	-
Poultry	4290	-	4290
Sheep	4210	-	4210
Goats	460	-	460
	Municipality C	Cajnice	<b>'</b>
Type of livestock and	Private (no)	State (no)	TOTAL
domestic animals		, ,	
Cattle	500	-	500
Pigs	1000	-	1000
Poultry	500	-	500
Sheep	3000	-	3000
Goats	100		100

Figure 78d. Cattle, pigs, poultry, sheep and goats per municipalities in SMR for the year 2002

	Municipality I	Foca/Srbinje	
Type of livestock and domestic animals	Private (no)	State (no)	TOTAL
Cattle	2.753	47	2.800
Pigs	2.400	1.044	3.444
Poultry	7.500	13.000	20.500
Sheep	5.400	135	5.535
Goats	450		450
	Municipality	Gorazde RS	
Type of livestock and domestic animals	Private (no)	State (no)	TOTAL
Cattle	80	-	80
Pigs	100	-	100
Poultry	-	-	-
Sheep	700	-	700
Goats	20	-	20
Gould	Municipality	y Ilidza RS	1 -
Type of livestock and	Private (no)	State (no)	TOTAL
domestic animals		State (110)	101112
Cattle	1000	-	1000
Pigs	2200	300	2500
Poultry	5000	20000	25000
Sheep	790	-	790
Goats	300	-	300
	Municipality	, Kalnovik	
Type of livestock and domestic animals	Private (no)	State (no)	TOTAL
Cattle	158	-	158
Pigs	246	-	246
Poultry	433	-	433
Sheep	398	-	398
Goats	30	-	30
	Municipality Nov	vo Saraievo RS	
Type of livestock and domestic animals	Private (no)	State (no)	TOTAL
Cattle			
Pigs			
Poultry			
Sheep			
Goats			

Figure 78e. Cattle, pigs, poultry, sheep and goats per municipalities in SMR for the year 2002

	Municipa	lity Pale		
Type of livestock and domestic animals	Private (no)	State (no)	TOTAL	
Cattle	6250	-	6250	
Pigs	575	-	575	
Poultry	13298	-	13298	
Sheep	18 000	-	18 000	
Goats	458	-	458	
	Municipality	y Rogatica	<b>'</b>	
Type of livestock and domestic animals	Private (no)	State (no)	TOTAL	
Cattle	4900	-	4900	
Pigs	3000	-	3000	
Poultry	8500	-	8500	
Seeps	29400	650	30050	
Goats	350	-	350	
Municipality Rudo				
Type of livestock and domestic animals	Private (no)	State (no)	TOTAL	
Cattle	3860	-	3860	
Pigs	1930	-	1930	
Poultry	11580	-	11580	
Sheep	9650	-	9650	
Goats	100	-	100	
	Municipalit	y Sokolac	<b>'</b>	
Type of livestock and domestic animals	Private (no)	State (no)	TOTAL	
Cattle	4750	-	475o	
Pigs	3300	-	3300	
Poultry	20000	-	20000	
Sheep	25000	-	25000	
Goats	320	-	320	
	Municipality S	tari Grad RS	<b>'</b>	
Type of livestock and	Private (no)	State (no)	TOTAL	
domestic animals				
Cattle	140	-	140	
Pigs	230	-	230	
Poultry	457	-	457	
Sheep	356	-	356	
Goats	45	-	45	

Figure 78f. Cattle, pigs, poultry, sheep and goats per municipalities in SMR for the year 2002

Municipality Trnovo RS Type of livestock and State (no) **TOTAL** Private (no) domestic animals 150 150 Cattle 250 250 Pigs -300 300 Poultry 370 370 Sheep Goats 50 50 Municipality Visegrad **TOTAL** Type of livestock and State (no) Private (no) domestic animals 1600 1600 -Cattle Pigs 900 900 9000 9000 Poultry 1850 Sheep 1850 500 500 Goats

Figure 78g. Cattle, pigs, poultry, sheep and goats per municipalities in SMR for the year 2002

Total for Municipalities in FBiH within SMR **TOTAL** Type of livestock and Private (no) State (no) domestic animals 18115 620 18735 Cattle 1164 Pigs 1164 **Poultry** 149356 149356 Sheep 43301 43301 4195 4195 Goats

Figure 78h. Cattle, pigs, poultry, sheep and goats per municipalities in FBiH within SMR for the year 2002

Total for Municipalities in RS within SMR				
Type of livestock and domestic animals	Private (no)	State (no)	TOTAL	
Cattle	26141	47	26188	
Pigs	13755	1344	15099	
Poultry	69143	20013	89156	
Sheep	71568	785	72353	
Goats	2723	0	2723	

Figure 78i. Cattle, pigs, poultry, sheep and goats per municipalities in RS within SMR for the year 2002

Total for SMR				
Type of livestock and domestic animals	Private (no)		State (no)	TOTAL
Cattle	44256	667		44923
Pigs	14919		1344	16263
Poultry	218499		20013	238512
Sheep	114869		785	115654
Goats	6918		0	6918

Figure 78j. Cattle, pigs, poultry, sheep and goats in SMR for the year 2002

## 9. TOURISM IN SMR

Tourism in SMR has never been observed like a significant economic activity, except in the case of winter tourism (Olympic Mountains), so that some serious components of modern tourist offers have been missed.

Except for the winter tourism in this region, tourism as such has never been developed and no other concepts of tourism have been explored for which, perhaps, there are available capacities. Some of these areas are the following:

- Summer mountain tourism (visits to the wild forests or rafting on wild rivers)
- Active sport tourism (rock climbing, mountain tours, paragliding, bungee jumping, physical and conditional preparation for sport teams, etc.)
- Village tourism (countryside tourism, domestic kitchen, traditional food, etc.)
- Historic tourism and religious tourism (especially in the old Sarajevo City) and some other historic places nearby.

With the construction of the highway in a corridor CV, which will connect central Europe and Adriatic, there will occur a new concept of so far undeveloped tourism in this region which is transit tourism that can be easily combined with some other tourist offers.

## 9.1. EXISTING CAPACITIES

In the period before Olympic Games, Sarajevo started major projects focused on increase of tourist capacities and infrastructure that could support this type of huge sport manifestation. In the period from 1980 until 1984 major facilities for winter tourism were constructed in the SMR.

Ski centres Bjelasnica, Jahorina Trebevic and Igman were constructed and developed. There were about 10 been about 20 large ski lifts, as well as one bobsled facility, biathlon and ski run facility, and two large ski jump facilities. All Olympic Mountains had been supplied with all the needed infrastructure including good road communication, parking places, etc.

At that time two large facilities for ice skating had been constructed or renewed in Sarajevo (Zetra and Skenderija) with the entire infrastructure.

Considering the hotel capacities, 1 large hotel was constructed(Holiday Inn) and several others were renewed (Bristol, Grand, Ilidza complex, etc.)

Unfortunately, the other part of the region was not in need for this sport and tourism infrastructure development.

Except for Sarajevo, in the other cities there is no large hotel even today. In all the cities in the region before 1992 there were small public hotels, most of which were destroyed during the war and not repaired in the post war period. Some of these places have changed the purpose of use meanwhile.

Instead of those public hotels in urban enters today it is possible to find small motels along the main roads or combined restaurant with several rooms for overnighting, the purpose of which is obviously for transit tourism only.

Most tourist facilities around Sarajevo after 1992 were destroyed and only some of them have been renewed, such as one hotel on Bjelasnica and 3 hotels on Jahorina. Vertical transport for skiers on these mountains functions but with much smaller capacity.

Current hotel capacities in Sarajevo are increased with the construction of new large hotels during the post war period (Hotel Saraj, Vila Orient, Meridian, Grand, Hollywood, Sunce, etc.).

Table below presents tourist capacities of the Sarajevo Macro Region per Municipalities in the year 2002.

Municipality	Tourism infrastructure	Comments
Breza	(H)(P)2	
Olovo	(H)(P)3, (T)(S)1	
Vares	0	
Visoko	(H)(P) 5,	
Foca/Ustikolina	(H)(P) 2	
Gorazde		
Pale/Praca	0	
Fojnica	(H)(S) 1, (H)(P) 1, (T)(S) 1,	
Kiseljak		
Kresevo	(H)(P) 3,	
Centre	(H)(P) 9, (H)(S) 1	
Hadzici	(H)(P) 2,	
Ilidza	(H)(P) 4, (T)(P) 1	
Ilijas	(H)(P) 1	
Novi Grad	(H)(P) 2	
Novo Sarajevo	(H)(P) 4, (H)(S) 1	
Stari Grad	(H)(P) 8 (H)(S) 2	
Trnovo	(H)(S) 1	
Vogosca	(H)(S) 3, (H)(P) 4	
Total for FBiH	(H)(P) 50, $(H)(S)$ 5, $(T)(S)$ 2, $(T)(P)$ 1	
Cajnice	(H)(S) 1,	
Foca/Srbinje	(H)(S) 2, (H)(P) 1	
Gorazde RS	0	
Ilidža RS	(H)(S) 2, (H)(P) 1	
Kalinovik	(H)(S) 1,	
Novo Sarajevo RS		
Pale	(H)(S) 3, (H)(P) 9	
Rogatica	(H)(S) 1,	
Rudo	0	
Sokolac	(H)(S) 1, (H)(P) 1	
Stari grad RS	0	
Trnovo RS	(H)(S) 1,	
Višegrad	(H)(S) 3, (T)(S) 1,	
Total for RS	(H)(P) 50, $(H)(S)$ 5, $(T)(S)$ 2, $(T)(P)$ 1	
Total in SMR	(H)(P) 12, $(H)(S)$ 15, $(T)(S)$ 1	

Figure 79. Hotels, motels and other tourist lodging infrastructure per Municipalities in SMR for the year 2002

Legend: H –Hotels and Motels, T – Thermal and healing water capacities with the accommodation, P – private sector, S – State sector

Administrative Unit	HP	HS	TP	TS
Total from FBiH	50	5	2	1
Total from RS	12	15	-	1
Total in SMR	62	20	2	1

Figure 79a. Hotels, motels and other tourist lodging infrastructure in SMR for the year 2002

Legend: H –Hotels and Motels, T – Thermal and healing water capacities with the accommodation, P – private sector, S – State sector

## 9.2. POTENTIALS FOR DEVELOPMENT OF TOURISM IN SMR

This region has a great potential for development of all winter tourism (ski centres). The reasons are the following:

- There is a tradition in this type of tourism
- There are topographic and climate conditions necessary for this type of tourism. Large mountains covered for about 6 months per year with the snow
- Developed road and other infrastructure in the whole region including some mountain areas that are completely unused
- Existence of Sarajevo City as a Capital and large commercial centre nearby those mountains
- Good road communication with the other regions and central Europe

There are a several interesting historical spots in the region, so that historical tourism can be developed. The mentioned potentials are:

- Old part of Sarajevo with the mixture of oriental and Austro-Hungarian architecture
- The bridge in Sarajevo where the Austro Hungarian emperor has been assasined (which caused the beginning of the first world war)
- Many religious facilities from Ottoman Empire (500 hundred years old) mosques, churches, etc.
- Old commercial centre in oriental style with the plenty of restaurants an handicraft shops named Bascarsija and the University library (Vjecnica)
- Archaeological findings from Mid Age Bosnian Kingdom on Bjelasnica and near Visoko
- Roman bridge and Ilidza Area.

