

BOSNIA and HERZEGOVINA

Country Report

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List of Abbreviations

AMFI	Association of Micro-finance Institutions
B&H	Bosnia and Herzegovina
BHAS	Agency for Statistics of Bosnia and Herzegovina
BT	Balance of trade
CAB	Current account balance
CAP	Common Agricultural Policy of the EU
CARDS	Community Assistance for Reconstruction, Development & Stabilisation
CBBH	Central Bank of Bosnia and Herzegovina
DoADB	Department of Agriculture, Forestry & Water Management, District Brcko
DfID	Department for International Development (UK)
DM	German Mark
EIA	Environmental Impact Assessment
EU	European Union
EUFOR	European Union peacekeeping troops
FAO	Food and Agriculture Organisation
FB&H	Federation of Bosnia and Herzegovina
FIB	Federal Investment Bank
FTAs	Free Trade Agreements
GDP	Gross Domestic Product
GTZ	Gesellschaft fuer technische Zusammenarbeit (German Donor)
GVA	Gross Value Added
Ha	Hectare
ICJ	International Court of Justice
IFAD	International Fund for Agriculture
IFOR	NATO-led international peacekeeping force
ILO	International Labour Organisation
KfW	Kreditanstalt fuer Wiederaufbau (German Development Bank)
KM	Bosnian Convertible Mark
LSMS	Living Standard Measurement Survey
MAFWM	Ministry of Agriculture, Forestry & Water Management of RS,
MAWMF	Ministry of Agriculture, Water Management & Forestry of FB&H, and
MAFRD	B&H Ministry of Agriculture, Food and Rural Development (to be established)
MFI	Micro-finance Institutions
MoFTER	Ministry of Foreign Trade and Economic Relations
NGO's	Non-Governmental Organisations
OHR	Office of the High Representative
PPP	Purchasing Power Parity
PRSP	Poverty Reduction Strategy Paper
RS	Republika Srpska of B&H
SAA	Stabilisation and Association Agreement
SCG	Serbia and Montenegro
SEE	South-East Europe
SFOR	NATO-led Stabilization Force
SIDA	Swedish International Development (Cooperation) Agency
SMEs	Small and medium sized enterprises
T	tonne
UHT	Ultra Heat Treated (milk)
USAID	United States Agency for International Development
USD	US Dollar
WB	World Bank
WTO	World Trade Organisation

1 INTRODUCTION

1.1 OVERVIEW OF THE COUNTRY



Bosnia and Herzegovina (B&H) has an estimated population of approximately four million people. The country has three ethnic constituent peoples: Bosniaks, Serbs, and Croats. The country borders with Croatia in the north and west and Serbia and Montenegro in the east. It is virtually landlocked, save for a small strip of land (about 20 km) on the Adriatic sea (Please refer to Annex 2 for various geographic and land use maps of B&H). The country was formed from two historical regions - Bosnia in the north, with Sarajevo as its chief city¹, (with an estimated population of 308,558 (530,000 pre-conflict)); and Herzegovina in the south, with Mostar as its chief city (with a population of approximately 105,000). Other important cities include Banja Luka², which is currently the second largest city in B&H (with an estimated population of 270,000), Tuzla, and Zenica. The interior of the country is heavily mountainous (estimated to cover more than 70% of the land area) and divided by

1 Sarajevo is also the capital of the Federation of B&H (FB&H) and center of the Sarajevo Canton

2 Banja Luka is also the administrative capital of the Republika Srpska (RS)

various rivers (the Sava (and its tributaries) and the Neretva are the chief rivers), most of which are non-navigable. Lying mostly in the Dinaric Alps, the nation has no coastal ports.

The ethnically diverse population speaks Bosnian, Croatian, and Serbian (all dialects of Serbo-Croatian). The country's Bosniaks (about 48%, mainly Muslim), Serbs (about 37% of the population, largely Eastern Orthodox), and Croats (about 14%, mostly Roman Catholics) formerly lived in mixed communities but the civil war of 1992-1995 and the flight of refugees forcibly segregated much of the population. Some inhabitants have gradually returned to their pre-conflict places of residence since the fighting's end. The legacy of the conflict and the subsequent administrative divisions established, following the signing of the Dayton Peace Agreement in 1995 continue to dominate and constrain the political, economic and socio-economic development of the country. The conflict caused significant loss of human capital, migration of large numbers of the rural population, extensive damage to production and processing facilities and the establishment of very specific and complex governance structures. It is important to understand these structures and their impact upon the governance of the sector.

The current Constitution of Bosnia and Herzegovina (B&H) forms an integral part of the Dayton Peace agreement. It established two Entities, the Federation of Bosnia and Herzegovina (FB&H) and the Republika Srpska (RS). Under this constitutional construction B&H is a sovereign state, with a decentralised political and administrative structure.

In addition, the area of Brcko, in the North-East corner of the country, which remained contested after the Dayton agreement, was settled through international arbitration, and Brcko District (BD) was established in March 2000, with powers largely similar to those of the Entities. The State of B&H is the central authority but has only limited and specific powers whereas the two Entities and Brcko District are politically, administratively and legally, largely fiscally autonomous. Entities have their own respective constitutions and hold all responsibility not expressly assigned to the State by the Constitution of B&H.

The country currently has a three-person, rotating Presidency, comprising two members from the Federation (one Croat and one Bosniak) and one member from the RS. The Presidency is responsible for foreign policy, appointment of ambassadors, international treaties and coordination with international and non-governmental organisations. There is also a Council of Ministers, equally divided between the three ethnic groups and responsible for overseeing foreign, economic and fiscal policy. There is a State level Parliament, comprised of a House of Representatives, a 42-member body - 28 from the Federation and 14 from the RS - elected by party list vote, and a House of Peoples, with 15 members (5 Serb, 5 Bosniak and 5 Croat) indirectly elected by the Federation's House of Peoples and the RS National Assembly. In addition, the Federation, the RS and Brcko District all have their own parliamentary assemblies.

The decision on the initiative to commence integration with the EU was signed in 1999 by the Council of Ministers (CoM) of B&H. In 2001 the EU granted B&H a number of Autonomous Trade Measures (ATM). In October 2002 the new B&H Government confirmed its commitment to EU integration and the development of regional trade. EU integration competencies were subsequently assigned to the Directorate for European Integration (DEI), established by the Law on Council of Ministers in December 2002, under the direct authority

of the Chair of the Council of Ministers. In 2003, at the EU-Balkan Thessaloniki Summit, it was agreed to further strengthen political co-operation, enhance institution-building and implement further trade measures to promote economic growth in the region. As a result of discussions that followed, in October 2005, the European Commission recommended that talks on a Stabilisation and Association Agreement (SAA) be initiated with Bosnia-Herzegovina. In November 2005 SAA negotiations commenced. This process is on-going.

1.2 GENERAL INTRODUCTION TO THE REPORT AND DATA CONSTRAINTS

The preparation of this report was particularly difficult given the lack of official data on the agricultural and rural sector for Bosnia and Herzegovina (B&H) as a whole. State-level structures for statistics and other information remain weak and fragmented. In undertaking data and information research in such a complex and fragmented governance environment as B&H, it was inevitable that major discrepancies in information sources would be identified (both from official and un-official sources). Sector statistics that do exist in B&H today are often subject to large margins of error, mainly due to the existence of outdated collection methods (often a combination of estimates and non-empirical survey data) and the growing significance of the informal economy (which may account for up to 40 % of all employment in the sector). Further, the political divisions within the country mean that there is little harmonisation of even the few statistics that are collected. This report has therefore been forced to utilise numerous partial sources of data and other supplementary information. Results presented for many tables have been amalgamated from these sources, where possible. The numbers included must therefore be considered in some areas as, at best, intelligent guesstimates. There is also a lack of recent comprehensive reviews of the agricultural situation and current policies. The most recent of significance focused on the organisation of public institutions within the Sector and this study did not touch on farm level issues.

Sector-wide reviews typically precede programmes of assistance, and the agricultural sector in B&H has not received such a priority for assistance from the EU or other Donor agencies for a number of years. This is changing but recent scoping missions from organisations such as the World Bank, SIDA, and DFID that are currently reassessing priorities and options have not yet published their findings. This report is therefore based on a combination of official and unofficial data, sub-sector or issue-specific project reports (where these existed), the views and perceptions of sector specialists from the EU and B&H and recent survey data, much of which is contradictory. The involvement of a network of local counterparts and cooperation with the current Ministries (FB&H, RS, DoB, DoA MoFTER) was also essential in gathering information and increasing our understanding of the current situation. It is strongly recommended that in any future planning of assistance for the sector that the strengthening of B&H data systems and general sector statistics is given priority. This is particularly important as B&H prepares for negotiation of an SAA with the EU.

2 ECONOMIC COUNTRY BACKGROUND

Since the signing of the Dayton agreement and more particularly since 1998, institutional and administrative arrangements in economic policy in Bosnia and Herzegovina (B&H) have been dominated by the role of its two entities, the Federation of Bosnia and Herzegovina (FB&H) on one hand and the Republika Srpska (RS) on the other. Macro-economic policy and the key instruments of monetary, fiscal and exchange rate policy have in practice been lacking in B&H, as have a number of the institutional structures required for the implementation of economic policy.

Responsibility for fiscal policy in B&H after the war was divided between the Entities (and Brcko District). This situation continued until 2004. In 2004, the Indirect Taxation Authority was formed and the Entity-level Customs Agencies were closed, so that fiscal responsibilities were transferred, for the first time since the war, from the Entities to the level of the Common Institutions of B&H. Although basic customs policy was determined and passed at the State-Level, the common basic customs policy was still implemented at the Entity level until 2004.

The other two branches of macro-economic instrumentation, monetary and foreign exchange policy have been lacking in B&H for the entire post-war period to the present. The Currency Board Arrangement and the pegging of the B&H currency (the Bosnian Convertible Mark - KM) to the Euro excluded the pursuit of monetary policy. The Central Bank is legally prevented from actively influencing the money supply (i.e. printing more money), except by setting mandatory reserves. Since the KM exchange rate is fixed and unchanging (initially linked to the Deutschmark, and now to the Euro), there is no room for using exchange rate policy to allow the exchange rate to adjust to fluctuations in the balance of payments and particularly in the current account.

2.1 MACRO- AND SOCIO-ECONOMIC SITUATION

Between 1999 and 2005 the Gross Domestic Product (GDP) of B&H grew, on average, by around 6% per annum. However, the average rate of GDP growth for the last three years has been slightly reducing. This slow-down in economic growth appears to be directly related to much lower levels of investment in infrastructure than had been the case during the period of reconstruction (i.e. between 1996-2000). The primary sources of economic growth over the last five years have been in the business sector, with increasing reliance upon the raw materials and related manufacturing sectors in the creation of new value. Increased production in these sectors, as well as price increases for commodities, contributed positively to growth.

Between 2000 and 2005, a number of inherited and more recent problems came to the fore, particularly related to the restructuring of medium-sized and large companies during or after privatisation, to the problem of surplus workers and their rights, and how to finance business projects in companies with good (strategic) vision which had not been fully privatised. Privatised companies had to solve the problems of transferred obligations, arising in large part from unpaid wages and social insurance contributions. Meeting these outstanding obligations meant a significant number of companies recorded losses between 2001 and 2005, reducing the scope for attaining a higher rate of economic growth.

The percentage of GDP accounted for by basic industries (including agriculture, hunting, forestry and fishing) has seen a gradual contraction in the last years (from 35.7% in 2004 to 35.4% in 2005). In contrast, the service sectors have seen a rise (from 67% in 2004 to 67.89% in 2005). The percentage accounted for by the public sector in total GDP has been steadily reducing over the last three years and is now around 22%.