Another aspect of tourism that could be developed in the Sarajevo Macro Region is health/medical tourism based on the springs of thermal mineral water. There are several centres in the region even today which should be developed into the real tourist centres (over years of tourism):

- Fojnica City with the thermal mineral water and available accommodation capacities as well as rehabilitation centre
- Olovo City with the thermal mineral water and available accommodation capacities

- Ilidza (Sarajevo) with the thermal mineral springs and accommodation capacities
- Visegrad with the thermal mineral water and available accommodation capacities as well as rehabilitation centre

With the construction of the highway in the corridor CV that will connect central Europe and Adriatic coast a new age of transit tourism for Sarajevo City and for the whole Sarajevo Macro Region will start. Of course, it can be combined with other tourist offers within the region.

The Wild forests and mountain areas during the summer give a particular feeling to visitors. Rich flora and fauna can contribute to the development of protection areas and national park tourism, especially in the largest wild forest in the Europe named Perucica. The road communication to these places is available and only needs to be better maintained and renovated in some areas.

The mountain river tourism could be developed as well. There are plenty of smaller and larger mountain rivers that flow through the very picturesque landscapes and have a good road communication along their flows, which provides possibilities for the development of rafting and kayaking.

## 10. ECONOMY AND BUSINESS IN SMR

The economy and business in the SMR is the largest in terms of legally registered companies and the size of revenues earned by these companies. All this is due to several factors, such as that the SMR has the largest concentration of population in all the BiH and that Sarajevo is located in the middle of the SMR and also a capital of Bosnia and Herzegovina. Further impact to the economy and business of the SMR is that the SMR has wide-range of cultural, governmental and legal institutions, financial and credit institutions, well-established educational institutions, social and sports activities that encourage many businesses by having their headquarters in this region.

The economy in the SMR since the end of the recent war has not developed at any appreciable rate. The level of the life quality in the SMR has in fact deteriorated despite the international community's efforts to support the repair, rebuilding and providing funds for SMEs throughout the entire country of BiH.

The infrastructure is slowly with regards to becoming effective, efficient or transparent as well as the governments, which have no capacities in terms of financing and which is not reactive nor willing to try "self help" programmes, "back strapping" or similar programs as experienced in America after the World War II known as "WPA" (US Congress created the "Works Progress Administration", which offered work relief for thousands of people).

Due to the lack of economic growth, lack of leadership in the government, minor changes in the unemployment rate figures, no opportunities for the young people thus resulting with a "brain drain", unfinished privatization process, marginal to no-real foreign investment, inapt legal system without power to implement decisions, discontinued political corruption and obstruction, grey and black markets, and no perspective for changes in the near future, it is obvious that the SMR and the entire country is currently at the dangerous edge of survival without sustainability or future. The economy seems to be still shell shocked from the war causing a lethargy that is seemingly irreversible.

## 10.1. PUBLIC SECTOR (ADMINISTRATION)

The public sector in the SMR is widely regarded as overburdened, adequately staffed or overstaffed, but understaffed with qualified and quality educated people, lacking appropriate management, and in many cases non-complying with the transparency principles. Policies and procedures are poorly defined, conflicting, and in some cases ignored or even completely unknown. The public administration sector very poorly paid, without incentives, motivation thus lacking any initiative to make the system function properly, effectively or efficiently.

The old socialist system of providing gifts or remuneration for getting something done is still prolific nowadays throughout the entire administrative offices and functions. Rapid change is needed and required, but mainly what is needed is a solid leadership, respect/trust and attitude focused on change with regards to the functions that are in service to the public citizens who are actually paying for their monthly salaries.

Standards must be established, training provided and encouraged, and competency levels adhered to for all the posts and people filling those posts from the top to the bottom, with an overseeing legal evaluation body to have the authority to correct, adjust, or eliminate any person or position wherever needed or required. The public administration sector needs to be overhauled, law regulations and

standards set (preferably to EU/EC levels), qualified personnel needs to be recruited to perform defined functions, Standard Operating Procedures (SOP's) defined, policies and procedures complied with, a strong leadership management structure is absolutely mandatory as well as some form of increasing economic pay levels and/or incentives that need to be evaluated for positive incentive purposes.

# 10.1.1. Municipalities budgets

In this SEA, the processes of developing and the management of municipal budgets was presented as a complete exercise in futility. The Municipalities in the Federation are not receiving any information from the Cantons as to tax, license, permit frees or any other revenues collected within their municipalities, so that they have no idea or concept of the sharing amounts to expect from the higher levels. In the Republic of Srpska the Entity level is the authorised for collection and as in the Federation, it is not providing any feedback information to their municipalities regarding the figures and sharing possibilities. This non-transparent approach makes it almost impossible for the municipalities to properly analyze, evaluate and prepare a competent budget.

Each budget is different and lacks continuity for short, mid-range, and long-term strategies and growth. There is a lack of harmonization in these municipal budgets between the Entities and even with neighbours where common problems could more easily and efficiently be resolved through cooperation and collaboration. Communication and sharing of statistics, financial data, and investigating of common issues needs to be undertaken to help this development of budgets to begin, so that the information is properly gathered and analyzed.

A formalized/standardized functional format (agreed between all Entities) needs to be developed and implemented throughout the entire BiH. Training and technical assistance needs to be provided to any municipality that needs support in any field of interest within this important process. Upon completion of this budget process by the municipalities and upon the municipalities' submission, and further training and evaluation, technical assistance is needed at the level of authority to accept and evaluate these budgets. An independent and impartial Counselling Board should be established to study and regulate the financial revenue share process with total transparency and authority over all the levels of jurisdiction remitting financial shares to the municipalities, and their decisions should be based upon past revenues generated to determine the amounts to be given the municipalities prior to the budget development process, so that the municipalities could know certainly what they can expect as well as the parameters for their budget.

Budget management in each Municipality was also very different. Many municipalities simply developed a budget to get their share of collected revenues from higher instances after which they did not comply with their budget at all. Others attempted to follow their budget, but in many cases would get side tracked due to many issues that occur during the course of a year and that were unplanned for but required funds to be resolved. Generally, due to the lack of knowledge on how much would be remitted to a Municipality from higher levels, there was little knowledge on how to prepare a realistic and proper proposed budget. Such a management of a theoretical budget document without receiving the amount of funds needed or required was not the way to be prepared, so that the budgets were vague and had a lot of not backed up or unsubstantiated projects, services to be provided, and other such things that simply baffled the higher authority during their evaluation process into believing such

budgets and their content were somewhat unrealistic. This leaves a huge dilemma to this authority as to how much is actual and how unrealistic to expect them to decide on the amount that a municipality should receive. Once everything is concluded and the municipality receives their less than requested amounts, they are faced with the operational tasks of allocating whatever they received and with creating a new streamlined operating budget that is manageable within the received amounts. If this process was overhauled, formalized, and accurate, it would require development of only one budget and would save an enormous amount of time.

Furthermore, if it was simply viewed as an economic management tool without any other influences and obstructions, it could become effective and efficient as well as transparent. Municipalities are to provide their citizens opportunity prior to submitting a comment that might have an impact to the budget, but little evidence of this activity seems to be reflected in the budget documents.

The above tables present figures from the Municipal budgets. There is a difference in the budgeting process in RS and FBiH municipalities due to different competences in the some areas. In fact, there are some differences in budgeting process within the FBiH municipalities that are in different Cantons.

Generally, in the FBiH municipalities under "Income based on tax" is presented a value that shows only personal taxes on additional income and taxes on private property and real-estate tax. On the other side, in RS municipalities under "Income based on tax" are presented values that cover the same as in the FBiH, but also all other taxes, such as sale tax for goods and services, additional tax on cigarettes and alcohol beverages, etc.

In the FBiH municipalities under "Grants" are presented amounts that Canton is obliged to return to the municipalities from collected taxes, but this process is not transparent at all, because it is hard at the municipal level to know how much taxes are collected. In RS municipalities under "Grants" are presented values that some municipalities get from the entity level, such as a support to budget.

Generally, under "direct income" in all municipalities are presented values that municipalities directly collect, such as administrative taxes, rents, etc

		Municipality Bro	eza	
Municipal budget	2000	2001	2002	2003
		Income		
Tax based income	668000	953800	580000	662000
Direct income	661500	785500	1049800	951272
Grants	360000	200000	367760	365680
Other	148381	46400	0	0
Total income	1837881	1985500	1998560	1978952
		Costs		<u> </u>
Total costs	1827881	1985500	1998560	1949952
Reserves	20000	0	0	29000
		Municipality Old	ovo	
Municipal budget	2000	2001	2002	2003
		Income	·	
Tax based income	634000	675500	541000	507500
Direct income	310000	403000	279500	395400
Grants	400000	48500	200000	270000
Other	0	250000	39500	0
Total income	1344000	1377000	1060000	1172900
		Costs	·	
Total costs	1279000	1327000	1030000	1138900
Reserves	65000	50000	30000	34000
		Municipality Va	res	
Municipal budget	2000	2001	2002	2003
		Income		
Tax based income	535000	470000	415000	597600
Direct income	252000	358000	530000	551000
Grants	950000	940000	350000	0
Other	0	0	0	0
Total income	1737000	1768000	1295000	1148600
		Costs		
Total costs	1721940	1727830	1275000	1148600
Reserves	15060	40170	20000	0

Figure 80a. Basic figures from the Municipal budgets in SMR

Municipality Visoko					
Municipal budget	2000	2001	2002	2003	
		Income			
Tax based income	2503093	2789700	2313000	2299000	
Direct income	560000	802700	1825000	1919000	
Grants	100000	150000	300000	170000	
Other	0	0	0	0	
Total income	3063093	3742400	4438000	4388000	
		Costs			
Total costs	2990426	3692400	4388000	4348000	
Reserves	72667	50000	50000	40000	

		Municipality Foji	nica			
Municipal budget	2000	2001	2002	2003		
Income						
Tax based income	667500	667500	664500	732000		
Direct income	181500	181500	314550	361000		
Grants	350000	350000	40000	130000		
Other	450000	450000	352000	345000		
Total income	1652000	1652000	1371000	2139632		
		Costs				
Total costs	1627000	1627000	1356000	2134632		
Reserves	25000	25000	15000	5000		
		Municipality Kise	ljak			
Municipal budget	2000	2001	2002	2003		
		Income				
Tax based income						
Direct income						
Grants						
Other						
Total income						
		Costs				
Total costs						
Reserves						

Figure 80b. Basic figures from the Municipal budgets in SMR

		Municipality Kres	sevo	
Municipal budget	2000	2001	2002	2003
		Income		
Tax based income	340000	340000	400000	400000
Direct income	170000	170000	140000	230000
Grants	40000	40000	80000	40000
Other	140000	140000	150000	150000
Total income	690000	690000	770000	820000
		Costs		
Total costs	688000	688000	763000	814000
Reserves	2000	2000	7000	6000
	N	<b>Iunicipality Foca/Us</b>	stikolina	
Municipal budget	2000	2001	2002	2003
		Income		
Tax based income	54717	39900	60500	40300
Direct income	14305	13100	33400	22500
Grants	269879	271000	524800	396000
Other	34065	0	0	9000
Total income	372966	324000	618700	467800
		Costs		
Total costs	372966	324000	618700	467800
Reserves	0	0	0	0

Municipality Gorazde				
Municipal budget	2000	2001	2002	2003
		Income		
Tax based income				
Direct income				
Grants				
Other				
Total income				
		Costs		
Total costs				
Reserves				

Figure 80c. Basic figures from the Municipal budgets in SMR

		Municipality Pale/I	Praca	
Municipal budget	2000	2001	2002	2003
-		Income		·
Tax based income	14347	14347	20292	22287
Direct income	42902	42902	59148	49927
Grants	377091	377091	300000	393172
Other	3000	3000	6927	33410
Total income	437340	437340	386367	498796
		Costs	<u>.</u>	<u> </u>
Total costs	437340	437340	386367	498796
Reserves	0	0	0	0
		Municipality Cen	itre	·
Municipal budget	2000	2001	2002	2003
		Income		
Tax based income	2800000	2880000	2495000	3315000
Direct income	3494000	4441500	4743000	5940000
Grants	3677000	1100000	3667000	2906000
Other	1127000	2580100	0	3545149
Total income	11719000	14511600	10905000	15706149
		Costs		
Total costs	11449000	14291600	10713650	15497083
Reserves	270000	220000	191350	209066
		Municipality Had	lzici	
Municipal budget	2000	2001	2002	2003
		Income		
Tax based income	390000	390000	390000	390000
Direct income	843423	843423	843423	843423
Grants	2053000	2053000	2053000	2053000
Other	290577	290577	290577	290577
Total income	3577000	3577000	3577000	3577000
		Costs		
Total costs	3547000	3547000	3547000	3547000
Reserves	30000	30000	30000	30000

Figure 80d. Basic figures from the Municipal budgets in SMR

		Municipality Ilia	dza	
Municipal budget	2000	2001	2002	2003
-		Income		·
Tax based income	2097000	2100000	2887000	2802000
Direct income	2182176	2526000	4222000	2951000
Grants	2957088	3168576	2541000	2832000
Other	807636	441000	50000	415000
Total income	8044000	8236000	9700000	9000000
		Costs		<u>.</u>
Total costs	8044000	8236000	9700000	9000000
Reserves	0	0	0	0
		Municipality Ilij	jas	
Municipal budget	2000	2001	2002	2003
		Income		
Tax based income	290000	302000	382500	650000
Direct income	259736	498500	393500	536000
Grants	2698800	2546000	2404000	2851000
Other	68040	18000	18000	186664
Total income	3316656	3364500	3198000	4223664
		Costs		
Total costs	3311424	3342500	3190100	4219500
Reserves	5232	22200	7900	4164
		Municipality Novi	Grad	
Municipal budget	2000	2001	2002	2003
		Income		
Tax based income	1960000	1860000	2390000	3340000
Direct income	6029300	3324000	5196200	5095300
Grants	5869600	5364900	3864900	3000000
Other	3032400	2550000	1050000	550000
Total income	16891300	13098900	12501100	11985300
		Costs		
Total costs	16741300	12948900	12301100	11860300
Reserves	150000	150000	200000	125000

Figure 80e. Basic figures from the Municipal budgets in SMR

Municipality Novo Sarajevo Municipal budget Income Tax based income Direct income Grants Other Total income Costs Total costs Reserves Municipality Stari Grad Municipal budget Income Tax based income Direct income Grants Other Total income Costs Total costs Reserves Municipality Trnovo FBiH Municipal budget Income Tax based income Direct income Grants Other Total income Costs Total costs Reserves 

Figure 80f. Basic figures from the Municipal budgets in SMR

		Municipality Voge	osca	
Municipal budget	2000	2001	2002	2003
		Income		
Tax based income	459000	592000	656000	735000
Direct income	1448600	844000	1228000	1395000
Grants	2461700	2289000	2090000	2040000
Other	700000	1016000	956000	906900
Total income	5079366	4550000	4954000	5076900
		Costs		
Total costs	5010000	4500000	4904000	5016833
Reserves	69366	50000	50000	60067
		Municipality Caji	nice	
Municipal budget	2000	2001	2002	2003
		Income		
Tax based income	200592	263300	338682	589000
Direct income	271196	153000	71426	240000
Grants	30000	30000	30000	60000
Other	100000	80000	232592	0
Total income	601788	526300	672700	889000
		Costs		
Total costs	595788	516800	665700	889000
Reserves	6000	9500	7000	0
	Ì	Municipality Foca S	Srbinje	
Municipal budget	2000	2001	2002	2003
		Income		
Tax based income	1201000	1465300	2220000	2340000
Direct income	532000	835000	797802	785000
Grants	100000	100000	440000	500000
Other	29000	0	0	0
Total income	1733000	2400300	3495500	3620000
		Costs		
Total costs	1663000	2339400	3416600	3520000
Reserves	70000	60900	78900	100000

Figure 80g. Basic figures from the Municipal budgets in SMR

Municipality Gorazde RS					
Municipal budget	2000	2001	2002	2003	
		Income			
Tax based income	333000	333000	222880	333000	
Direct income	63150	63150	29450	63150	
Grants	194180	194180	1962851	194180	
Other	0	0	0	0	
Total income	590330	590330	2222181	590330	
	•	Costs	<u>.</u>	<u> </u>	
Total costs	568530	568530	2222181	568530	
Reserves	21800	21800	0	21800	

		Municipality Ilidz	a RS	
Municipal budget	2000	2001	2002	2003
		Income		
Tax based income	1341988	1532360	2634614	3124339
Direct income	270800	310800	128695	140964
Grants	0	0	195000	0
Other	0	0	336915	794607
Total income	1612748	1843160	3303824	4059928
		Costs	·	
Total costs	1612748	1843160	3222277	3979379
Reserves	0	0	81547	80549
		Municipality Kaln	ovik	
Municipal budget	2000	2001	2002	2003
		Income		
Tax based income	150405	232000	252500	366000
Direct income	32316	55000	57326	46504
Grants	350405	391835	327835	252776
Other	0	0	0	0
Total income	533126	678835	637711	665276
		Costs		
Total costs	533126	678835	637711	665276
Reserves	0	0	0	0

Figure 80h. Basic figures from the Municipal budgets in SMR

	M	unicipality Novo Sai	ajevo RS	
Municipal budget	2000	2001	2002	2003
		Income		
Tax based income				
Direct income				
Grants				
Other				
Total income				
		Costs		·
Total costs				
Reserves				
		Municipality Pa	ıle	·
Municipal budget	2000	2001	2002	2003
-		Income		·
Tax based income	1341988	1532360	2634614	3124339
Direct income	270800	310800	128695	140964
Grants	0	0	195000	0
Other	0	0	336915	794607
Total income	1612748	1843160	3303824	4059928
		Costs		·
Total costs	1612748	1843160	3222277	3979379
Reserves	0	0	81547	80549

Municipality Rogatica											
Municipal budget	icipal budget   2000   2001   2002										
Income											
Tax based income	410000	716800	1248000	1420000							
Direct income	91000	158200	1367000	1210000							
Grants	39000	70000	125000	70000							
Other	30000	175000	0	0							
Total income	570000	1120000	2740000	2850000							
		Costs	·								
Total costs	541500	1120000	2603000	2778850							
Reserves	28500	0	137000	71250							

Figure 80i. Basic figures from the Municipal budgets in SMR

		Municipality Ru	do	
Municipal budget	2000	2001	2002	2003
-		Income		
Tax based income	200592	263300	338682	589000
Direct income	271196	153000	71426	240000
Grants	30000	30000	30000	60000
Other	100000	80000	232592	0
Total income	601788	526300	672700	889000
		Costs		
Total costs	595788	516800	665700	889000
Reserves	6000	9500	7000	0
		Municipality Soke	olac	
Municipal budget	2000	2001	2002	2003
		Income		
Tax based income	575000	825000	647950	1659000
Direct income	280000	675400	643500	1814222
Grants	0	0	220400	0
Other	80000	0	643500	0
Total income	1000000	1500400	1665900	3473224
		Costs		
Total costs	950756	1493400	1582990	3473224
Reserves	49244	7000	83000	0
	Ï	Municipality Stari G	rad RS	
Municipal budget	2000	2001	2002	2003
		Income		
Tax based income	73030	87000	106000	115000
Direct income	125350	205000	166401	125000
Grants	0	283240	90000	140000
Other	171040	75204	0	0
Total income	369420	650444	362401	380000
		Costs		
Total costs	369420	629804	345144	380000
Reserves	0	20640	17257	0

Figure 80j. Basic figures from the Municipal budgets in SMR

		Municipality Trnov	vo RS									
Municipal budget	2000	2001	2003									
	Income											
Tax based income	57842	74400	2001         2002           Income         0         103960         13270           90         185071         96820           27         230000         33700           0         0         0           17         415071         56652           Costs         587         394317         55267           0         20754         13848           ipality Visegrad         2002         1           Income         05         1074302         11589           147         1098168         13164           0         40000         50000           0         0         0           852         2212470         25253           Costs         Costs									
Direct income	21963	203290	230000 337000 0 0									
Grants	218995	184627	27 230000 337000									
Other	50000	0	0	0								
Total income	348800	387917	415071	566520								
		Costs		<u> </u>								
Total costs	344520	374987	394317	552672								
Reserves	4360	12930	20754	13848								
		Municipality Vise	grad									
Municipal budget	2000	2001	2002	2003								
		Income										
Tax based income	994402	937705	1074302	1158904								
Direct income	963450	1199147	1098168	1316468								
Grants	219000	20000	40000	50000								
Other	0	0	0	0								
Total income	2176852	, , ,		2525372								
		Costs										
Total costs	2156852	2156852	2182470	2487040								
Reserves	20000	0	30000	38332								

Figure 80k. Basic figures from the Municipal budgets in SMR

Summarized from Municipalities in FBiH											
Municipal budget	2000	2003									
Income											
Tax based income	14387657	14889747	15068792	17566778							
Direct income	21279442	19296043	26347371	27343264							
Grants	28871084	23870067	23458058	22098148							
Other	7499194	10519712	4109254	7627031							
Total income	72636897	71897793	69009225	74032022							
		Costs									
Total costs	71892572	71078423	68933975	73459475							
Reserves	744325	819370	756250	572547							

Figure 80l. Basic figures from the Municipal budgets in FBiH within SMR

Summary from municipalities in RS										
Municipal budget	2000	2001	2002	2003						
Income										
Tax based income	6879839	8262525	11822184	14951282						
Direct income	3193221	4321787	4744960	6219092						
Grants	1181580	1303882	3886086	1663956						
Other	560040 410204 17	410204	1782514	1589214						
Total income	11750600	14223998	21704282	24568578						
		Costs								
Total costs	11544696	14081728	21160277	24162250						
Reserves	205904	142270	544005	406328						

Figure 80m. Basic figures from the Municipal budgets in RS within SMR

	Summary from municipalities in SMR										
Municipal budget	2003										
Income											
Total income	84387497	86121791	90713507	98600600							
		Costs									
Total costs	83437268	85160151	90094252	97621725							
Reserves	950229	961640	1300255	978875							

Figure 80n. Basic summarized figures from the municipal budgets in SMR

## 10.2. BUSINESS

The SMR as well as many other regions of this country suffers from a lack of knowledge on how to do business in a proper and legal way as it has been done in other more advanced economies. Businessmen make decisions and implement their plans without evaluations, studies, proper resources, adequate funds, business training and educational knowledge, but they do build «Taj Mahals» that provide reinvestment, profits, or any real sustainable creation of employment.