Industrial production rose by nearly 20% in 2005 in the RS. In 2006, production first slowed down and picked up in April, averaging 10% for the first five months compared to a year earlier. The Federation on the other hand experienced a more moderate growth rate of 5% both during 2005 and the first part of 2006. Growth appears to have been supported by continued strong private consumption, fuelled by high credit growth. The increase in production was mainly attributed to growth in the processing industry as well as in the utilities, while the rise in industrial production in the RS mainly came from mining. As a result of recent privatisations there is potential for a continued strong increase in production of steel and aluminium in 2005/6, which will contribute positively to growth and industrial output.

Inflation remains relatively low, though there has been a small rise in the last period, currently recorded as 4.4% in 2005 (in previous years inflation was running at less than 1%). The increase was mainly driven by price increases in anticipation of the VAT introduction but also by some administrative price increases and higher energy prices. The rise in inflation has continued in 2006, recorded at 4.5% in the first five months of the year and most strongly for agricultural and processed food products.

Official unemployment data indicate that unemployment rose from 42% in 2004 to 44% in 2005. However, to obtain access to social security one must register as being unemployed (or be employed in the formal economy) which results in an overestimation of unemployment. A more accurate figure is assumed to be around 20% of the population, although no official estimation is available for 2005. Unemployment is to a large extent of a structural nature and does not seem to have decreased over recent years, despite rather high economic growth rates. On the contrary, informal employment (i.e. unregistered, grey economy) seems to have been increasing. Employment on the informal labour market still acts as a specific kind of social 'shock-absorber'. According to World Bank estimates, it is equivalent to 55% of registered employment.

Table 1: Main macroeconomic indicators in comparison with EU (2005)

	2000	2001	2002	2003	2004	2005	EU-25 (2005)
Population, total (1000)	3,781	3,798	3,828	3,832	3,843	3,844	459,488
Surface area (sq km)	51,209						3,975,043
Population density (No per sq km)*	74	74	75	75	75	75	115.6
UAA	n/a	n/a	n/a	n/a	n/a	n/a	162,394*
GDP (current Mio. Euro)	4,914	5,358	5,957	6,266	7,495	8,052	2,697,935
GDP per capita (current Euro)	1,300	1,411	1,556	1,635	1,950	2,095	5,872
Export of goods & services (% of GDP)*	24.9	n/a	19.6	21.0	22.3	26.5	9.3*
Real GDP development (%)	5.6	4.5	5.5	3.5	5.0	5.3	1.6
Import of goods & services (% of GDP)*	85.9		78.7	76.3	69.8	76.8	9.9*
Inflation rate (annual %)	4.8	3.1	0.4	0.6	0.4	4.4	2.2
Registered unemployment rate (%)	39.7	40.3	40.9	42.0	43.2	44.0	9.0
Euro-Exchange rate (1 Euro = x units NC)	1.95	1.95	1.95	1.95	1.95	1.95	n/a

Source: Statistical bulletins of Agency for Statistics of Bosnia and Herzegovina, Statistical Yearbooks and monthly reviews of Federal Office of Statistics, The monthly statistical reviews of Statistical Institute of the Republika Srpska, B&H Central Bank, B&H Ministry for Finance and Treasury, B&H authorizes and IMF staff estimates, Customs offices of Federation B&H, The Republika Srpska and District Brcko, Statistical office of District Brcko, UNECE Common statistical database, Phare ACE Programme, Project P96-6020-R: Overview on Agriculture in Bosnia and Herzegovina - Prospect for Reconstruction and development, Sarajevo 1999, Chamber of Commerce of B&H; * Calculation on the basis of the above sources; EU 25: Eurostat database: There are significant discrepancies between the various sources;. Data for 2005 are provisional; *2004 data

During the last three years (2003-5), there have been positive developments, with a modest reduction in the trade deficit. However, the deficit remains large at 53.3% of GDP in 2005. The current account deficit also expanded in 2005, from 20.8% to 22.5% of GDP. A large part of the increase occurred in the fourth quarter of 2005 owing to increased imports in the run-up to the VAT introduction.

The main rise in exports took place between 1998 and 2000 (exports doubled), while imports rose by 24.3% during the same period. Between 2000 and 2002 was the period of greatest stagnation in foreign trade – exports fell 4.7%, while imports grew 11%. However, exports have been increasing in the last year and this positive trend appears to be continuing in 2006. In the first quarter of 2006 exports grew by 30% compared to the same period in the previous year, whilst imports weakened. Adjusting for VAT effects, the current account deficit seems to have remained fairly stable at a high level.

The current account deficit is mainly financed by non-debt creating inflows. In 2005 however, Foreign Direct Investment inflows decreased drastically, from 7% of GDP in 2004 to around 3.2% of GDP in 2005. In spite of the fact that the trade deficit has fallen, as a percentage of GDP, B&H is the only European country with a current account deficit close to

28% or a trade deficit of nearly 50%. Even taking into account recently published data on the significant disproportion between the official and real GDP of B&H and adjusting official GDP upwards by 50% to allow for revenue created on the informal sector, B&H still has the greatest current account deficit of any country in transition.

2.2 AGRICULTURE IN THE ECONOMY

In absolute terms, despite evidence of sustained modest growth over the last decade, agricultural production in Bosnia and Herzegovina, in almost all sub-sectors, has not yet recovered to pre-conflict levels. Productivity levels remain low and import dependency high. In consequence the country continues to be burdened by an enormous agri-food trade deficit (currently running at 53.3%)

According to official statistical data for 2005, the share of Agriculture, Hunting and Forestry in overall B&H GDP is estimated at around 10-11%. However, there are significant differences when comparing the two Entities. The sector contributes between 7 - 8% to the GDP of the Federation of B&H, whereas in Republika Srpska, the sector share in GDP is considerably higher, at more than 17%.

The share of the agri-food sector (agricultural production and food processing) in total recorded employment, for the whole of B&H is officially estimated at 7.4%, although in reality the number engaged is likely to be significantly higher given that small-scale private producers are not recorded in official statistics (see figure 4 below). Estimates range from between 20 to 50%. The most significant group employed on the informal market is self-employed people in agriculture. According to the same World Bank report, this group totals close to 190,000, of whom 60% are from the Republika Srpska (RS) and the remaining 40% from the Federation of B&H (FB&H).

According to official statistics, the share of agricultural and food products in total imports, at a little above 20%, is much higher than in total exports at 6 %.

Table 2: Key agricultural indicators for B&H, in comparison with the EU in %

	B&H			EU-25
	1995	2000	2005	2005
Share of Agricultural land in total land	n/a	n/a	48%	40.8%
Share of Arable Land and Permanent Crops in total land	n/a	n/a	25%	n/a
Share of Agricultural GDP in total GDP	n/a	n/a	10.1%	1.6%
Share of Agricultural Labour in total Labour	n/a	n/a	3.6%*	5%
Share of Agri-food labour in total labour	n/a	n/a	7.4%*	n/a
Share of Agricultural Export in total Export	n/a	n/a	6%	6%
Share of Agricultural Import in total Import	n/a	n/a	20%	6%

Source: BHAS + Own estimates and reports from Economic Institute, Sarajevo, May 2005; **EU 25 data** – Dg Agri "Agriculture in the European Union".

* Note: These are official percentages, as published by the B&H Statistics office for 2004. The numbers are believed by the consultant to significantly under-estimate the active agriculture and agri-food labour force which is estimated to be in excess of 20% of total labour.

3 LAND USE, FARM STRUCTURE AND LABOUR

3.1 LAND USE AND QUALITY

Bosnia and Herzegovina has a total land area of 5,113,000 hectares of which 2,444,000 hectares (or 47.8%) are agricultural land. Of this area approximately 1,250,000 ha are in the territory of Republika Srpska and 1,194,000 in the territory of the Federation of B&H. Of the total land area, there are approximately 1,000,000 hectares of arable land, out of which 40% are currently uncultivated. Following the conflict in the mid-nineties, over 237,000 ha were left covered in landmines (see annex 2 map of existing land mines in B&H).

When compared to the EU, B&H has a low % of total arable land (20%) available and a relatively high percentage of grassland, suggesting a potential advantage in certain types of livestock production over crop production. Despite this fact, grain production accounts for over 50% of land use, Fodder crops for approximately 30%, horticulture 15%, and orchards and vineyards 4%. Over 85% of the land in B& H is currently under private ownership (over 90% in the Federation and 78% in RS where a number of large socially owned enterprises still exist).

Table 3: Land use in comparison with EU (2005)

	B&H	%	EU-25 2004	%
Land total	5,113,000	100.0	397,504,000	100.0
Agricultural land	2,444,000	47.8	162,393,000	40.9
Arable land	1,028,000	20.1	109,156,000	27.5
Permanent grassland	1,285,000	25.1	51,721,000	13.0
Fallow Land	478,000	9.3	9,686,000	2.4
Agricultural land/capita (ha)	0.51	n/a	0.36	n/a
Arable land /capita (ha)	0.26	n/a	0.24	n/a

Source: Estimates based on the following sources - Statistical Yearbook of the Republic of Bosnia and Herzegovina (1988-1992); Statistical bulletins of Agency for Statistics of Bosnia and Herzegovina, Statistical Yearbooks and monthly reviews of Federal Office of Statistics, The monthly statistical reviews of Statistical Institute of the Republika Srpska, Statistical office of District Brcko, Phare ACE Programme, Project P96-6020-R: Overview on Agriculture in Bosnia and Herzegovina - Prospect for Reconstruction and development, Sarajevo 1999. / EU 25 data: Year 2003 <http://epp.eurostat.ec.eu.int/portal/page>. Year 2004 DG Agri Agriculture in the European Union

3.2 LAND OWNERSHIP AND PRIVATISATION

B&H has a complex land ownership recording system (Land registry and cadastre) which is in desperate need of unification and modernising:

Land registry: The forerunner of the modern land registry in B&H was first established by the Austro-Hungarian Empire administration between 1886 and 1910, and was based on the then Austro-Hungarian survey. The keeping, maintenance and establishment of the land registry and registration of the real estate and real estate rights was regulated by the

Kingdom of Yugoslavia in the period of 1930-1931, the legal precepts of which have been kept until the present day. These legal precepts have for the most part been assumed by the new entity-level Land Registry Laws. Technically, the land registry is still maintained on the basis of the old Austro-Hungarian survey, except for a smaller part of the territory where the real estate cadastre (*katastar nekretnina*) has been established based on the new cadastral survey. During the WWII, on many parts of B&H territory the land registers were completely or partly destroyed, and have, to-date, never been re-established. In legal terms, the land register is the public ledger and public register of rights to real estate.

The keeping, maintenance and establishment of the land registry, and registration of the real estate and real estate rights is regulated by separate Entity legislation, namely the Law on Land Registry in the Federation of Bosnia and Herzegovina ("FB&H OG" No. 19/03 and 54/04) and the RS Law on Land Registry ("RS OG", No. 67/03, 46/04, and 109/05), both of which are in alignment with each other. Pursuant to these laws, each Entity adopted the following three Rulebooks: *the Rulebook on Introduction of Electronically Maintained Land Registries*; *the Rulebook on Procedures in Land Registry Matters*; and *the Rulebook on Education and Specialist Examination for Land Registry Clerks*.