The SMR is also faced with the lack of creative imagination and utilization of the skills and resources of its people. There are more coffee bars or mini grocery stores per capita than in most of other places throughout the world. These businesses have large competition for the low level of available cash to spend by the households, so that their chances to survive for more than a couple of months are minimum.

Each business has to have lots of initial funds available for design, decoration, procurement of equipment and furniture, to start businesses and make profit. Due to the huge competition nearby they definitely need to have something unique or new to attract customers away from the competition, unless they want to fail in a short period of time. This cycle is repeating over and over again. In some cases, we can see four or five different activities at the same location within a year and all of them perform the same basic business only with new and different decors.

The table below presents values of total income per municipality in SMR from business activities done within the territory of the municipality. The only source of data is municipal employees within the economic and business sector, and in some cases, cantonal or entity taxation offices in the municipalities. Even if the data are given from taxation office, it does not mean that they are reliable, because of the high percentage of hidden incomes and increased costs at the annual balance sheets, which taxation offices request from the companies to fill in.

These data are not crosschecked, due to the lack of information sources and can be used only as estimates for total income from business activities in the Sarajevo Macro Region.

Another problem is different details in template filled in by the Municipalities. Some of the municipalities give very detailed description of business and economic sector, while most of them are not able to complete SEA template. Therefore, we will present here data that all municipalities delivered (which the Municipalities have been able to collect) that can be integrated at the regional level and perhaps compared within the region and between the regions.

# 10.2.1. Total income from sale of business activities

Administrative Unit	Municipality	funicipality 2000		2002
Citi	Territory of the curr	 vent FRiH Munic	 inalities within SN	1R
Canton 4	Zeničko-Dobojski			
1.	Breza	58035430	59538450	58987978
2.	Olovo	27051173	27592196	27730157
3.	Vareš	30592585	29661391	32739734
4.	Visoko	352640402	361356412	370189332
Canton 5	Bosansko-Podrinjski	0	0	0
5.	Foča/Ustikolina	1332066	1333565	1412232
6.	Goražde	0	0	0
7.	Pale/Prača	1588231	1568825	1602330
Canton 6	Srednje-Bosanski	0	0	0
8.	Fojnica Fojnica	28540014	29967014	32562964
9.	Kiseljak	0	0	0
10.	Kreševo	46172601	50128346	64482488
Canton 9	Sarajevo	0	0	0
11.	Centre	1152879300	1193690450	1367749800
12.	Hadžići	169996666	1750565960	1814000430
13.	Ilidža	571789064	579222320	602970435
14.	Ilijaš	34561913	42755764	53083373
15.	Novi grad	643923794	658734041	681130998
16.	Novo Sarajevo	1658366577	1683242075	1743838790
17.	Stari grad	428640402	439356412	444189332
18.	Trnovo	1224000	1228455	1306530
19.	Vogošća	88884567	87551298	89389875
Total from FBil		5296218785	6997492974	7387366778
Total from T Di		nicipalities withi		7307300770
20.	Čajniče	26915896	9664803	11363857
21.	Foča/Srbinje	66581116	48863202	55314686
22.	Goražde RS	8950500	9264320	1001210
23.	Ilidža RS	58725600	63025711	70965565
24.	Kalinovik	1962233	1945240	1954080
25.	Novo Sarajevo RS	0	0	0
<u>26.</u>	Pale	134030490	153050610	181361181
27.	Rogatica	28912300	31360794	36783991
28.	Rudo	11657800	7586900	8370000
<del>2</del> 9.	Sokolac	41029719	2672809	30452771
30.	Stari grad RS	1420500	1390220	1330400
31.	Trnovo RS	1462233	2044744	2052482
32.	Višegrad	122496632	49325250	43747481
	visegiau			
Total from RS	<u> </u>	504145019	380194603	444697704 7932064492
TOTAL IN SMI	r	5800363804	7377687577	7832064482

Figure 81. Summarized figures of total income from business activities per Municipality in SMR

Administrative Unit	2000	2001	2002
Total from FBiH	5296218785	6997492974	7387366778
Total from RS	504145019	380194603	444697704
Total in SMR	5800363804	7377687577	7832064482

Figure 81a. Summarized figures of total income from business activities in SMR

## 10.2.2. Total income from sales at domestic markets and export

There seems to be a disproportion in sales of products at the foreign market in comparison to the local sales. The foreign market sales are in the single digits and should be in the low double-digit range. Exporting should be increased by offering the variety of products from the SMR. There also seems to be disproportionally high level of imports, which are jeopardising domestic sales, particularly in areas where domestic producers could provide equally good if not even better quality products by equal or lower prices. Such high rates of imports are of low quality turning this market into a dumping ground for low quality and non-saleable products from abroad.

Based on the data obtained from 9 Municipalities from the FBiH and RS within SMR, the following conclusion could be brought. About 10 % of total income from business activities in SMR is earned through the sale of the foreign markets.

Below table shows types of industries in SMR with the export potentials and the Municipalities where the headquarters of those export companies are located for the year 2002.

Sectors	<b>EU</b>	Ex YU	Asia
Mining and energy		Vares, Foca/Srbinje, Visegrad	
Food industry		Visoko	
Metal	Vares, Vogosca, Pale,	Vares, Foca/Srbinje, Pale,	Pale
	Rogatica	Visegrad, Rogatrica	
Wood and furniture	Pale, Visegrad,	Vares, Foca/Ustikolina, Pale,	
	Rogatrica	Sokolac, Visegrad, Rogatrica	
Textile an leather	Vares, Novi Grad, Pale,	Pale, Visegrad, Rogatrica,	
	Visegrad, Rogatrica	Visoko, Olovo	
Paper and printing			
Electrical equipment			
Construction material		Visoko	
Agriculture		Rogatrica	
Forestry	Visegrad	Foca/Srbinje, Visegrad,	
		Rogatrica	
Construction		Visegrad	
Communications	Novi Grad	Foca/Srbinje, Visegrad,	
		Rogatrica	
Retail		Vogosca, Foca/Srbinje,	
		Rogatrica	

Figure 82. Types of export industries from SMR and target foreign markets

# 10.2.3. Number of legal subjects per sector and type of ownership

Administrati	Municipality	Mi	ning	Foo	d	M	Metal		Wood and furniture		ile and other
ve structure		S	P	S	P	S	P	S	P	S	P
	Municipalities in th	ne FB	BiH ar	ıd wi	thin S	araje	vo Ma	icro F	Region		
Canton 4	Zeničko-Dobojski										
1.	Breza	1	3	0	3	0	1	0	3	0	3
2.	Olovo										
3.	Vareš	0	1	0	1	2	1	1	3	0	1
4.	Visoko	0	0	1	9	0	0	0	0	0	0
Canton 5	Bosansko-Podrinjski										
5.	Foča/Ustikolina	0	0	0	1	0	0	0	1	0	0
6.	Goražde										
7.	Pale/Prača	0	0	0	1	0	0	0	1	0	0
Canton 6	Srednje-Bosanski										
8.	Fojnica	0	3	0	7	0	0	2	9	0	1
9.	Kiseljak										
10.	Kreševo	0	1	0	3	0	8	0	4	0	3
Canton 9	Sarajevo										
11.	Centre										,
12.	Hadžići										
13.	Ilidža										
14.	Ilijaš										
15.	Novi grad						661				
16.	Novo Sarajevo										
17.	Stari grad										
/18.	Trnovo										
19.	Vogošća										
	Municipalities i	n RS	and 1	withir	. Sara	ijevo 1	Macro	Reg	ion		
20.	Čajniče	0	0	0	0	1	0	1	4	0	1
21.	Foča/Srbinje	1	0	0	1	0	2	1	10	2	3
22.	Goražde RS	0	0	0	1	1	1	0	0	0	0
23.	Ilidža RS	0	0	1	5	2	3	0	7	0	0
24.	Kalinovik	0	0	0	1	0	0	0	0	1	0
25.	Novo Sarajevo RS										
26.	Pale	0	0	0	9	3	10	2	37	2	2
27.	Rogatica	0	0	1	4	2	0	1	10	2	0
28.	Rudo	0	0	0	0	2	2	1	2	1	0
29.	Sokolac	0	0	2	0	1	0	1	67	2	0
30.	Stari grad RS	0	0	0	0	0	0	0	2	0	0
				+					+		
31.	Trnovo RS	0	0	0	0	0	0	0	0	1	0

Figure 83a. Number of legal subjects (companies) per sector and Municipality in SMR for the year 2002

Administrati ve structure	Municipality	Pape pi	er and rint	nd Electric Construct equipment material				culture	Forestry		
		S	P	S	P	S	P	S	P	S	P
	Municipalities in th	ne FB	iH an	d with	hin Sa	ırajev	o Ma	cro R	egion		
Canton 4	Zeničko-Dobojski										
1.	Breza	0	1	0	1	0	5	0	1	0	0
2.	Olovo										
3.	Vareš	0	1	1	0	1	0	2	1	0	9
4.	Visoko	0	0	0	0	0	0	0	0	0	0
Canton 5	Bosansko-Podrinjski										
	Foča/Ustikolina	0	0	0	0	0	0	0	1	1	0
6.	Goražde										
	Pale/Prača	0	0	0	0	0	0	0	1	1	0
Canton 6	Srednje-Bosanski										
	Fojnica	0	1	0	0	0	2	1	0	2	0
	Kiseljak										
-	Kreševo	0	1	0	1	0	1	0	3	1	2
Canton 9	Sarajevo										
11.	Centre						Į.		1		1
	Hadžići										
	Ilidža										
14.	Ilijaš							40:	10		
	Novi grad	66	of for	all ty	es of	indus	stry				culture,
16.	Novo Sarajevo	1		<i>J</i> 1			,	hu	ınting ar	nd for	estry
17.	Stari grad										
/18.	Trnovo										
19.	Vogošća										
	Municipalities in	n RS	and w	ithin	Sara	ievo N	Macro	Regi	ion		
20.	Čajniče	0	0	0	0	0	0	1	0	2	0
	Foča/Srbinje	0	0	1	0	0	0	1	1	1	1
22.	Goražde RS	0		0	0	0	0	0	6	0	0
	Ilidža RS	0		0		0		0	0	1	0
	Kalinovik	0	0	0	_	0		0	0	1	0
	Novo Sarajevo RS	ľ	Ť		ĺ	ĺ		1			
	Pale	1	3	2	2	1	2	0	2.	4	0
27	Rogatica	1	1	0	0	0	0	2	1	2	0
	Rudo	0	0	0	0	0	0	1	1	1	2
29	Sokolac	0	1	0	0	0	2	3	1	2	0
29. 30.	Stari grad RS	0	0	0	0	0		0	0	1	0
31.	Trnovo RS	0	0	0		0		0	0	1	0
32.	Višegrad	0	0	1		0	0	2	2	2	0
52. E: 921	V ISEGIAU	V	ĺ	1	ν	V	Μ,	<u> </u>	۲	<u> </u>	ν 12.62 α

Figure 83b. Number of legal subjects (companies) per sector and Municipality in SMR for the year 2002

ninistrati Municipality		Constructi on		iCommuni cations		Retail		Catering		Handcrafts	
		P	S	P	S	P	S	P	S	P	
Zeničko-Dobojski											
Breza	1	5	1	38	0	132	0	35	0	45	
Olovo											
Vareš	1	2	0	0	2	0	1	2	0	45	
Visoko	0	6	1	14	1	124	0	6	0	12	
Bosansko-Podrinjski											
Foča/Ustikolina	0	2	1	3	0	24	0	1	0	1	
Goražde											
Pale/Prača	0	2	1	3	0	24	0	1	0	1	
Srednje-Bosanski											
Fojnica	0	1	0	8	0	12	0	1	0	0	
Kiseljak											
Kreševo	0	12	0	27	0	50	0	14	1	12	
Sarajevo											
Centre				•							
Hadžići			286		2056		122				
Ilidža											
Ilijaš											
Novi grad	4	150								-	
Novo Sarajevo											
Stari grad											
Trnovo											
Vogošća	1										
Municipalities in	es in RS and within Sarajevo Macro Region										
Čajniče	0	1	0	1	0	6	1	0	0	0	
Foča/Srbinje	1	2	0	71	0	240	1	2	0	97	
Goražde RS	1	3	0	1	1	18	0	0	0	0	
Ilidža RS	3	12	0	7	1	46	1	3	0	0	
Kalinovik	0	0	1	0	0	0	1	0	0	0	
Novo Sarajevo RS											
Pale	1	2	0	2	4	0	2	11	2	23	
Rogatica	0	0	1	1	1	0	0	0	0	0	
Rudo	0	2	1	0	2	10	1	0	0	0	
Sokolac	0	1	3	0	0	20	1	2	0	0	
Stari grad RS	0	0	0	0	1	2	0	0	0	0	
Trnovo RS	0	0	0	0	1	2	0	0	0	0	
Višegrad	1	4	1	2	1	34	2	0	0	8	
	Municipalities in the Zeničko-Dobojski Breza Olovo Vareš Olovo Vareš Visoko Bosansko-Podrinjski Foča/Ustikolina Goražde Pale/Prača Srednje-Bosanski Fojnica Kiseljak Kreševo Sarajevo Centre Hadžići Ilidža Ilijaš Novi grad Novo Sarajevo Stari grad Prnovo Vogošća Municipalities in Čajniče Foča/Srbinje Goražde RS Ilidža RS Kalinovik Novo Sarajevo RS Pale Rogatica Rudo Sokolac Stari grad RS Irnovo RS Provo RS	Municipalities in the FE Zeničko-Dobojski Breza 1 Olovo Vareš 1 Visoko 0 Bosansko-Podrinjski Foča/Ustikolina 0 Goražde Pale/Prača 0 Srednje-Bosanski Fojnica 0 Kiseljak Kreševo 0 Sarajevo Centre Hadžići Ilidža Ilijaš Novi grad Novo Sarajevo Stari grad Trnovo Vogošća  Municipalities in RS Čajniče 0 Foča/Srbinje 1 Goražde RS Ilidža RS Kalinovik 0 Novo Sarajevo RS Pale 1 Rogatica 0 Rudo 0 Sokolac 0 Stari grad RS Ornovo RS	Municipalities in the FBiH and Zeničko-Dobojski Breza 1 5 Olovo Vareš 1 2 Visoko 0 6 Bosansko-Podrinjski Foča/Ustikolina 0 2 Goražde Pale/Prača 0 2 Srednje-Bosanski Fojnica 0 1 Kiseljak Kreševo 0 12 Sarajevo Centre Hadžići Ilidža Ilijaš Novi grad Novo Sarajevo Stari grad Trnovo Vogošća  Municipalities in RS and v Čajniče 0 1 Foča/Srbinje 1 2 Goražde RS 1 3 Ilidža RS Kalinovik 0 0 Novo Sarajevo RS Pale 1 2 Rogatica 0 0 Rudo 0 2 Sokolac 0 1 Stari grad RS O 0 Stari grad RS O 0 Stari grad O 0 Rudo 0 2 Sokolac 0 1 Stari grad RS O 0 Stari grad RS O 0 Stari grad O 0 Sokolac 0 1 Stari grad RS O 0 Stari grad RS O 0 Stari grad RS O 0 Sokolac 0 1 Stari grad RS O 0 Stari grad RS O 0	S   P   S	S   P   S   P	S   P   S   P   S   P   S   P   S   Municipalities in the FBiH and within Saraje   Sereza   1   5   1   38   0   Olovo	S   P   S   P   S   P	S   P   S   P   S   P   S   P   S   P   S   Maunicipalities in the FBiH and within Sarajevo Macro II	S   P   S   P   S   P   S   P   S   P   S   P   S   P   Macro Region	S   P   Municipalities in the FBiH and within Sarajevo Macro Region	

Figure 83c. Number of legal subjects (companies) per sector and Municipality in SMR for the year 2002

Administrati ve structure	Municipality	Utilities and housing S P		Finances S P							
	Municipalities in he FBiH and within Sarajevo Macro Region								l		
Canton 4	Zeničko-Dobojski										
1.	Breza	2	0	0	16						
2.	Olovo										
3.	Vareš	0	0	0	7						
4.	Visoko	1	1	0	6						
Canton 5	Bosansko-Podrinjski										
5.	Foča/Ustikolina	1	0	0	1						
6.	Goražde										
7.	Pale/Prača	1	0	0	1						
Canton 6	Srednje-Bosanski										
8.	Fojnica	2	0	0	36						
9.	Kiseljak										
10.	Kreševo	1	0	1	47						
Canton 9	Sarajevo										
11.	Centre										
12.	Hadžići										
13.	Ilidža										
14.	Ilijaš										
15.	Novi grad	] :	25		9						
16.	Novo Sarajevo										
17.	Stari grad										
/18.	Trnovo										
19.	Vogošća										
	Municipalities i	n RS	and v	vithin	Saraj	ievo A	Macro	Regi	on		
20.	Čajniče	1	0	0	1						
21.	Foča/Srbinje	0	0	0	5						
22.	Goražde RS	1	0	0	3						
23.	Ilidža RS	0	0	4	8						
24.	Kalinovik	0	0	0	1						
25.	Novo Sarajevo RS										
24. 25. 26. 27. 28. 29. 30. 31.	Pale	3	0	1	0						
27.	Rogatica	0	0	0	0						
28.	Rudo	2	0	2	0						
29.	Sokolac	3	0	0	0						
30.	Stari grad RS	0	0	0	0						
31.	Trnovo RS	0	0	0	0						
32.	Višegrad	2	0	0	0						

Figure 83d. Number of legal subjects (companies) per sector and Municipality in SMR for the year 2002

#### 10.2.4. Markets

The SMR has variety of existing and potential markets that can either be further developed or exploited or newly created. The existing natural geographical sectors in the SMR are the areas that contain the natural resources such as the great number of hard wood forests, the extensive volumes and capacities of high-quality water and areas favourable for Agricultural/Animal development. If only one of these industry sectors are analysed, for example forests: it provides opportunity for logging mills, furniture factories, veneer and chip board plywood's, pressure treatment facilities (for long lasting wood), wood for fuel, for glues/adhesives/tapes factories, etc., carpentry for production of joinery/mouldings/toys and many other ideas. The forests also have many other potentials that are unexploited such as: natural medicinal plants and herbs, rich soils and fertilizers, wild mushroom/berries/nuts, plants and shrubs for nursery/landscaping, natural stone used in various industries, seasonal (Xmas) trees/wild flowers, pine cones, wild bees/honey, and abundance of different birds and wild animals. Natural preserves as well as natural gardens could be founded in the forests, as well as tourist nature trails, and much more. Therefore, markets are not a problem in the SMR or in the entire country, but the creative nature of the people and their entrepreneurial spirit that has to be developed and nurtured.

## 10.3. JOINT VENTURES AND DIRECT FOREIGN INVESTMENTS

The SMR has only a few joint ventures and direct foreign investments because there is a little knowledge and understanding of such issues in this area and the entire BiH. There are also no incentives for evaluation of the ventures (either by domestic or foreign stakeholders) to check if they are worthwhile in the SMR. There is also no viable promotion of the average businessman or the municipality environments.

The government has not provided relevant conditions, laws, regulations, infrastructure, bureaucracy, and most of all the attitude to make the region or the country "investor friendly". There are programs such as "Public-Private Partnerships" (PPP) that could help both businessmen and municipalities, but they are not widely spread and known in this country. There are many other activities, programs and even projects that are relatively unknown, from which everyone could benefit, even foreign investors.

#### 10.4. FINANCIAL INSTITUTIONS

The SMR has benefited within the last couple of years since the war from temporary financial institutions and projects that were supported by the European Union/European Commission, the US Government through their USAID Financing Credit Facilities, and World Bank Credit Facilities, as well as Grants and other credit facilities provided by many of the donor agencies and countries (i.e. OXFAM, IRC, SEED, CARE, UMCORE, UNHCR, GTZ, and others). These programs and credit facilities have mostly been used up and completed.

All the banking financial institutions that existed at the end of the war (approximately 86 in BiH) have gone through the changes, where some survived and other did not. There have been some consolidations, mergers and even buyouts of domestic institutions. Couple of foreign institutions have opened branch operations or registered new BiH banks that are affiliated to the foreign Bank. The latter situation has resulted with an expansion of these operations through acquiring the existing Bosnian Banks (i.e. Zargrebacka Bank buying out Universal Bank, Reisffisen buying Market Bank, etc.) There are also other things that have happened where many foreign financial institutions have provided credit lines to Bosnian Banks (i.e. EBRD-London, IFC, IMF, WB, etc.).

Primarily, these new financial institutions and other financial activities were registered and/or located in the territory of the SMR with few exceptions. Sarajevo being the headquarters and capital of the state government has been chosen as a location for the National Bank which has contributed to stabilization and regulation of financial institution activities and currencies in the entire BiH. In the SMR the Banking Commission was established as well as other financial institutions to help in modernization of the entire banking system. There have been programs and projects with an aim to train, provide technical assistance and in some cases grant funds for the necessary equipment to help in modernization of the area, most of which within the SMR, although these activities are for the whole BiH (i.e. KPMG, Barrons, & Deloitte Touche etc.).