Cadastrre: In the Federation of Bosnia and Herzegovina, there is the currently applicable *Law on Survey and Real Estate Cadastre*, adopted in 1984 (except for the part which refers to the records of evidence and registration of rights to the real property), regulating the introduction of a uniform public records system. This Law has determined that the recording and registration of the rights to the real estate should also be carried out in addition to the survey, development and maintenance of the cadastre of land, buildings, and other facilities. Insofar as the real estate cadastre has been put in official operation, the land register would no longer remain in effect in practice. At the time when the Law on Land Registry came into force in 2002, Article 93 repealed all provisions of *the Law on Survey and Real Estate Cadastre* insofar as they were of relevance for the recording and registration of ownership rights and other obligation-related rights to real property. By that point in time the land cadastre was established on about 10% of the territory of Bosnia and Herzegovina, but the development of the real estate cadastre was not extended for a considerable part of the total territory. In the regions where no real estate cadastre was established there is still the applicable *Law on Survey and Cadastre of Land* in effect since 1978 ("OG RB&H", No. 14/78). According to that Law, the land cadastre contains the data concerning the cadastral plots of land and buildings located on the land in terms of their location, surface form, method of use, their class and cadastral revenue, as well as the data concerning the users of these plots.

In the Republika Srpska, there is still the applicable *Law on Survey and Real Estate Cadastre* ("RS Official Gazette" No. 55/03 and 46/04), regulating the survey and real estate cadastre, and the real estate user records in regard to the specific data on the cadastral parcels of land, as well as their maintenance. There is also *the Law on Maintenance of the Survey and Land Cadastre* ("RS Official Gazette", No. 19/96) as a still applicable law, except for its Articles 6 and 7, which have been repealed and are no longer effective. A *Listed cadastre* (*Popisni katastar*) has been established in those regions of Bosnia and Herzegovina where

the cadastre survey maps and operations were destroyed and no land register existed. It is based on a list of the users within blocks or groups of land parcels and on crude, manual assessment of the land parcel size. The official records concerning the real estate rights are not maintained. Instead, the documents certifying the rights are stored with the courts, but due to the lack of the land register they are not practicable.

In both Entities the new, mutually harmonized *Draft Laws on Survey and Real Estate Cadastre* are in an on-going adoption procedure. The main purpose of this new law is to introduce a new division of tasks and promote the use of more modern technologies, ensuring harmonization of the legislation of both entities.

Constitutionally established ownership rights have yet to be fulfilled in many cases because of the consequences of war and ethnic strife. During the four years of the conflict over 2 million of the 4.4 million inhabitants of the country either became refugees or were displaced from their homes. Many of these were rural families, residing on agricultural land. Approximately 600,000 displaced people and refugees have returned to Bosnia and Herzegovina, mainly to urban centres. However, gradually some of these people have begun to return to rural areas. In B&H today, about 94% of the agricultural land is privately owned and is farmed privately. Pre-1992 legislation allowed individual holdings only up to a parcel size of 10 hectares of flat land and up to 15 hectares of hilly land. This legal limit has now been abandoned. About 5% of arable land is now held by state farms.

3.3 FARM STRUCTURE

Information on farm structure is very limited in B&H currently. The last official data published was in the 1991 agricultural census. Given the impact of the conflict on rural areas this data is not considered reliable. From available evidence (often partial) an estimate has been made of current farm structure by the consultant. Based on this evidence it is estimated that there are over 500,000 agricultural holdings in B&H. Over 50% of these agricultural holdings are estimated to be less than 2 ha and over 80% are less than 5 ha (see table 4 below). These small farms are often further compartmentalised into 7-9 smaller parcels creating major problems for productivity and overall efficiency. Although the size of land areas actually cultivated by individual farms may be larger, the extent of land fragmentation severely restricts the adoption of more modern agricultural systems. This is in contrast with the state farms, which are generally much larger. However, former state farms are mostly not working or in a difficult, often not finalised state of privatisation (some having leased land to private owners), restricted in attracting private capital, lacking investment and effective management. In consequence, a commercial farming sector, able to produce in sufficient volumes and effectively compete in the increasingly competitive domestic and international agri-food markets is currently severely limited in B&H. The need for consolidation of fragmented farm holdings into more viable economic units has been recognized for some time by policy makers but little action has been taken to address the problem. The laws and procedures are in place in both entities and appear to provide a suitable procedural basis for land sale but little incentive currently exists for land owners to

offer their land for sale or rental given the weakness of the domestic land market and the lack of suitable policy incentives or securities.

Table 4: Farm Structure

Land area	Number of holdings	% of holdings
Total	515,000	100.0%
Up to 2 ha of UAA	250,000	48.5%
Above 2 ha to 5 ha	150,000	29.1%
Above 5 ha to 10 ha	90,000	17.5%
Above 10 ha to 100 ha	20,000	3.9%
Above 100 ha UAA	200	0.0%

Note: These are the consultant's own estimates for farm holdings. There is no reliable data available on Utilised area currently. This is primarily because the last agricultural census was conducted in 1991. All subsequent data on farm structure are based on historical estimates and production statistics.

3.4 FARM INCOME AND EMPLOYMENT

The total labour force (people able to work) of B&H is an estimated 1.1 Million people. 626,463 people were officially registered as being employed in 2004. Consequently the remainder are considered unemployed (43% of total labour force in 2004 and 44% in 2005). However to obtain access to social security one must register as being unemployed (or to be registered in the formal economy) which results in an over-estimation of unemployment. A more accurate figure for unemployment is estimated to be around 20% of the population, although no official estimate is available for 2005.

Average net real wages increased by 2.9% in December 2005 compared to a year before, with wage increases being higher in the RS than in the Federation and thus contributing to reducing the gap in wage levels. There is currently no reliable data available on farm incomes in B&H.

According to official statistics, the share of the agri-food sector (agricultural production and food processing) in total recorded employment in 2004 is about 7.4 % (47,000 people, of which 23,000 are actively employed in primary agriculture or 3.6%). However, evidence suggests that most of the rural population active in agriculture do not register as being employed in the sector. There has been no recent population census so it is impossible to quantify with any accuracy, the exact number of those employed in the sector. The main discrepancy is the high level of subsistence and semi-subsistence farms in B&H, most of which are simply not recorded in official statistics. They are not registered for taxation (VAT) and produce only modest levels of marketable surplus. More detailed agricultural survey data (and ultimately an agricultural census) is clearly required.

Having in mind an estimated number of agricultural units in excess of 500,000 (with an estimated 100,000 units of above 5 ha), the significance of subsistence and semi-subsistence farming and other related 'unofficial' employment opportunities within the sector, there appears to be a significant under-valuation of the importance of the agriculture and food sector in employment in official statistics. A recent World Bank estimate (2005) of 18% share of primary agriculture in total employment may still be an underestimation.

4 AGRICULTURAL PRODUCTION AND CONSUMPTION

4.1 TOTAL AGRICULTURAL PRODUCTION (GAO, MAIN PRODUCTS)

In Yugoslav times B&H was not regarded as a particularly agricultural country. Before the war agriculture contributed less than 10% of gross domestic product (GDP). Immediately after the war this figure rose considerably, reflecting the decline in industry and services and the fact that many people had reverted to subsistence and small-scale farming.

Despite its increased relative share of GDP, agricultural output declined until around 2004. Since then the economic importance and (to a lesser extent) the output of agriculture has been moving back to pre-war levels. In 2005 the agriculture sector contributed approximately 10% of total GDP. However, in absolute terms today, the agricultural production in almost all sub-sectors of crop and livestock production are still less than they were before the war (see sections 4.2 and 4.3 below).

The enormous agro-food trade deficit (currently 53.3%), as well as the low rate of self-sufficiency (see tables below), are clear indicators of the poor productivity in agriculture and the lack of competitiveness of the Bosnian agro-food sector as a whole.

Table 5: Gross Agricultural Output for main agricultural commodities (Mio. Euro)

	2000	2004
Total GAO	n/a	n/a
Crop Production (total)	n/a	n/a
Thereof:	n/a	n/a
- Cereals	129.7	200.6
- Oilseeds	n/a	n/a
- Potatoes	69.9	58.7
- Fruit & Vegetables	n/a	n/a
- Vegetables	n/a	n/a
Livestock Products (total)	n/a	n/a
Thereof:	n/a	n/a
- Beef and Veal	n/a	n/a
- Pork	20.9	22.6
- Poultry	17.3	9.8
- Eggs	38.95	58.83
- Cow-Milk	130.0	150.0

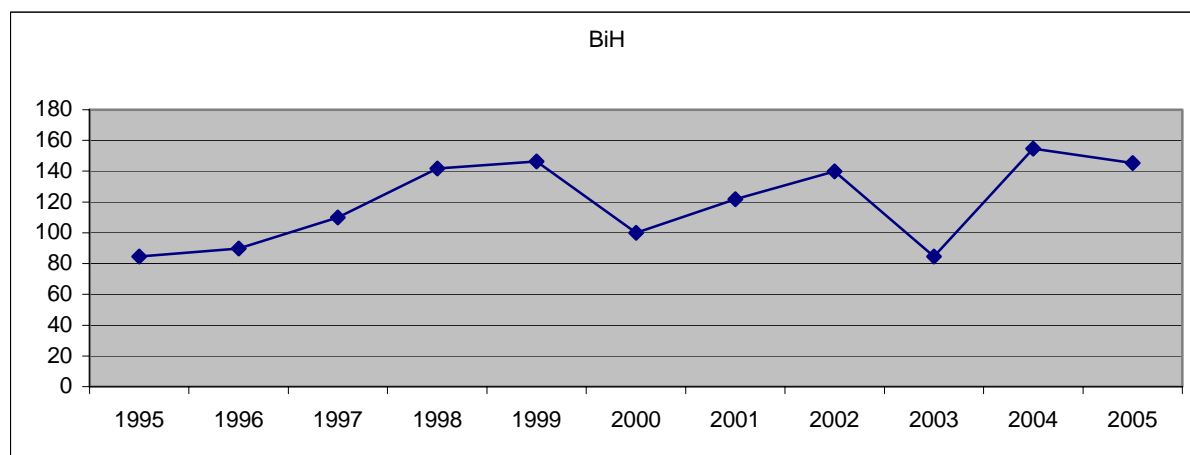
Source: numbers were calculated on the basis of available data from: Agency for statistics of Bosnia an Herzegovina, Statistical Yearbooks of Federal Office of Statistics (1997-2005); Reviews of the Republika Srpska, Institute of Statistics, Part Domestic trade and statistics for 1998-2004; **Note:** Accurate data from 1995 are not available as this was the last year of the armed conflict in B&H.

4.2 CROP PRODUCTION

Following a rapid initial increase, post-war crop production has been fairly stable since 1996/97 and the total area harvested is now fluctuating around 55-65 % of pre-war levels.

Only the areas planted to fodder and industrial crops continue to increase, while the area in vegetable production is relatively stable and the area used for cereals has steadily declined from 1998 until 2005 (average per year, 2.3%).

Figure 1: Crop production index, 1995-2005, (2000 = 100)



Source: Calculations on the basis of: Statistical Yearbook of the Republic of Bosnia and Herzegovina (1988-1992); Statistical bulletins of Agency for Statistics of Bosnia and Herzegovina, Statistical Yearbooks (1995-2005) of Federal Office of Statistics, The monthly statistical reviews of Statistical Institute of the Republika Srpska, SO of District Brcko, Phare ACE Programme, Project P96-6020-R: Overview on Agriculture in Bosnia and Herzegovina - Prospect for Reconstruction and development, Sarajevo 1999.

4.2.1 Cereals

Due to relatively modest amounts of arable land and dominant hilly-mountainous areas in which both actual and potential yields are limited by unfavorable agro-climate factors, Bosnia and Herzegovina cannot be considered as a cereals producing region. This particularly applies to the Federation of Bosnia and Herzegovina. In 2005, there were 321,000 ha planted to cereals. The leading cereal crops are maize, with 195,600 ha (61%) and wheat with 81,400 ha (25%), while barley, rye, oats and triticale are sown on the remaining 44,000 ha.