The SMR in almost all the cases has some form of financial institutions within their communities. It might have headquarters in Sarajevo or possible branch offices in other communities.

The table below gives data on financial institutions per Municipality in SMR

Administrative	Municipality	Financial institutions	
unit			
	Territory of today	FBiH Municipalities within SMR	
Canton 4	Zeničko-Dobojski		
		Banks (3): CPB, ABS, Deposit; Insurance (6): BH,	
		Raiffaisen, VGT, Lido, German-Bosnian, Triglav;	
1.	Breza	Micro credit (4): Partner, Sunrise, Rezfond,, Eki	
		Banks (2): CPB, ABS; Insurance (3): Sarajevo, Lido,	
2.	Olovo	German-Bosnian; Micro credit (2): Partner, Sunrise	
		Banks (2): CPB, ABS; Insurance(4): Sarajevo, Lido,	
3.	Vareš	Croatia, VGT; Micro credit (1): Partner,	
		Banks (5): CPB, ABS, Universal, UPI, Raiffaisen;	
		Insurance (11): Aurum BH, Euroherz, Raiffaisen, Lido,	
		Kamel, Remis, Sarajevo, Sunce, Una Sana, Zovko,	
4.	Visoko	Triglav; Micro credit (0):	
Canton 5	Bosansko-Podrinjski		
5.	Foča/Ustikolina	(0)	
6.	Goražde		
7.	Pale/Prača	(0)	
Canton 6	Srednje-Bosanski		
		Banks (2): CPB, Universal; Insurance (1): Sarajevo;	
8.	Fojnica	Micro credit (1): Sunrise	

9.	Kiseljak	
10.	Kreševo	Banks (1): HYPO; Insurance (0):; Micro credit (0):
Canton 9	Sarajevo	
		Banks (10): CPB, ABS, Universal, UPI, Raiffaisen,
		HYPO, Deposit, BBI, Volksbank, Vakufska ;Insurance
		(12): Aurum BH, Euroherz, Raiffaisen, Lido, Kamel,
		Remis, Sarajevo, Sunce, Una Sana, Zovko, Triglav,
11.	Centre	Bosna; Micro credit (0):
12.	Hadžići	Banks (1): CPB
13.	Ilidža	Banks (8): ; Insurance (4): ; Micro credit (0)
		Banks (1): CPB; Insurance: (1): Sarajevo; Micro
14.	Ilijaš	credit (0)
		Banks (7): CPB, ABS, Raiffaisen, HYPO, Commerce,
15.	Novi grad	Postanska, Volksbank;Insurance (6):; Micro credit (0):
16.	Novo Sarajevo	
		Banks (8): CPB, ABS, Raiffaisen, BBI, Procredit,
		Turkish zirat, Postanska, Volksbank,;Insurance (5):;
17.	Stari Grad	Micro credit (1): MEB
18.	Trnovo	(0)
		Banks (2): CPB, ABS, ; Insurance (4): Bosna, Kamel,
19.	Vogošća	Lido, Sarajevo; Micro credit (1): Rez fond
Total from	FBiH	

Figure 84a. Financial institutions, banks, insurance companies and micro-credit organizations per Municipality in SMR for the year 2002

Administrative	Municipality	Financial institutions				
unit						
	RS M	nicipalities within SMR				
20.	Čajniče	Banks (3): ; Insurance (3): ; Micro credit (1)				
		Banks (3): Hypo, Privredna, Razvojna, Nova;				
21.	Foča/Srbinje	Insurance (5): ; Micro credit (2): Miled, Benefit				
22.	Goražde RS	(0)				
		Banks (2): Hypo, Zepter; Insurance (3): Jahorina,				
23.	Ilidža RS	Dunay, Drina; Micro credit (0):				
23. 24. 25.	Kalinovik	(0)				
25.	Novo Sarajevo RS					
	-	Banks (5): Bobar, Razvojna, Nova, Nova banjalucka,				
		Privredna; Insurance (6): Jahorina, Dunav, Drina,				
26.	Pale	Bobar, Grand, Krajina; Micro credit (1): Beneefit				
		Banks (3): Privredna, Razvojna, Nova; Insurance (3):;				
27.	Rogatica	Micro credit (2): Beneefit, Partner				
		Banks (3): Privredna, Razvojna, Nova; Insurance (3):;				
28.	Rudo	Micro credit (2): Beneefit, Partner				
		Banks (4): Hypo, Razvojna, Nova, Nova banjalucka;				
		Insurance (4): Jahorina, Dunav, Drina, Bobar; Micro				
29.	Sokolac	credit (2): Beneefit, MEB				
30.	Stari grad RS	(0)				
31.	Trnovo RS	Banks (1): Privredna; Insurance (0): ; Micro credit (0):				
		Banks (4): Privredna, Razvojna, Nova, Hypo;				
		Insurance (4): Jahorina, Bobar, Drina, Dunav; Micro				
32.	Višegrad	credit (3): Beneefit, Eki, Aldi				
Total from RS						
TOTAL FOR S	SMR -					

Figure 84b. Financial institutions, banks, insurance companies and micro-credit organizations per Municipality in SMR for the year 2002

## d. REVIEW OF THE SEA DEVELOPING PROCESS FOR SMR

Although the process of data collection and presentation in requested format was very complicated, and although some format/types of data are estimated by the Municipal employees and other involved subjects, the process of making the first Regional Socio-Economic Audit shows that many officials from the local communities understand the importance of this regional strategy and see it as the first step towards the development of SEA for SMR.

Therefore, this is the first attempt to make one strategic document for the newly founded Sarajevo region, though some data are not presented in details. The idea was to avoid further delays and to speed up the process buy requesting minimum details on some data, so that it is possible for all municipalities and other institutions and organizations to participate in the process of delivering data relevant for SEA in the required format.

As a result of the compromise between the theoretical science and the actual situation in the field, this document Socio-Economic Audit of Sarajevo Macro Region is produced. Hopefully, this document will serve to all teams and work groups that will in the future participate in upgrading of this document and making the SWOT Analysis for the SMR and consequently producing one quality strategic document, which is the Development Strategy of Sarajevo Macro Region.

#### e. SUMMARY

This SMR SEA has identified certain elements that will be the basis for the further development of the SWOT analysis and eventually the SMR's Regional Development Strategy.

There are six areas of major importance, all lacking a coordinated or managed effort or approach as well as any strategic plan per any element of government, any other institution or IC. There are many other smaller areas affecting the SEA, but not of a significant importance. The major concerns from this SEA are as follows: **Population/migrations**, use of natural resources, Infrastructure (road and rail), Tourism, Agriculture, Business development (clement). These six areas of interest are the main strengths requiring strategical concentration and development in the SMR.

## **Population**

The SMR as it was the case throughout all B&H, experienced several types of population changes. Firstly, even before the war people from the villages and rural areas started moving to cities for economic reasons (employment), for better and modern way to life (inside plumbing, electricity and housing), for educational and cultural reasons. Sarajevo received the vast majority of these newcomers since it was the city with the most to offer. Secondly, the war created major ethnic migrations and although all the efforts have been undertaken to return many refugees to their homes, the results are poor. Many people have settled permanently in places where they have lived for the last ten to fourteen years. Again, the major cities such as Sarajevo took the majority of this population. The war also resulted in massive unemployment forcing many families to go wherever they were most likely to find job for their survival, and again the SMR and its cities were the most logical final destination. The conclusion is that there is quite large labour force with semi or skilled qualifications along with more educated people being available skilled for management, so that this is a major human resource capacity for Regional Strategic Development of the SMR.

## Natural Resources

The largest and most potential natural resource in the SMR is the forest/wood industry. This is an industry that is under-utilized and certainly insufficiently exploited. Wood from this country, which is reputed to be the best hard woods in the world, is shipped out in the raw logs or as semi product, which generates the lowest margins and almost no profit. Geographically, the SMR is about 51% covered with forest and this should further developed, not only in logging and reforestation, but also in domestical production for export purposes. There are other resources such as natural water, carbonated waters (gasified) and thermal waters, which are insufficiently exploited as well. Mini hydro-power plants could be installed for production of energy supplies, bottling of water (natural and gas) to be exported to other countries that do not have available water due to the climate, foundations and further development of spas and medical centres with the thermal waters, heating could be developed from the thermal waters, and even recreation sites on the rivers, streams and thermal locations (water slide park). Certainly there are many other industry segments not herein mentioned such as rock, stone, marble, cement, sand, crash, coal, and even oil or national gas deposits, etc.

#### Infrastructure

The infrastructure in BiH and the SMR, especially roads and rail is the weakest in the world. The roads are not properly constructed, or repaired, and certainly not properly maintained, which makes travelling around this country and the SMR almost impossible. The railroad system is not in operation at all, and due to the fact that Sarajevo is a centre for distribution and supply channels this missing element of strategic development is a huge disadvantage. This is the major capacity and economic resource that is missing, and it includes promotion of passenger travel and tourism as well. The SMR has an international airport in Sarajevo that is of limited size, capabilities, and restrictive climate (fog), due to its location. This must be extensively upgraded or new airport infrastructure asset that is virtually useless for the economic environments of the SMR. Port Ploce should be and could be a enormous support in upgrading and economic development of the SMR economy. The Port Ploce issues must be resolved as stipulated in the Dayton Peace Agreement and this major infrastructure element should work for the interest and benefit of all the SMR. Finally, there are many other smaller infrastructure issues, but if the big ones are resolved positively, majority of the smaller ones would simultaneously be resolved or there would be time to work on them. Commerce will never grow and thrive in the SMR without the strategic efforts being directed into these three major infrastructure areas.

## Tourism

Before the war, the tourism industry was very good, but the war resulted in a void destruction of many resorts, recreation sites (winter and summer), hotels, tourist historical sites, architectural buildings, and museums. The focus must be on repair, reconstruction and re-establishment of the sites and attractions (such as the ski resorts, horse back ridding, hunting, etc) that used to be important for tourism. Within the SMR there are many of these sites in need for the above attention. Furthermore, we have to find possibilities for the creation of new and different venues that would attract tourists, perhaps such as water slide park or village, natural trails, rock climbing, bungee jumping, cross country or down hill skiing, motorcycling and off road motor cross, international athletic tournaments held in our facilities, an entertainment or theme park (Six Flags or Disney), all of which and many more could be created in the SMR and bring the tourism back.

#### Agriculture

Agriculture is the most important problem in this country, because no one wants to stay at the farm and work hard. However agricultural strategic development in the entire country as well as in the SMR should be the highest economic priority. This country makes agricultural imports of about 94% of all the available products. Frequently, these products are of inferior quality, high cost, and non-compliant to the standards. This country turned into a dumping ground for the unsold and over-produced products from all other countries. The SMR has a land available for developing products with the support of new technology, training, and some equipment provided through IC aid in order to be able and produce "Import Replacement" products and "all natural" products even for export. There is no reason that MILKOS of Sarajevo is not in function today and that the people of the SMR have to buy products at the grocery from Croatia, Slovenia, Austria, Germany, Hungary and other countries. The SMR has land, people, know-how to grow herds of cattle for meat, for milk and cheese products, as well as sheep, poultry etc. Strategic efforts for development need to be made in this area for the overall Regional Development of the SMR.