Table 6: Cereal crop area, production and yield trends (2001-5)

	2000	2001	2002	2003	2004	2005	EU-25 (2005)
Crop area ('000 ha)							
Cereals	364.8	356.2	341.7	315.1	327.3	321.0	52,014
Production ('000 t)							
Cereals	935.1	1,138.0	1,307.7	790.2	1,445.3	1,358.3	260,561
Yield trends (t/ha)							
Cereals	2.6	3.2	3.8	2.5	4.4	4.23	5.8

Source: Statistical Yearbook of the Republic of Bosnia and Herzegovina (1988-1992); Statistical bulletins of Agency for Statistics of Bosnia and Herzegovina, Statistical Yearbooks and monthly reviews of Federal Office of Statistics, The monthly statistical reviews of Statistical Institute of the Republika Srpska, Statistical office of District Brcko, Phare ACE Programme, Project P96-6020-R; EU 25 data – FAO database

Average yields per hectare of all cereal crops are still far behind those achieved in EU countries. The main reasons for this, beyond the limited agro-climate conditions, are unfavorable farm structure, small and fragmented land parcels, insufficient use of certified

seed and limited use of artificial fertilizers and herbicides. When compared for individual cereal crops the situation is even more negative. For wheat 3.1 t/ha, barley 2.6 t/ha, oats 2.3 t/ha. For maize the level is more positive at 5.1 t/ha. This resulted in total production of levels of: wheat 249,000 tons, barley 53,400 tons, oats 41,800 and maize production of 990,000 tons.

A significant area of arable land (110,000 ha) is planted for forage and fodder crops to support livestock production. In addition to maize, large areas are planted to clover, alfalfa and legume mixes; these areas have increased steadily since the war. Much could be done to increase the contribution that these crops make to livestock production through the introduction of new varieties and improved utilization and conservation techniques. A wider range of fodder crops is also needed, such as brassica and root crops that are suited to more intensive livestock production systems in the lowland areas.

Table 7: Cereal production by crop (2001-2005)

Cereal crop	2000	2001	2002	2003	2004	2005
Wheat						
Area (000 hectares)	104.1	105.2	90.7	71.1	86.8	81.4
Production (000 tons)	338.5	255.2	272.3	156.8	319	249
Yield (tons/hectare)	3.3	2.4	3	2.2	3.7	3.1
Maize						
Area (000 hectares)	207.9	200.8	198.8	195.8	193	195.6
Production (000 tons)	474.9	770.6	903.2	551.2	990	1004.2
Yield (tons/hectare)	2.3	3.8	4.5	2.8	5.1	5.1
Barley						
Area (000 hectares)	22.3	23.2	24.1	21	21	20.3
Production (000 tons)	53.1	55.5	61.2	37.2	62.5	53.4
Yield (tons/hectare)	2.3	2.4	2.5	1.8	3	2.6
Rye						
Area (000 hectares)	4.5	4.1	4.4	3.7	3.4	3.4
Production (000 tons)	11.7	9.6	11.1	6.9	9.9	7.7
Yield (tons/hectare)	2.6	2.3	2.5	1.9	2.9	2.3
Oats						
Area (000 hectares)	25.7	22.9	23.7	23.5	20.5	18.5
Production (000 tons)	56.9	47.1	59.9	38.1	59.8	41.8
Yield (tons/hectare)	2.2	2.1	2.5	1.6	2.9	2.3
Cereals (total)						
Area (000 hectares)	364.8	356.2	341.7	315.1	327.3	321.0
Production (000 tons)	935.1	1138	1307.7	790.2	1445.3	1358
Yield (tons/hectare)	2.6	3.2	3.8	2.5	4.4	4.2

Source: Statistical bulletins of Agency for Statistics of Bosnia and Herzegovina, Statistical Yearbooks of Federal Office of Statistics, Statistical reviews of Statistical Institute of the Republika Srpska, Statistical office of District Brcko.

The planted area for cereals in B&H is generally in decline. The total surface area sown with cereals in 2005 decreased by 12% compared with 2000 (by 22% for wheat, by 6% for maize, by 10% for barley and by 25% for oats). Given the low levels of production and the high level of demand (estimated at 600,000 tons per annum), B&H is a substantial net importer of all cereal products (between 350-500,000 tons dependent on total domestic

production in any one year). The total value of cereal imports in 2005 was € 88,891,000 which represented 9% of the total import value of agri-food commodities. The main exporter of cereals to Bosnia and Herzegovina is Hungary (40%). Serbia has recently taken second place, primarily as a result of the recent free trade agreement between Bosnia and Herzegovina and what was formerly Serbia and Montenegro³. The negative cereals trade balance has shown an increasing trend, expanding by over 70% in the last five years. The leading imported crop is wheat. This trend is in part due to the structure of farming in B&H, with many small-scale producers using significant quantities of their production on-farm (on average 1/3). Export of cereals is very modest and in 2005 it amounted to 486,000 EURO.

Table 8: Cereal supply balance sheet (2004)

Supply balance sheet	Cereals ('000t)
Usable production	1,445
Change in stocks	27
Imports	485
Exports	4
Internal use	1,516
of which:	
- animal feed	558
- seed	44
- industrial use	190
- losses (market)	n/a
- human consumption	724
Human consumption (after processing)	n/a
Human consumption (kg/head)	188
Self-sufficiency (%)	74

Source: FAO stat.fao.org/faostat/agriculture, USDA GAIN Reports, CEEC Agri Policy, Project no 513705, Monitoring of agricultural policy, market and trade developments in Bosnia and Herzegovina, 2005.

4.2.2 Vegetable and Fruit Crops

There is very limited information on vegetable and fruit production, despite the fact that particularly vegetables are one of the most significant crops produced by small-scale subsistence type producers. The numbers that are available suggest very stable levels of planted area and increasing levels of production. Though only limited yield data are available it is clear that there have been modest improvements in productivity over the last five years for both fruit and vegetables. Whilst yields appear to be well below EU averages this area of production does appear to offer future opportunities in terms of value-added processing and export if productivity can be further enhanced.

³ It is assumed that this FTA will be need to be reformulated following the independence of Montenegro in June 2006 and that separate agreements will be signed in the future with each country.

Table 9: Vegetable and Fruit Crop area, production and yield (2000-2005)

	2000	2001	2002	2003	2004	2005	EU-25 (2005)
Crop area ('000 ha)							
Fruits ('000 trees)*	na	na	na	na	27,496	27,958	5,838,000
Vegetables ('000 ha)	88.1	88.2	86.4	93.8	86	84	2,460
Roots and tubers ('000 ha)	46.5	47.5	46.1	45.4	45.2	41.5	2,037
Production ('000 t)							
Fruits (inc. grapes)	na	na	na	na	274.7	206.2	63,001
Vegetables	668.0	702.0	709.0	605.0	724.0	715.4	66,037
Roots and tubers	309.4	432.0	438.4	322.1	479.9	413.5	59,599
Yield trends (t/ha)							
Fruits	n/a	n/a	n/a	n/a	10.0	9.0	n/a
Vegetables	n/a	n/a	n/a	n/a	n/a	n/a	n/a

Source: Statistical Yearbook of the Republic of Bosnia and Herzegovina (1988-1992); Statistical bulletins of Agency for Statistics of Bosnia and Herzegovina, Statistical Yearbooks and monthly reviews of Federal Office of Statistics, The monthly statistical reviews of Statistical Institute of the Republika Srpska, Statistical office of District Brcko, Phare ACE Programme, Project P96-6020-R; EU 25 data – FAO database;

Table 10: Production of fruit (2004 and 2005)

Fruit	2004			2005		
	Number of trees	Total production (t)	Average yield (Kg/tree)	Number of trees	Total production (t)	Average yield (Kg/tree)
Plums	10,713,413	167,935	16	10,916,968	95,891	9
Apples	3,242,142	52,338	16	3,426,944	52,181	15
Pears	1,617,421	19,759	12	1,690,205	22,505	13
Cherries	680,715	8,975	13	691,606	8,625	12
Sour cherries	305,565	2,868	9	303,732	2,716	9
Apricots	68,892	716	10	71,303	522	7
Mandarins	1,390	5	4	1,300	4	3
Lemons	3,499	12	3	3,282	11	3
Figs	41,106	372	9	41,805	427	10
Olives	4,255	49	11	3,710	44	12
Grapes	10,817,818	21,710	2	10,807,000	23,273	2
Totals	27,496,216	274,738	10	27,957,855	206,199	9

Source: B&H Agency for Statistics, First release, No 1, 10/08/06

The most significant fruit crops in B&H include plums, grapes and apples. Generally productivity levels remain low for all fruit crops due to aging orchards and poor cultivation techniques. This has resulted in a modest negative supply balance for fruit as a whole.

Table 11: Vegetable and Fruit supply balance sheet (2004)

Supply balance sheet	Vegetables	Fruit
Usable production	724	214
Change in stocks	N/a	N/a
Imports	21	71
Exports	15	12
Internal use	706	195
of which:		
- industrial use	n/a	35
- losses (market)	n/a	n/a
- human consumption	706	160
Human consumption (after processing)	n/a	n/a
Human consumption (kg/head)	183	42
Self-sufficiency (%)	100	85

Source: *FAO stat.fao.org/faostat/agriculture, USDA GAIN Reports, CEEC Agri Policy, Project no 513705, Monitoring of agricultural policy, market and trade developments in Bosnia and Herzegovina, 2005.*

The supply balance sheets for fruit and vegetables indicate that with modest further gains in productivity, B&H has the capacity to produce a marketable surplus and to develop (and in some cases, re-establish) export markets, particularly with near markets in the Western Balkan region and EU member states to the north.

Vineyards: Both grape growing and wine production in B&H are centered around the Mostar region in the south of the country (Herzegovina), especially the municipalities of Citluk, Capljina, Stolac, and Mostar. These areas enjoy a warm Mediterranean climate, with well-drained karst soils. The industry is dominated by a large number of very small vineyards, ranging in size from 0.3–0.4 ha; very few vineyards exceed 10 ha in a single block. White varieties account for roughly 70% of production, red varieties for about 30%. The two dominant varieties are Zilavka and Blatina: white and red, respectively. Statistics on the current land area under cultivation are unreliable, but best estimates place it at 2,200–3,000 ha—a significant decrease from the pre-war area of about 5,000 ha of new plantings. Approximately 2,500 ha are needed to regain pre-war production levels. The average yield of current vineyards is estimated at 8 metric tons (MT)/ha. As a consequence of the war, not only were many vineyards abandoned but trellis systems were damaged and irrigation systems destroyed. Many vineyards were old prior to the conflict and productivity today would benefit substantially from re-grafting, replanting, and/or re-trellising.

OIV, FAOSTAT and information from local institutions estimate average annual wine production of around 5.500 MT, with significant variations year by year (from 4700 MT in 2000 to 7,500 MT in 2003). Unofficial information from the field suggests that commercial wine production in 2004 was between 8 – 11 million litres. Climatic and soil conditions are well suited for wine production in the main B&H winegrowing region. Grape producers are paid on time; prices are favourable (between 0.50 and 0.75 EUR/kg of grape, depending of grape quality). There are no reliable data on wine production costs but based on existing data they appear to be relatively high due to fragmented vineyards and small-scale winery capacities.