# **Business development**

The climate in the SMR for business development is new. The government (and politics) should not interfere in this area, but need to provide clear, simple, and non-bureaucratic ways to promote the activities in this area. Encouragement, motivation and incentives should be established for the young entrepreneurs from the SMR. There should also be promotions, invitations of foreign business executives, groups of investors to look for their opportunities, projects, and investments in the SMR. Laws, regulations and documentation need be changed and updated in order to become realistic and practical. Privatization must be completed. The transparent legal system and enforcement of same must be in place. The SMR has all the elements and resources to promote business development of Public-Private Partnerships (PPP), Joint Ventures, Mergers, Limited or Partnerships, and to promote acquisitions. New businesses need to be developed, old businesses need fresh blood, educated talents and initiated all in order to look to the future and for the globalization of the entire economy.

All the SMR municipalities have significant projects in various stages of implementation and many of them are important and meritory not only for the municipality and its local economic development, but for the regional economic development as well.

The SMR has all the elements for success. We have tried here to touch on the more important aspects within this SEA, but most of other facts and figures can be found within this document. The SMR Strategic Regional Development should revolve around the creation of EMPLOYMENT, use of RESOURCES available within the SMR, a creative PRO ACTIVE attitude and a BACK STRAPPING (doing it by ourselves) approach.

## **APPENDICES**

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### **INTEGRAL SWOT ANALYSIS FOR SARAJEVO MACRO REGION**

Integral SWOT Analysis for Sarajevo macro region have been prepared in cooperation with EU RED project (European Union Regional Economic Development), development agencies SERDA and REDRIN, work and partnership groups members participated by about 35 persons per meeting, as well as all municipal representatives from the Region, and representatives of non-governmental organisations and Economic faculty in Sarajevo. Based on EU RED methodology for preparation of Regional Development Strategy, the first step was preparation of Socio-Economic Audit, while preparation of sectoral and integral SWOT analysis started before the socio-economic audit was completed, and was finalised and revised according to data and findings from socio-economic audit. Municipal representatives from the Region have mutually come to the basics of integral

Municipal representatives from the Region have mutually come to the basics of integral SWOT through work groups. The aim of such an approach was to bring regional ideas and way of various work groups thinking closer and to synchronise them.

After the initial integral SWOT analysis, preparation of sectoral SWOT analysis has started as proposed by the partnership group ( consisting of the local government representatives in cooperation with non-governmental sector), followed by consequent adjustment of all sectors based on consensus principle by local government representatives in cooperation with non-governmental sector, and additional revision of initially prepared integral SWOT analysis.

Integral SWOT analysis shown at the following pages has attempted to include all the advantages of our Region, indicating all its weaknesses, without any decoration of current situation.

The entire analysis is based on the available resources in the Region, as well as opened opportunities in case the resources are used efficiently and rationally, and providing we overcome the existing weaknesses.

The following steps in preparation of regional strategy will provide more detailed picture of the region, and thoroughly analyse the opportunities for regional development in the coming period.

## **STRENGTHS OF THE REGION**

IDENTIFIED BY WORK AND	SHORT DESCRIPTION OF
PARTNERSHIP GROUPS	IDENTIFIED STRENGTHS
I GEOGRAPHIC LOCAITON	
A. Geographic location of the region is favourable	Sarajevo Macro Region has a central location in comparison to other regions in BiH
B. Communication connection of the Region is good	- there is a network of main and local roads, good part of the region is covered with railroad, and the only international airport is in Sarajevocommunication links does not reflect only in traffic communications, but also in a good telecommunication network. There are three mobile and fixed telephone operators in the region, several internet providers and numerous TV and radio stations, etc.
C. Capital of Bosnia and Herzegovina is in Sarajevo Macro Region	- Sarajevo, as the capital of Bosnia and Herzegovina, needs to develop further based on the model of the developed European countries capitals. The town has the entire infrastructure for sport and cultural events, and coming to Bosnia and Herzegovina from the surrounding countries is usually done through Sarajevo airport. We believe that it is necessary to further develop and use the potentials of Sarajevo as the cultural events centre.  - Sarajevo is also the centre of international representative offices, financial institutions, diplomatic representative offices, and has a potential for development of «congress tourism».  - Sarajevo is the biggest consumers' centre in BiH, which could be exceptional advantage for other parts of the region, as well as the entire BiH, who cold find a market for their products in this town.
II NATURAL RESOURCES	
A. Rich in forests	SEA (Socio-economic audit) shows that Sarajevo Macro Region is mostly covered with forests. We consider this to be the strength of the region, which needs to be rationally used for the future
B. Forest fruits and medical herbs	development.  Forest fruits and medical herbs must not be neglected in the development strategy, considering that Sarajevo Macro Region is very rich in this natural

resource, which is totally unused. C. Waters Sarajevo Macro Region is characterised by a huge number of sources, which is also described in SEA (socio-economic audit): - potable water - mineral waters -thermal-mineral waters D. Ores Mountain pastures in Sarajevo Macro E. Pastures region represent the basis for cattle breeding development. F. Ploughland Size of ploughland as well as cultivable land is restricted. However, available land is not used to its maximum, so we believe that this natural resource is the basis for agricultural development. Mountains are the strength of the region G. Mountains because they can be a basis (some of them already are) for development of winter tourism, as well as other types of tourism. H. Rivers and lakes Rivers and lakes could also be used in the development of technical infrastructure, fishing, as well as sportrecreation tourism (rafting) I. Mineral wealth The region is also rich in dolomite, as well as other kinds of stones, as described in socio-economic audit. III ECONOMY RESOURCES A. Industrial infrastructure Industrial infrastructure is developed in Sarajevo Macro Region, for metalprocessing industry, civil engineering textile industry, wood-processing industry, as well as several other activities. industries, As other for some unfortunately, only infrastructure, knowhow and staff remained while market position is lost, while production capacities are outdated and noncompliant with the current market demands. Work and partnership group should not the mentioned industrial capacities. The group should use what is available, know-how an infrastructure, to start the production of the above mentioned industries (in fact, industrial branches). In the entire BiH, particularly in Sarajevo **B. Primary wood industry** macro Region, trends in wood-processing industry after the war indicate that majority of the producers retained the primary wood processing, in fact production of semi-products.

Work and partnership group consider that it could be strength if the primary wood-processing industry is used within region, and superstructure is established focusing on production of final wood products. Sarajevo Macro Region has one big C. Hydro-energy resources hydro-power plant in Visegrad, as well as two smaller hydro-energy facilities. However, considering large number of rivers and smaller water streams, the region has capacities for development of mini-hydro-power plants. D. Winter, health, spa, sport and The region is rich in spa capacities, has recreation tourist potentials available infrastructure as well as objects for winter tourism and sport-recreation potentials **IV HUMAN RESOURCES** A. High-educated human resources B. Relatively low price of labour **V CULTURAL AND HISTORICAL** HERITAGE A. Rich cultural heritage **B.** Historic monuments C. Museums VI AUTOCHTHONOUS PRODUCTS The Region is known by certain food A. Food products products that are produced in the households of this region Those are primarily various smoke-meat products, for which there is evidently a demand and supply. The region also produces fruit jelly, which is of unique structure and taste. Furthermore, there are also homemade cheese products, milk cream, etc. All these products may be exported. but it requires good organisation, marketing, and products quality control. B. Craft products

#### **WEAKNESSES**

## **IDENTIFIED WEAKNESSES BY WORK AND PARTNERSHIP GROUP** I ROAD INFRASTRUCTURE A. Poor quality of road communications II ECONOMIC INFRASTRUCTURE A. Insufficient use of installed capacities B. Outdated technology C. Lack of processing industry development D. Illegal construction of objects at the agricultural land **III NATURAL RESOURCES** A. Insufficient environment protection B. Improper forest management C. Irrational use of natural resources IV BUSINESS ENVIRONMENT A. Lack of spatial planning documentation B. Unsorted legal regulations C. Privatisation process (slow, ineffective) D. Insufficient use of human resources E. Unsorted markets F. Concession law– its application G. Lack of entrepreneurial spirit and tradition I. Expensive capital (high interest rates, short grace period) J. Different levels of development within regions and division of region K. Available institutions not in function L. Uncertain business environment M. Migration of local population towards urban areas N. Unloyal competition at the agricultural products market (lack of subsidies and provided sale of agricultural products) O. Weak economic power of population P. Slow demining of mine fields **V GENERAL WEAKNESSES** A. Educational system B. Lack of government support to the regional and local economic development processes C. lack of readiness for free trade agreement D. Visa regime E. Poor performance of inspection institutions F. Unstable political and security situation G. Corruption H. Lack of local influence I. Lack of final implementation of democratic processes

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# **OPPORTUNITIES**

IDENTIFIED STRENGTHS BY WORK AND PARTNERSHIP GOURPS	SHORT DESCRIPTION OF IDENTIFIED SITUATION
I POLJOPRIVREDA	
A. Cattle breeding	-demand for healthy cattle products at the market -non-compliance with genetically modified meat and meat products
B. Bee-keeping	-increasing demand for honey and honey products (food products and medicines)
C. Fruits growing	-demand for organically produced fruits -BiH may offer organic fruits below the competition's price
D. Vegetables growing	-use of thermal energy -greenhouse production
II TOURISM	
A. Olympic mountains	- winter tourism development
B. Thermal-mineral waters	- development of spas, water parks and similar.
C. Village tourism	<ul> <li>development of village tourism</li> <li>based on traditional national</li> <li>kitchen</li> <li>natural wealth</li> </ul>
D. Rivers	- rafting on Tara and Drina rivers
E. National parks	- development of national parks
F.C Cultural-historical monuments	- macro Sarajevo region rich in cultural and historical monuments that need to be further promoted within the overall tourist offer
G. Use the image of sport and cultural actors in the world	
H. Improvement of road communications quality	- condition for development of tourism, as well as other sectors, is improvement of road communications quality
III INDUSTRY	
A. Revival of old and establishment of new business-technical links	
B. Insufficiently used available industry zones and development	

of new industry zones
C. Co-operatives development
D. Image that BiH companies ha n the world
E. Great number of qualified workers (highly-educated staff)
F. Development of certain target industry branches
IV Final implementation of democratic processes (necessary for accession into EU)

# **THREATS**

I Qualified workforce, mainly the youth is leaving (brain drain)			
II market opening may led to the fall of local producers due to the lack of competitive advantages			
III Lack of legislation may result in enormous economic consequences			
IV Trade deficit			
V Lack of ecological and political awareness might seriously jeopardise the population health, as well as lead to insufficient use of advantages			
VI Investors may permanently lose the interest in BiH			
V Possible social disturbances			
VI Economy burdened with too complex and multiple-level administration			

## **SECTORAL SWOT ANALYSIS**

Sectoral and Integral SWOT analysis are prepared in cooperation with Work and partnership Group (comprising of municipal representatives, non-governmental sector representatives, as well as representatives from the Faculty of Economy at the University of Sarajevo), as well as with development agencies SERDA and REDRIN representatives.