4.2.3 Industrial crops

Table 12: Industrial crop area, production and yield (2000-2005)

	2000	2001	2002	2003	2004	2005	EU-25 (2005)
Crop area (1000 ha)							
Oilseeds	4	2.6	3.3	4.7	3.9	6.1	11,349
Tobacco	3.2	na	na	na	na	na	
Production (1000 t)							
Oilseeds	4.1	3.9	6.9	5	9.5	13.6	10,021
Tobacco	3.2	na	na	na	na	na	
Yield trends (t/ha)							
Oilseeds	1	1.5	2.1	1.1	2.4	2.2	8.8
Tobacco	1	na	na	na	na	na	

Source: *Statistical Yearbook of the Republic of Bosnia and Herzegovina (1988-1992); Statistical bulletins of Agency for Statistics of Bosnia and Herzegovina, Statistical Yearbooks and monthly reviews of Federal Office of Statistics, The monthly statistical reviews of Statistical Institute of Republika Srpska, Statistical office of District Brcko, Phare ACE Programme, Project P96-6020-R; EU 25 data: FAO database; Tobacco global report (2001).*

Industrial crops were never a major component of crop production in B&H, with only 2 % of the area cultivated before the war. Tobacco, soybean & oilseed are the main industrial crops but all with very small areas of production. Sugar is only grown on very small areas. Data are only currently available for oilseeds. Planted areas of all main industrial crops are still negligible and yields are relatively low, by western European standards. Current production is negligible due in part to the lack of active processing facilities, many of which collapsed after the war. B&H mostly imports raw product to fulfil existing processing demand and this trend is likely to continue in the foreseeable future as the country appears to offer little comparative advantage in the domestic production of any of these crops and little or no investment has taken place to encourage producers (with the exception of sugar, for which a new refinery is planned in Brcko – see the Food Industry chapter below for more details).

Tobacco, which was historically an important crop for B&H has been in decline as government direct support for the existing processing plants has gradually reduced. It is still grown in three of the ten Federation Cantons and in some municipalities of the RS, but at very low levels. Production statistics from 1999 & 2000 indicate total leaf tobacco production levels of approximately 3,200 metric tons per annum, grown on approximately 3,200 ha (representing around 0.17% of the total land area). The overall production and planted area are estimated to have been reduced by at least 1/3rd of these levels in the last five years.

4.3 LIVESTOCK PRODUCTION

Conditions in B&H are well-suited to semi-extensive livestock production. Some 250,000 ha of pastures and meadows provide grazing and hay for winter feed and a further 500,000 ha of natural pastures in high altitude areas provide seasonal grazing in the summer months. Most of the natural pastures are state-owned, with grazing rights allocated according to local custom (often through inherited 'non-legal' rights to grazing). Traditional management practices (such as field storage of hay in uncovered hay stacks) markedly reduce the

quantity and quality of the hay and grazing from meadows and improved pastures, to the detriment of animal nutrition and production. Forage and fodder crops (mostly maize, alfalfa and clover) supplement the pasture resources. An important livestock industry has been built on this resource base, with dairy production as the dominant enterprise. In general, however, a slight increase in livestock production can be observed.

Table 13: Livestock numbers & production (2001 – 2005)

	Units	2001	2002	2003	2004	EU-25- (2005)
Cattle	1000 heads	440	442	445	453	86,411
Goats	1000 heads	80	82	88	92	11,996
Sheep /ewes	1000 heads	464	486	497	653	89,305
Pigs	1000 heads	460	489	535	595	151,143
Chickens	1000 heads	no data	No data	no data	3,178	5,311,391
Beef and veal	1000 t	26.1	26.7	27.4	28.2	8,084
Milk	Mio litres	532.0	535.0	545.0	599.0	141,324
Pig meat	1000 t	19.7	17.8	14.6	16.2	21,194
Poultry meat	1000 t	8.4	8.4	8.6	8.5	10,990
Sheep/goat meat	1000 t	11.2	11.7	12.0	13.2	1,058

Note: No official data available for 2005 at this time; **Source:** Statistical bulletins of Agency for statistics of Bosnia and Herzegovina, Statistical Yearbooks of Federal Office of Statistics (1997-2003), FAOSTAT data base, Milk processing d.o.o. Study of production, processing and market of milk in Federation of Bosnia and Herzegovina, Phare ACE Programme, Project P96-6020-R: Overview on Agriculture in Bosnia and Herzegovina - Prospect for Reconstruction and development, Sarajevo 1999.

Table 14: Livestock supply balance sheet (2004)

	per '000 t			
	Beef and Veal	Sheep and Goats	Pork	Poultry
Gross internal production	15	n/a	10	9
Net production	n/a	n/a	n/a	n/a
Change in stocks	n/a	n/a	n/a	n/a
Imports	23	n/a	19	20
Exports	n/a	n/a	n/a	n/a
Internal use (total)	38	n/a	29	29
Gross consumption (kg/head/year)	9,8	n/a	7,5	7,5
Self-sufficiency (%)	39.5	n/a	34.4	31.0

Source: [FAO stat.fao.org/faostat/agriculture](http://stat.fao.org/faostat/agriculture), CEEC Agri Policy, Project no 513705, Monitoring of agricultural policy, market and trade developments in Bosnia and Herzegovina, 2005, Own estimation.

Data is very limited on supply balances for meat and that which is available provides mixed messages on the dynamics of the current market. What is clear is that domestic demand has changed dramatically since the end of the conflict, in part due to demographic changes and in part due to reductions in purchasing power. What is also clear from available data is that B&H is heavily reliant upon imports of meat and meat products to meet current domestic demand for most meat products and that this situation is likely to remain for most types of livestock production. Although numbers are not currently available to calculate sheep or lamb supply balances it is estimated that in this area B&H has the potential to meet

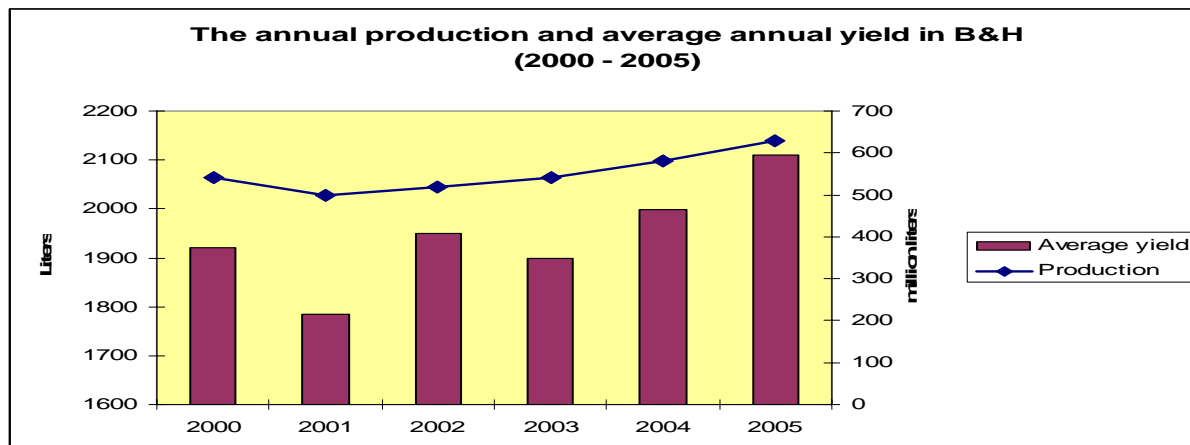
domestic demand in the future, should flock numbers continue to expand at the current rate experienced in the last 2-3 years. Clearly more research is required to gain a more accurate picture of actual numbers and the extent of negative balances for specific products.

4.3.1 Cattle

Cattle production is characterized by small herds and highly seasonal milk supply. Of the farmers who owned cattle before the war, 60 % had only one cow, 30 % had two and less than 1% had five or more cows. Most cows are a mix of the local Busha breed with Grey Tyrol, Brown Swiss or Simmental. Performance is low due to poor nutrition, especially during the winter, late weaning of calves and slow rates of genetic improvement (only 32% of farmers use artificial insemination). Nevertheless, gross-margin analysis indicates that small-farm cattle production is profitable and the milk income improves household cash-flow. Before the war the 10 state-owned dairy farms had herds of 400-1,700 cows, mostly imported Holsteins and achieved production levels close to those obtained in Western Europe. Animals were housed all year round and fed on green-cut in the summer and hay or silage in the winter. War damage to these state farms was severe. Half of the livestock were lost and buildings and plant were heavily damaged. Some government investment has been evident to reconstruct these businesses, particularly in the RS but data on these operations is not currently available.

Beef production has been stable since 2001 with small increases in numbers in recent years. Post conflict, the demand for meat reduced by more than 50% and meat consumption patterns changed dramatically due to price and other factors (such as changes in per capita consumption of pork, mainly in FB&H). During this period the demand for higher priced beef cuts and lamb fell, while that of low-priced poultry meat increased by more than 50%. The B&H cattle population in 1991 comprised 852,000 head of beef cattle, of which 622,000 were cows and heifers. Comparing the pre-war situation with that of 2002 (the last year for which data are currently available), the number of cattle decreased to 51.5% of the pre-war total (458,000); the number of cows and heifers (327,000) was down by about half as well. Cattle production has since recovered somewhat from these post-war lows.

Dairy: Compared to EU-25, the productivity in milk production in Bosnia and Herzegovina is very low. Based on available data, there appears to be a significant difference in productivity levels between the two entities. According to 2005 survey data (USAID LAMP project), average yields in RS were 2,900 litres and in FB&H 1,948 litres. This represents an increase compared to previous years, but is still low by EU standards. The reason for the differences in yields between the Entities is unclear. It may be due to improved breeding and animal feeding techniques introduced with government support in the RS. However, low productivity, due to poor knowledge of farmers and poor farm equipment are among most important problems and obstacles for the dairy sectors development.

Figure 2: Dairy Annual production and average annual yield (2000-2005)

Source: University of Sarajevo, Agriculture Faculty estimates (2005)

This leads to severe problems with the quality of milk. Within the EU, milk for human consumption cannot have a total bacteria content of more than 100,000 parts per litre. In Bosnia and Herzegovina, this limit is 1 million. Even with such poor standards, B&H dairies are sometimes forced to refuse the milk due to irregular microbiological status. Improvement of milk quality depends largely on motivation and education. However, education will do little good until farmers are motivated to produce a high quality product for the processors. Such motivation will come in the form of payment premiums. Some dairies, such as Zenica dairy, are slowly introducing such practices but this will take time to impact at farm level. In addition the sector suffers from a lack of cooling facilities, insufficient coverage with collection networks, a lack of suitable credit and unreliable policy support. Premiums that are available are often not paid on a regular basis and are often several months late.

During the war the number of both beef and dairy cows was reduced by an estimated 60%, which in turn reduced the total milk production by more than 60%⁴, which partly was caused in parallel by a decline in milk production per cow. Breakdowns in infrastructure resulted in dairies only collecting between 10%-12% of the total milk produced by the turn of the millennium. By 2004 this rate had increased to 15%.⁵ Reasons for such low collection rates are in part related to the fragmentation and scale of production, leading to high levels of milk sold locally (or fed to calves). The prevalence of subsistence milk production further accentuates this situation. However, it is likely that collection rates are much higher in the more developed dairy areas (perhaps 30% or more) and much lower in the mountainous areas.

⁴ Source: Market Profile of the Dairy Production Sub-sector [LAMP (USAID), 2005]

⁵ Source: Market Profile of the Dairy Production Sub-sector [LAMP (USAID), 2005]

4.3.2 Sheep and Goats

The local "Pramenka" breed accounts for 80% of the sheep flock, supplemented by Pramenka-Merino cross-breeds and the small Humnjacka sheep of Southern Herzegovina. Ninety-five percent of production takes place on small, private farms and low-input management systems predominate. Ninety-three percent of pre-war farms had flocks of less than 20 sheep and less than 1 percent had flocks of more than 100. Most income is derived from meat (80 percent) and high-quality cheese (15 percent), for which there is a strong demand on local markets and long-term export potential. The coarse Pramenka wool is typically heavily clotted due to poor (winter) animal nutrition and consequently is of little value.