Work and partnership group representatives have defined sectors that require intervention through several measures in order to reach effective economic development in Sarajevo Macro Region, emphasising that presented sectoral SWOT analysis does not exclude whatsoever the development of the mentioned sectors, and that sectoral SWOT analysis, as well as all related documents and future Regional Strategy, represent «live» documents that need to be regularly followed up, revised and adjusted to the new circumstances or eventual changes in the Region.

In this short introduction, in fact overview of prepared documents so far, we would like to emphasise the final conclusion of all the participants that there are many questions requiring due attention. Therefore, the recommendation of group participants is that all sectors should be equally treated and several integrated and parallel measures need to be undertaken during the future period in order to implement tasks ahead of us and create conditions for economic development.

Considering that specified processing industries had well developed production capacities before the war in BiH, work and partnership group of Sarajevo Macro Region considered that the mentioned industries, as well as those that are not mentioned but existed in the Region, should be separated and dealt with, because tradition, infrastructure and knowledge are not the factors that should be neglected. Special attention in the discussion is given to metal-processing industry that has available enormous potentials. Other sectoral SWOT analysis are separated due to specific available resources of the region (Tourism, Wood-processing, Agricultural and Food industry), as well as due to specific needs and circumstances that require due attention as separate segments (Business environment and Human resources development).

One of particular issues that is not separately specified in sectoral SWOT analysis, but frequently mentioned as weakness of the region, is poor infrastructure quality. This issue needs a special attention as well.

#### 1. DEVELOPMENT OF PROCESSING INDUSTRIES

#### STRENGTHS (S)

- Existing capacities and accompanying infrastructure in the region for development of:

   metal-processing industry
   civil engineering industry
   textile industry and similar
- Potential and tradition
- Know How
- Human resources (unused human potential)
- Good image
- Vicinity of educational centres
- Raw material and energy
- Unused industrial zones
- Cluster networking possibilities

### WEAKNESSES (W)

- Relatively outdated technology
- Expensive energents in comparison with use of capacities, in fact installation of capacities
- Lost markets
- Divided and not connected companies in the region and wider
- Aging workforce
- Privatisation effects
- Lack of international certification
- Lack of researches

#### **OPPORTUNITIES (O)**

- Trends in world economy
- Return to classical industries
- Cooperative and co-production relationships in the wider region
- Preferential custom regime with EU
- Adoption of dislocated industries from developed countries
- Free zones

- Not ready for foreign trade agreements
- Strong competition at the global level
- Ecology– inflow of dirty industries
- Lack of strategic policies
- Decay of big companies

## 2. WOOD-PROCESSING INDUSTRY

#### STRENGTHS (S)

- Rich in resources conifer and deciduous forests
- Wood quality
- Existing tradition and knowledge in wood processing
- Available infrastructure for wood production and processing
- Available qualified workforce
- Favourable geographic location

#### WEAKNESSES (W)

- Improper forest management
- Low level of project finalisation
- Lack of subsidies for development of final production
- Outdated technology
- Delay in world trends following (design, marketing, fairs,....)
- Division and lack of connection in sector and wider
- Unfavourable credit sources (high interest rates, short repayment periods,)

#### **OPPORTUNITIES (O)**

- Demand for quality wood products at the world market
- Cluster development
- Demand for products such as (conifers, briquette...)

- Strong competition at the world market
- High ecological demands at the world market related to current situation and condition of our companies
- Legal regulations (frequent change of laws and regulations)
- Slow de-mining process of forests
- Arrival of big companies

#### 3. AGRICULTURE AND FOOD INDUSTRY

#### STRENGTHS (S)

- Existence of large unused pastures
- > Favourable climate for cattle breeding development
- Existence of unused land that is not contaminated in the last ten years (valley of Drina, Sarajevsko polje...)
- ➤ Favourable climate for production of berries as well as other fruits and vegetables, and tradition in production of certain fruit and vegetable cultures
- > Rich in medical herbs
- > Existence of food-processing companies
- > Leading positions of certain companies
- > Numerous sources of natural potable water
- ➤ Tradition in domestic food production (meat, dairy, fruit products)
- ➤ Sarajevo as the biggest consumers' centre in the Region
- > Available unused human resources

## WEAKNESSES (W)

- ➤ Insufficient subsidies
- ➤ Divided agricultural land and generally unorganised producers
- > Brain drain from the villages
- ➤ Lack of agricultural affirmation
- ➤ Insufficient and non-targeted education
- Outdated technology
- ➤ Inability to sell products in organised and regular manner
- Domestic products not protected
- ➤ Insufficient presence of institutions (veterinary, inspections, relevant ministries...)
- ➤ Lack of modern equipment for quality control in this sector
- ➤ Lack of knowledge in marketing techniques for promotion of domestic products

#### OPPORTUNITIES (O)

- > Substitution of food products import
- Development of autochthonous products for export
- > Standardised agriculture
- Opportunities for expansion with new products
- ➤ Constant demand
- ➤ Alternative way of agricultural production (greenhouses)
- ➤ Cluster networking opportunities
- Possibility for production of organic products
- > Increased level of awareness on healthy nutrition
- > Development of pharmaceutical industry based on medical herbs

- ➤ Undeveloped ecological awareness
- ➤ Lack of interest for elimination of the specified weaknesses
- > Transformation of agricultural land into construction sites
- ➤ Emphasised use of foreign products (strengthening of market positions)
- ➤ Big financial power of foreign producers (dumping possibilities, monopoly position, acquisition, etc.)

#### 4. TOURISM

### STRENGTHS (S)

- Natural wealth
- Vicinity of Sarajevo as the capital
- Airport
- Developed network of road communication (roads and railroad)
- Built tourism capacities
- Image of Sarajevo Olympic Games
- Rich social and national diversities, cultures and customs
- Cultural-historic characteristics (monuments, archaeological excavations)
- Existing infrastructure of national parks
- Tourist community
- Climate conditions

#### **OPPORTUNITIES (O)**

- Reforms in tourism
- Transition country
- Attractive tourism offer
- Vicinity of the centre for banking, financial and insurance sector
- Vicinity of headquarters of public corporations, foreign institutions, embassies and diplomatic offices
- Possibility to visit fair, congress, tourist and exhibition centres
- Strengthening of regional competition and expansion towards Europe.

#### **WEAKNESSES (W)**

- Existing polluted environment (inadequate protective measures against pollution filters and others)
- Mined areas
- Insufficient protection of natural resources (uncontrolled woods cutting, dumping waste)
- Inadequate quality of road and other infrastructure to the tourist destinations
- Poor tourism marketing (passiveness in tourism promotion)
- Insufficient investments into tourism
- Bad reputation of the region

- Political instability in the country
- Lost partnerships
- Complex political system and politicised in all the fields and levels
- Inadequate level of education in tourism
- Lack of tourism offer quality in comparison with European standards
- Reflections on tourism due to bad socio-economic situation in the country
- Unresolved problems related to mine fields

## 5. DEVELOPMENT OF BUSINESS ENVIRONMENT

ST	RENGTHS (S)	SI	LABOSTI (W)
>	Big Number of entrepreneurs in the	>	Low level of institutional support for
	region		small and medium enterprises
>	Available workforce (given the		Unfavourable sources of financing and
	unemployment)		high capital price
$\triangleright$	Business flexibility and adjustability	$\triangleright$	Lack of industries as partners (suppliers
>	Large number of undeveloped activities		and customers) SMEs
	at the local market		Huge bureaucratic system
>	Availability and access to natural		Insufficient education and lack of
	resources		"reform" approach in all segments of the
>	Favourable geographic location		society:
	Existence of institutional framework		Owners of enterprises, management,
	Existence of laws and legal regulations	_	workers as well as public administration
	Existence of local and regional		Insufficient focus on production
	development agencies, consultancy network	_	companies
_			Lack of connection and coordination between the institutions
	Existence of banking sector with huge	1	Unequal laws, duplication of certain
>	cash potential for investments Existence of road, railroad and other		laws
	kinds of traffic and communication	>	Lack of pro-active engagement by
	kinds of traffic and communication		various agencies, government and others
			in business promotion offering legal
			security
		>	Lack of subsidies for production
ΡĮ	RILIKE (O)	ΡĮ	RIJETNJE (T)
>	Increased support to the existing	>	· /
	companies		development of companies and
>	Increased number of and support to new		entrepreneurship
	companies and ideas	>	Slow improvement of environment for
>	Raising the awareness and promotion of		work of the companies
	EU standards amongst small and medium	>	Poor quality of road infrastructure
	enterprises	۶	Lack of market orientation and focus on
>	Increased number of target vocational		customers in many companies
	trainings and education at all levels in the	>	Lack of orientation and focus on citizens
	society		as the final beneficiaries of public
>	Promotion of new business opportunities		administration services
	through import substitution programme	>	Well-organised and strong trade and
>	Development and expansion of export		import lobby
	markets	>	Inadequate resolution of big systems'
>	Connection of companies both vertically		destiny (socio-economic problem)
1		i i	- · · · · · · · · · · · · · · · · · · ·
	and horizontally into clusters or other		
	and horizontally into clusters or other forms of consortium  Experience of the developed countries		

## 6. HUMAN RESOURCES DEVELOPMENT - POTENTIALS

ST	RENGTHS (S)	SLABOSTI (W)
\( \rangle \) \(	Institutions for education (faculties, university, different secondary schools) Presence of the international organisations developing human resources Big number of professionally trained young people Big number of able to work population (given the unemployment) Flexibility an adjustability to new posts and work environments Ability to learn fast	<ul> <li>Existing disproportion between available human resources and labour market demands</li> <li>High unemployment rate</li> <li>Insufficiently defined term "Unemployment"</li> <li>Brain drain of young and educated people from the Region</li> <li>Insufficient support to the employment of young staff through initiation of independent activities</li> <li>Lack of managerial skills in all sectors</li> <li>Lack of knowledge in market economy, in fact new approach to work</li> <li>Political interferences in staff selection</li> </ul>
PI	RILIKE (O)	PRIJETNJE (T)
\( \text{\tin}\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\tint{\text{\tint{\text{\tin}\text{\texi\tint{\text{\text{\text{\text{\text{\tin}\text{\text{\text{\texi}\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\ti}\tint{\text{\text{\text{\text{\text{\text{\text{\text{\text{\ti}\tint{\text{\text{\text{\text{\text{\texi}\text{\text{\text{\ti}\tint{\text{\text{\texit{\text{\texi}\tint{\tiint{\text{\tin}\tint{\text{\tin}\tint{\tin}\tint{\text{\texi}\tint{\text{\ti}\tit	Introduce modern educational systems and methods Use transfer of knowledge through different institutions Create support to small and medium enterprises in order to employ more people Train people through practical trainings in cooperation with leading companies and Employment bureau Improve relationships between education and practice Improve relationships between private sector and education institutions	<ul> <li>Expensive official education</li> <li>Age structure of some employees</li> <li>Low level of support in different kinds of training in the Region</li> <li>Attractive EU countries for employment of young and educated people</li> </ul>