Sheep production has long been falling in B&H. Total sheep numbers fell from 4.0 million in 1939 to 1.3 million in 1990 as the marginal hill and mountain areas that were the traditional domain of sheep production were steadily abandoned. There was also little concomitant improvement in the historically low levels of animal performance. War then accelerated this decline and sheep numbers in FB&H fell from 650,000 in 1990 to 236,000 in 1996. In the meantime, however, a recovery process has taken place and in B&H the number of ewes has increased from 464,000 in 2001 to 653,000 in 2004.

Goat production was traditionally practised by poorer farm households, which grazed small flocks (15-50 animals) on unused land. The pre-war population is estimated at 40,000 head, most of which were in Herzegovina. These were typically a cross between the domestic Balkan goat and milking Saanens and were used for milk and meat production. The post-war population of 30,000 goats has been the focus of renewed interest in FB&H as these animals thrive in more marginal areas and require lower capital investments. In 2001 total number of goats amounted to 80,000 animals and in 2004 a number of 92,000 was recorded.

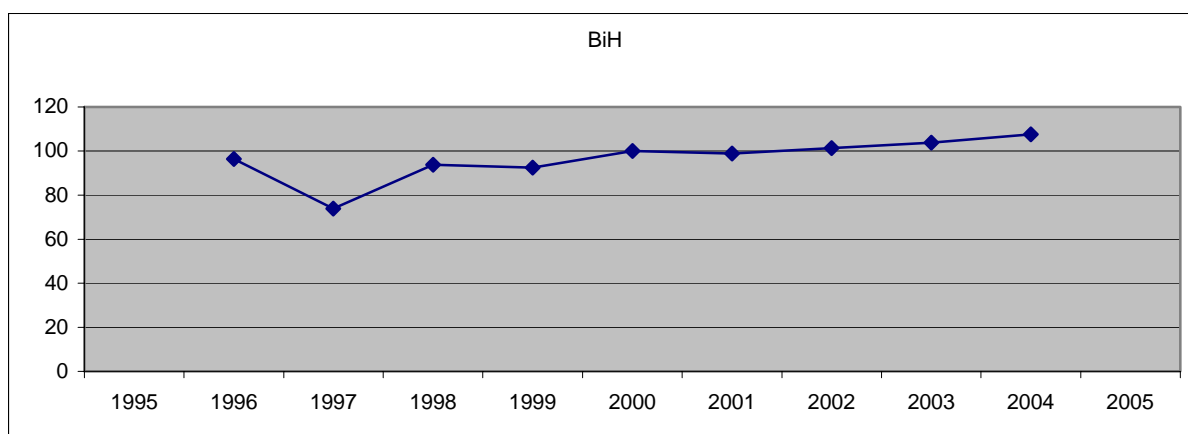
Marked differences have already emerged in the pattern of post-war recovery for non-ruminants in FB&H. Poultry production has grown quickly in response to strong local demand and numbers already exceed pre-war levels. Pig production has declined, due to the low demand for pork in post-war FB&H.

4.3.3 Other livestock

Poultry: As poultry production is well-suited to large-scale, intensive management systems a higher proportion of pre-war production occurred on state farms. Of the 10.6 million poultry in B&H in 1991, 44 percent were owned by four large state production and breeding centres. However, their average production was well below western European standards. In war this sub-sector suffered severely. After the war poultry production has recovered from 4.8 million t in 1997 to 8.5 million t in 2004. The herd size has increased almost to the pre-war level (9.5 million heads). Poultry will dominate non-ruminant livestock production in the future but further growth will depend on the price and availability of animal feed, most of which is imported.

Pigs: As stated above per capita consumption of pork has plummeted with the increase of the Muslim population after the independence of B&H in the 90ies. Before the war four large state farms accounted for 20 percent of pig production, with production levels comparable to those obtained in Western Europe. Among the small-scale farmers, some 50,000 households owned pigs before the war, typically with two sows producing 10-15 weaners/sow/year. The trend of constant decrease in pork production seems to have come to an end in 2004 (compare table 8 above) but the potential in this sub-sector in general is low due to the little domestic demand and the limited ability to compete with neighbouring countries or the EU.

Figure 3: Livestock production index, 1995-2005 (2000 = 100)



Source: Calculated on the basis of: Statistical bulletins of Agency for statistics of Bosnia and Herzegovina, Statistical Yearbooks of Federal Office of Statistics (1997-2003), FAOSTAT data base, Milk processing d.o.o. Study of production, processing and market of milk in Federation of Bosnia and Herzegovina, Phare ACE Programme, Project P96-6020-R: Overview on Agriculture in Bosnia and Herzegovina - Prospect for Reconstruction and development, Sarajevo 1999.

4.4 FOOD CONSUMPTION

Due to the conflict in the mid-nineties there was a 15% decline in the total population of B&H and an estimated loss of purchasing power of approximately 40% over the same period. This inevitably impacted upon overall food demand in the country. Unfortunately, there is almost a complete lack of official data on consumption available currently in B&H. General estimates from some NGO's providing humanitarian assistance, based on partial survey data from both Entities suggest a moving average of between 60-70% of total household expenditure is spent on agriculture and food products. When compared to the EU25 average household expenditure on food of 12.8%, the B&H level is very high. This suggests that improvements in productivity and competitiveness will have a strong and positive impact on standards of living in B&H in the next period of transition. Clearly further investment in household surveys, market research and data analysis is required to understand more fully the current food consumption trends and household dynamics in B&H.

Table 15: Per capita consumption of basic agricultural products (2005)

Product	Units	B&H	EU-25
<i>Total cereals</i>	Kg per capita/year	199	91.9
- Wheat	Kg per capita/year	175	68.7
Potatoes	Kg per capita/year	59	76.9
Sugar	Kg per capita/year	n/a	31.8
Fruits	Kg per capita/year	48	n/a
Vegetables	Kg per capita/year	71	n/a
<i>Meat (total)</i>	Kg per capita/year	37	n/a
- Pig meat	Kg per capita/year	8	43.4
- Poultry meat	Kg per capita/year	11	23.0
- Beef meat	Kg per capita/year	13	17.9
- Sheep meat	Kg per capita/year	5	2.9
- Other meat	Kg per capita/year	2.6	n/a
<i>Milk (excl butter)</i>	Kg per capita/year	160	n/a
<i>Eggs</i>	Kg per capita/year	8.2	13.4

Source: *FAO stat.fao.org/faostat/agriculture, CEEC Agri Policy, Project no 513705, Monitoring of agricultural policy, market and trade developments in Bosnia and Herzegovina, 2005, Own estimation; EU 25 data - Agricultural Situation in EU 2005, from tables on supply balances for year 2003/2004; 2004/2005 and DG-Agri "Prospects for agricultural markets 2004-2011", Tables A.9-A.17, July 2004*

The data available suggests that average per capita food consumption includes a high proportion of basic staples in average diets, such as cereals and starchy vegetables (with the exception of potatoes, which are consumed at levels somewhat below average EU levels) and lower levels of consumption of proteins (meat and eggs). Such patterns are typical of low income, subsistence type rural households. Interestingly, lamb consumption is far higher in B&H than the EU average, whilst pork consumption is far lower.

4.5 AGRICULTURAL PRICES

The general level of agricultural product prices in B&H appears to be relatively high when compared to the EU, reflecting the lack of integration of B&H in international markets.

Producer price policy consists of a guaranteed floor price for wheat, supported by public purchases, official "minimum prices" for 12 other commodities, which are not supported by direct market intervention and some producer subsidies. There are no input subsidies. The wheat floor price was reduced from Euro 230/tonne to Euro 153/tonne in 1999 and in 2004 it was Euro 140/tonne. This trend gave rise to producer prices which increased from 2000-2004 by 8%. With regard to rye and meslin a similar situation was observed. In the same period producer prices increased, by 12.5%. Most of the official "minimum prices" were also reduced, with the exception of those for tobacco, beans, and broilers. Producer subsidies are currently set at Euro 0.07/litre for milk and Euro 0.45/kg for tobacco. There are no direct controls on consumer prices although the Commodity Reserves Agencies has the power to intervene in markets to "stabilize" prices as it deems necessary. These agencies exist in certain Federation Cantons and in the RS currently. These price interventions have resulted in higher prices for certain cereal crops than those found in the EU during this period.

Table 16: Producer Prices for Crop products (2000 – 2004)

Product	Units	2000	2001	2002	2003	2004	EU-25 ¹⁾
Crop products							
- Wheat	€/ t	128.8	135.2	136.2	141.9	140.3	105,8
- Rye and Meslin	€/ t	151.1	145.1	146.5	138.0	170.2	
- Corn/Maize	€/ t	138.5	140.0	108.8	125.0	136.3	119,5
- Barley	€/ t	160.1	129.8	132.7	137.6	135.3	104,1
- Oats	€/ t	170.8	143.5	147.8	159.5	187.7	
- Rape and turnip rape seed	€/ t	n/a	n/a	n/a	N/a	n/a	
- Sunflower	€/ t	n/a	n/a	n/a	N/a	n/a	
- Soya	€/ t	238.1	246.1	245.0	225.0	264.8	
- Tobacco raw	€/ t	1,310	1,141	1,140	1,037	1,253	
- Sugarbeet	€/ t	n/a	n/a	n/a	N/a	n/a	
- Potatoes	€/ t	243.9	201.5	138.1	263.4	127.7	111,5
- Apples	€/ t	273.9	240.3	216.5	334.6	269.1	410,5
- Pears	€/ t	211.8	255.6	n/a	N/a	n/a	
- Peaches	€/ t	349.8	284.3	n/a	N/a	222.4	
- Citrus fruit	€/ t	n/a	n/a	n/a	N/a	n/a	
- Table grapes	€/ t	n/a	n/a	n/a	N/a	n/a	
- Wine grapes	€/ t	415.4	493.0	468.7	511.3	460.2	
- Tomatoes	€/ t	135.1	128.1	110.1	102.3	95.8	

Source: *Statistical Yearbook of Federation of B&H, Federation of B&H Federal office of statistics, 2005 and Reviews of the Republika Srpska Institute of statistics, Part Domestic trade statistics, for period 1998-2004.* ¹⁾ As there were no aggregate data on EU 25 prices for 2005 data for selected products were calculated as a 3 year average (2002 -2004).

Overall B&H suffers a deficit of beef and veal and this affects the stability of domestic prices year-on-year. Prices are generally lower than those found in the EU. This difference appears to be linked to the overall unstable business environment within the meat and livestock sector. B&H slaughterhouses, processors and producers report that their most serious problem is the consistency of supply and the price volatility of meat. This volatility disrupts cash flow and makes it very difficult for the industry to forecast, set prices or establish stable supply-chain relationships. Smuggling, unpredictable enforcement of laws (particularly at the borders), and fluctuating domestic policy all contribute to this volatility.

Table 17: Producer Prices for Livestock products (2000 – 2004)

Product	Units	2000	2001	2002	2003	2004	EU-25 ¹⁾
Livestock products	€/ t						
Calves for slaughter (lwt)	€/ t	1,598	2,270	2,568	2,353	2,308	
Adult cattle for slaughter (lwt)	€/ t	1,254	1,481	1,674	1,679	1,452	2,785,7
Pigs for slaughter (lwt)	€/ t	1,089	1,419	1,428	1,104	1,396	1,268,3
Poultry for slaughter (lwt)	€/ t	2,402	1,116	1,137	1,018	1,151	1,228,5
Lambs for slaughter (lwt)	€/ t	2,544	2,558	2,255	2,603	2,058	
Goats for slaughter (lwt)	€/ t	n/a	n/a	n/a	n/a	n/a	
Raw cows milk (actual fat content)	€/ '000 litre	246.9	235.7	243.0	253.1	257.1	

Product	Units	2000	2001	2002	2003	2004	EU-25 ¹⁾
Sheep and goat milk	€/ '000 litre	431.1	421.1	428.7	439.7	445.4	
Eggs for consumption	€/ '000	95.3	76.4	104.5	92.1	110.5	
Processed products wholesale prices							
Butter	EUR / t	n/a	n/a	n/a	n/a	n/a	
Cheese	EUR / t	2,800	2,900	3,154	2,991	3,271	4,754,3
Skimmed milk powder	EUR / t	n/a	n/a	n/a	n/a	n/a	
Sugar	EUR / t	n/a	n/a	n/a	n/a	n/a	

Source: *Statistical Yearbook of Federation of B&H, Federation of B&H Federal office of statistics, 2005 and Reviews of the Republika Srpska Institute of statistics, Part Domestic trade statistics, for period 1998-2004.* ¹⁾ As there were no aggregate data on EU 25 prices for 2005 data for selected products were calculated as a 3 year average (2002 -2004).

Consumer prices for food and agricultural products fell significantly after the war and have been relatively stable since 1996 - in contrast to a gradual increase in the overall retail price index from 1996-1999. However this apparent stability masks some significant shifts in relative prices. Retail prices for animal products have generally increased during the period 1996-1999 and, with the exception of lamb and eggs, are now at or above pre-war prices in 1990. In contrast, most current fruit and vegetable prices are well below 1990 prices and have been constant or declining slightly since 1996. These trends send two important messages to producers: first that there is a strong demand for moderately priced animal products and second, that post-war fruit and vegetable production will need to become more efficient to be competitive with imports.

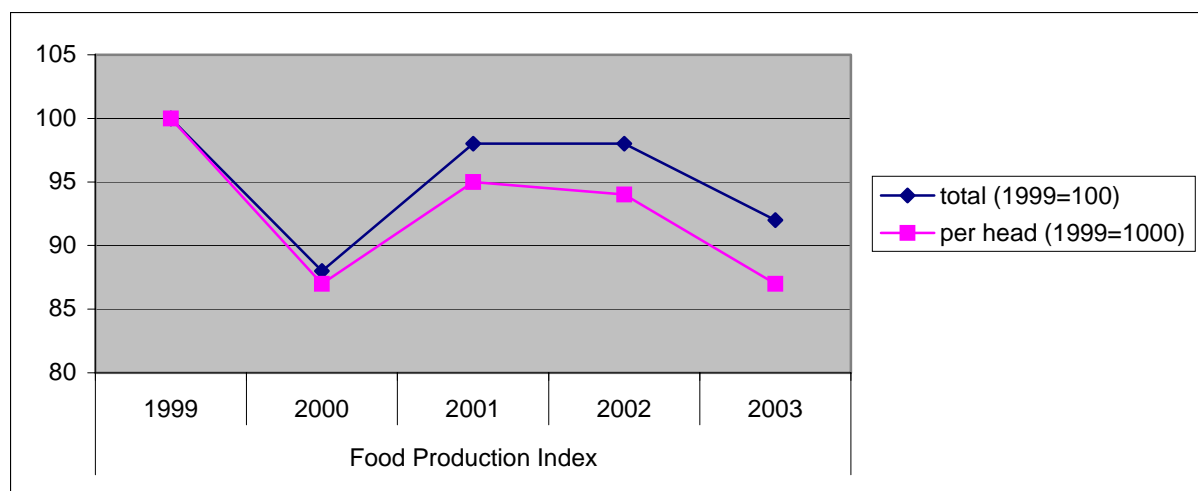
5 AGRI-FOOD INDUSTRY

The agri-food industry is an important sector in the economy of B&H, both for ensuring food security for the country and for preventing a further increase in the negative trade balance of the country (the trade balance for food products is also in deficit). However, the industry is in poor shape. Little has been done in the last decade following the end of the conflict to assist the industry to attract desperately needed investment or improve quality of production to allow it to compete on both domestic and international markets. In consequence today, B&H has no food processing company that is certified to export to the EU for any major agri-food commodity in which it has a potential comparative advantage in the production thereof.

Over the last decade there has been a gradual decrease in production of primary products to supply to the food industry. This is in part linked to the increased number of subsistence and semi-subsistence farms who predominantly consume their own production. This is also due to the impact of war-related damages in the agricultural and food sector, estimated by the IMF to amount to approximately €4 billion⁶, which disrupted previously integrated supply chains. In some areas of the country, 70% of the agri-business infrastructure and 60% of the livestock were lost and over 237,000 ha were left covered in landmines. The food industry was therefore forced to work at approximately 10% of its capacity, leading to diseconomies of scale and in some cases, closure of food processing plants. The decrease in production by 80% since the beginning of the 1990s has been far greater than the reduction in domestic demand (caused by a 15% population decline and a loss of purchasing power by 40% over the same period). This deficit has been filled primarily by imports.

Whereas a decrease in the first half of the 1990s can be explained easily with the war, the development in recent years points clearly to significant structural problems. Even compared to 1999, which was no record year at all, food production decreased:

Figure 4: Food production index, (1999 = 100)



Source: FAO - FAOSTAT; World Bank - World Development Indicators (2005)

⁶ IMF Report to the Peace Implementation Council, 1996

5.1 PRIVATISATION AND INVESTMENT

In general the privatisation process in B&H has been slow and the food industry is no exception to this rule. Some small-scale food processing enterprises have been sold to local buyers but many larger scale plants remain as state-owned enterprises (often referred to as 'socially owned enterprises'). Many structural problems prevail within these firms. They are generally highly indebted and the social benefits, which are paid by the firms, on behalf of their employees, to Entity social funds, have accumulated over the years. Today they constitute a considerable burden for the companies. Courts are not fully capable to handle bankruptcy procedures of SOE's and the large number of employees in these enterprises further complicates restructuring or liquidation options. Employment is a politically sensitive issue in B&H where the unemployment rate is so high and alternative job opportunities so limited. But on the other hand these companies use resources inefficiently and thus are affecting negatively savings and investments. They constitute a barrier to further growth. But in their current shape they are mostly not attractive for private investors. There is no clear strategy currently in place to overcome these difficulties and in both Entities the payment of subsidies (particularly for milk and tobacco) remain a fundamental lifeline to maintain these firms.

A number of laws to improve corporate governance and the business climate were either adopted in 2004 or are now, in 2006, in the final stages of adoption. Among them is a framework law establishing simplified procedures for the registration of businesses (adopted 2004), with implementing legislation adopted in the Entities in 2005; a law regulating public procurement (adopted in November 2004, applicable in the Entities from January 2005); a law establishing simplified procedures for the registration of businesses (adopted in April 2006 but not in force until January 2007). Progress can be seen also in the field of general legal and court reform which will allow strengthening of contract enforcement mechanisms. These efforts will contribute to improving the business climate in B&H, as long as the consistent enforcement of these laws can be assured.

5.2 MAIN FOOD INDUSTRIES

The main products of the agro-processing industry are milk, fruit juices, flour, processed fruits / vegetables, processed meat, sugar and fodder. The industry has had to deal with a sharp decrease in the supply of raw materials from the primary agricultural sector. Furthermore the capacity of the agri-food processing industry has been further reduced due to damages sustained in the conflict. As a result of these and other factors, two main characteristics of the agri-food industry of B&H can be observed:

- (i) Most agro-processors are operating well below capacity, and
- (ii) Raw materials often have to be imported.

Thus the food industry suffers from the drastic reduction of domestic raw material supply, which is due to (i) the focus of many small farms almost exclusively on subsistence production, (ii) the absence of large-scale agricultural production for industrial processing and (iii) the unreliability of supply, both in terms of quantity and quality.

The food industry does not generally meet EU or other international quality standards. There are few quality assurance schemes in place. Supply tends to come from a large number of very small units (e.g. 60 % of milk comes from farms with 2 – 3 cows). However, different sub-sectors of the Bosnian food industry are beginning to show differences in terms of their development, competitiveness and future potential. The situation is briefly characterised as follows:

Cereal mills: Mills are one of the relatively well-functioning sub-sectors in the Bosnian food industry. Before the war, there were 18 large-scale state-owned mills (for flour and fodder) with relatively modern equipment. Their capacity was approx. 455,000 tons of wheat per year. Today there are 14 large-scale (socially owned) and 6 smaller, private flourmills. The majority of the milling companies produce both flour and fodder, but there are also about some 20 specialised fodder mills. The processing capacity of the flourmills is estimated to be 520,000 tons of wheat per year with the capacity utilisation being approx. 65% (1999 data). As there were hardly any mills damaged in the RS. The RS dominates in this area and further investment in renovation and improved technology of some mills has been taking place in the last five years. However, the capacity utilisation of feed mills in FB&H is only 11% of their nominal capacity, totalling about 212,000 tons and little comparable investment has taken place.

Sugar / isoglucose: B&H plants and produces little sugar of any significance and imports mostly refined sugar. However this is likely to change in the coming period following a significant investment by an Austrian-based company, Agrana, which claims to be the leading sugar and starch producer in Central and Eastern Europe. They plan to expand their activities towards the Western Balkans. They have announced that they will establish a raw sugar refinery in Brcko jointly with the Bosnian-Austrian company SCO Studen & CO Holding/Vienna as 50 per cent partner. Capital expenditure for the project is estimated at around Euro 30 million. The refinery will have a capacity of some 150,000 tons of sugar per year. The company claims that this will be one of the first industrial investments by a foreign food company in Bosnia and Herzegovina since the end of the Balkans conflict and will create 160 new jobs in Brcko. The company investment decision was clearly driven by the recent WTO panel ruling to terminate C sugar production and the changes in the EU sugar CMO. SCO already operates an oil mill for the production of cooking fat in Brcko. The construction of the new sugar refinery began in 2006. Operations are expected to commence in 2007. Raw sugar will be used as raw material. It will be purchased on the world market and transported via waterways and railways. The production capacity of the new Bosnian refinery (150,000 tons) corresponds to the volume of EU export sugar that Agrana has so far sold in this region via SCO Studen. As regards isoglucose, production in existing refineries appears to be relatively low. From data available for 2004, the exported production was estimated 11,533 tons. No other data on isoglucose production is currently available.

Dairies: Before the war, six large state-owned dairies operated in Bosnia. After the war the number of dairies operating in the country increased reaching approx. 30 dairies with a nominal capacity of around 200 million litres in 1999. The capacity utilisation was a mere 30-

40% (i.e. about 70-80 million litres). In 2004⁷ there were roughly 55 dairies in B&H, mostly private, with a total capacity of approximately 1.5 million litres/day. Again only 36% of that capacity was actually used in 2004. The ownership structure of these dairies has changed in recent years. In 2004 there was just one state-owned dairy, which was in litigation. Foreign investors like the German dairy Meggle have taken over enterprises and invested in education and equipment. Some of the bigger dairies with capacity of 50,000–200,000 litres/day (e.g., those former state-owned dairies in Sarajevo and Zenica) have old facilities and equipment. Still in 2004 two-thirds of dairies were small, privately owned with a daily capacity of 2,000–10,000 litres.

Some small dairies are now earning money by offering cooling equipment and services to farmers. Low capacity utilisation is a permanent problem of the dairy industry, making it impossible for the dairies to benefit from economies of scale, to decrease costs per unit and increase funds available for new investments. Many farmers sell their milk (and locally processed cheeses) directly to households or at green markets. Consequently, the share of raw milk being processed in dairies is very low (compare chapter 4.2 above) and was in 2004 approximately 15%. Most dairies have a very similar and limited product assortment (mainly liquid milk and plain yogurt). Given health concerns connected with fresh milk by many B&H consumers, this has given rise to increased consumption of UHT milk.

The LAMP market profile listed in 2005⁸ the following factors in the B&H market that impact domestic dairies:

- *Significant imports of dairy products, especially from neighbouring countries:* Imports have remained stable since the signing of a number of regional free trade agreements (FTA's).
- *Exports have been limited:* Exports have steadily increased since the FTA's with neighbouring countries came into effect.
- *Many milk products that receive export subsidies are legally being sold in B&H:* This is especially the case for long shelf-life milk products like cheese, butter, and powdered milk.

Slaughterhouses and meat processors: Before the war, there were more than 200 slaughterhouses, of which about 60% were privately owned. During the war some slaughterhouses were extremely damaged and then closed, while other slaughterhouses continued to operate. Some 20 new slaughterhouses and/or meat-processing enterprises were established during and after the war. Today there are about 30 medium-sized or large slaughterhouses plus a great number of smaller enterprises. Some of these slaughterhouses apply high quality standards, but mostly they face an under-utilisation of their capacity. A possible explanation for this low capacity utilisation is the fact that some of the smaller companies slaughter non-registered, unofficially imported animals without being registered nor controlled. Most enterprises slaughter cattle and poultry (four companies have installed modern, specialised equipment for the slaughtering of chickens). The meat from the

⁷ Information on dairy sector in the year 2004 is based on the *Market Profile of the Dairy Production Sub-sector* [LAMP (USAID), 2005]

⁸ Market Profile of the Dairy Production Subsector [LAMP (USAID), 2005]

slaughterhouses goes partly to 20 meat-processing companies in B&H. Their major products are sausages, salami, ham, and smoked meat. The company Lijanovici dominates the domestic market and also exports high quality ham to other South East European countries.

Wineries: The B&H wine industry is small and concentrated in a relatively small region, centered around Mostar in Herzegovina (especially the municipalities of Citluk, Capljina, Stolac, and Mostar). These areas enjoy a warm Mediterranean climate, with well-drained karst soils. However, within this region the wine industry is a significant part of the agricultural economy and the wine products are well known and well accepted throughout the nation and in the neighboring countries of the former Yugoslavia, thus making a disproportionately large contribution to regional identity. Unfortunately, the B&H wine industry is stagnant, sharing common problems with many other B&H agricultural sectors. There is no inventory of the vineyard area under cultivation, nor the age, health status, or varieties being cultivated. The wineries are weakly organized, but can choose between joining two associations, or none. One association is for wine producers only, and has attracted the premier wineries, most of which are family enterprises. The other association has members whose wineries are large privatized units of the former state-owned enterprise, Hepok—which had a pre-war monopoly on wine production—but this association also has members with distilleries producing gin, vodka, whiskey, and other spirits.

Total domestic production of wine is estimated at 9–11 million liters (L). However, this includes a very large volume of wine produced informally by small farmers and sold to extended family members and village residents. In fact, it is highly likely that the volume of wine produced informally may exceed production in the formal, business sector. According to U.S. wine industry statistics, B&H ranks 52nd–55th among nations of the world (depending on the year) in wine production. It is assumed that this ranking was based on figures for the formal wine sector.

Domestic wine production is divided into four quality categories which could be called: topquality PSR, good-quality PSR, table-quality PSR, and table quality w/o PSR. Lack of official controls has led to an unrealistically high proportion of commercially produced Herzegovina wine being declared as top-quality wine. In comparison with other countries in the region, the proportion of bottled middle quality wines is very low. Production of the lowest quality category - table wines - is relatively high. Expert opinion puts the approximate ratio among commercially produced Herzegovinian wines as 35% top –quality, 15% good-quality (middle quality) and 50% table wines (Blesić, 2006⁹).

Wine from the FB&H is currently not sold in the RS because labelling and tax laws are not harmonized. The resulting cost and double taxation make the products uncompetitive with imports. More significantly, although the EU does grant access to B&H wine under quota, B&H is unable to take advantage of this market access. This is due to the fact that in October 2003, the only B&H agency authorized by the EU to certify the safety and quality of wine exports, the Agricultural Institute in Mostar, was removed from the official list. Recently, the state Ministry of Foreign Trade and Economic Relations approached the EU and

⁹ D12-1 First 6-monthly report Monitoring Of Agricultural Policy, Market And Trade Developments In Bosnia And Herzegovina, www.agripolicy.net

appointed the Agricultural Institute in Mostar as the authority in charge of issuing the quality certificates. It is hoped that the Institute will regain its EU authorization in the near future.

Fruit and vegetable processors: Before the war, there were 18 state-owned processing companies for fruits and vegetables. Today, there are approximately 20 fruit and vegetable processors in B&H. Some private companies were established after the war, and have gained considerable shares in the domestic and foreign markets. The largest processing companies are the private company Vegafruit in the FBH (10,000 tons of processed products per year, 100% capacity utilisation) and the newly privatised company Vitaminka in the RS (capacity of about 20,000 tons, production in 2001 estimated at 4,000 t). Fruits and vegetables are either supplied by contracted farmers in the region, grown by the processing enterprises themselves or imported (e.g. a special pepper variety from the former Yugoslav Republic of Macedonia). The main processed products are fruit juices, jam, pickled vegetables, typical local vegetable pastes (e.g. pepper-based Ajvar), ketchup but also frozen or dried vegetables.

Before the war, there was one large-scale, state-owned processing company (Hepok) near Mostar comprising - among other plants - a winery and a distillery with a capacity designed to process large quantities of raw material from all over Yugoslavia. Similar companies with very large capacities were the oil mill in Brcko and the sugar factory in Bijeljina, and a factory for the chemical processing of maize in the RS. The capacities of these companies far exceeded the domestic raw material supply. Today, they drastically reduced capacity utilization, as both, import and processing, cannot be carried out at internationally competitive prices.

Some agro-processing companies have started to secure their supply of raw material by growing crops themselves (e.g. see above fruits and vegetables), others have formed partnerships with wholesalers and suppliers in an attempt to vertically integrate supply and marketing. More often, however, the relationships between agricultural producers, processors and traders are characterised by distrust and disagreement, another reason for the lack of raw material supply that the food industry suffers from.

6 SUPPORT SYSTEMS AND SERVICES

6.1 FINANCIAL SUPPORT SERVICES

During the post-conflict period (1996 – 2004) B&H experienced a steady flow of external funds to support reconstruction and the availability of soft loans and grants from donors. Since 2004, when the country's status in the World Bank changed from that of a post-conflict to a transition country the flow of funds also slowed down. Issues related to rural credit facilities changed over this period and were a reflection of the general political and economic situation.

Nowadays, Bosnia and Herzegovina still does not have a clear selective national development strategy for rural areas, neither has it a selective credit policy that would follow such strategy. This means that the rural population, enterprises and entrepreneurs mostly face credit conditions and credit lines no different to any other business or person in the country. The lack of favourable credit lines that are tailored to the specific characteristics and needs of agriculture is among the most often mentioned obstacles to the development of the sector. Bearing in mind that agriculture is the main income source of the rural population in Bosnia and Herzegovina, agricultural credits are crucial for rural financing. Although establishment of a specialist agro-bank has been advocated by experts for years, it has not been established yet.

Perceived high risk factors related to agriculture prevented lenders from providing the needed finance and credits for this critical sector at the beginning of the post-conflict period. The lack of credit lines tailor-made for agriculture and other rural businesses is probably the most often mentioned obstacle and missing link in the development of agriculture, and has been identified as a crucial issue by both national and international experts and specialists. To improve this situation, in 2002 the EC initiated a rural credit line with a grant estimated at up to 5 million EURO, to establish rural finance in B&H through a project called "Seed Capital and Credit Facilities" aimed at various beneficiaries such as refugees, internally displaced persons, farmers associations and cooperatives. This, and many other valuable projects, gradually improved the situation and provided remarkable help for the rural population, but they remain as the only successful projects while a permanent, systematic, legally framed rural finance policy, supported with sound policy measures, is still missing.

Still, it cannot be said that there has been no improvement in the sector. Most commercial banks in Bosnia and Herzegovina have gradually developed special credit lines for small and medium enterprises, which can be applied for agro-businesses, too. The Government of the Federation of Bosnia and Herzegovina have founded the Federal Investment Bank that offers special a credit line tailored to agricultural production and this is available through the network of commercial banks. Furthermore, a certain number of micro-finance institutions have been established with different credit lines intended for different population groups or individuals. However, saving-credit associations that could be important facilitators of rural financing still do not have a legal framework for establishment, as the law on these institutions hasn't been adopted yet in either of two entities of Bosnia and Herzegovina.

At the moment, one comforting fact is that the whole of Bosnia and Herzegovina is well covered with banking institutions and micro-finance institutions and their branch offices, so at least rural areas have physical access to existing credit lines, and can be properly informed about them. According to a recent investigation of the World Bank Group (in 2005) into the ease of doing business, 155 countries were analysed and ranked in 10 indicators of which the indicator 'getting credit' – was one. Bosnia and Herzegovina's overall ranking was 87, and in the 'getting credit' indicator its rank was 9. The basis for evaluation were indicators such as legal rights for borrowers and lenders, and factors such as the scope, access and quality of credit information through public registries and private bureaus. This means that legislation in the banking sector in Bosnia and Herzegovina is appropriate and the banking sector can serve as a solid basis for possible future measures related to rural finance policy.

Bearing in mind that there are no agricultural or rural credit institutions that deal exclusively with agriculture and other rural businesses in Bosnia and Herzegovina, there are two sources from which rural individuals, collectives and enterprises can get short-term credits under the same conditions as any other applicant. One of these sources is the commercial banking sector, and the other is the micro-finance institutions.

Commercial Banks: Most commercial banks in Bosnia and Herzegovina offer short-term credits aimed at the financing of working capital, but only one of them has a special short-term credit line for agricultural producers (ProCredit Bank). This bank operates across the whole territory of Bosnia and Herzegovina, so potentially all citizens have access to it. Credits of up to 10,000 EURO are given for working capital over an 18-24 month period, the monthly interest rate is 0.9%, with one co-signer (up to 2,500 EURO another agricultural producer can be co-signer). The application procedure is simple and very quick. In most of the commercial banks in the whole of Bosnia and Herzegovina there are short-term credits intended for the financing of working capital for small and medium enterprises and micro-businesses. These credits amount to up to 50,000 EURO, the repayment period is up to 2 years, in most of the cases there is no grace period (except in the Federal investment bank) and the interest rate varies from EURIBOR + 3% up to 13% per annum. Only two banks in RS that have tailored special credit lines for SMEs do not require collateral for these credits.

Conditions for long-term credits in commercial banks (including for agriculture are: amount from 10,000 to 250,000 EURO, a repayment period of up to 8 years, a grace period of up to 2 years, an interest rate of between 6% and 11.5% per annum. All commercial banks require a business plan and collateral for long-term credits.

Long-term credits for SMEs are given under following terms: a credit amount of between 5,000 EURO and 380,000 EURO, a repayment period of between 3 and 10 years with a 6 – 12 months grace period, and interest rates varying between EURIBOR + 4% up to 8% per annum. Business plans and collateral are requested.

Micro-finance Institutions: The micro-credit sector in Bosnia and Herzegovina had a significant role during the post-war period in poverty reduction and support to the small and medium entrepreneurial developments among the socially endangered population that has no possibility of obtaining financial resources from the traditional banks. Since 1996, Bosnia

and Herzegovina facilitated the development of this financial sector through the Local Initiatives Project (LIP) supported by the World Bank and through the support of the international non-governmental organizations. The main role of micro-financing institutions lies in the fact that they serve the clients who do not have collateral and have low income or no income whatsoever. In the period from 1996 until today 14 micro-financing organizations have been established. According to data of AMFI (Association of Micro-finance Institutions in Bosnia and Herzegovina) micro-credit organizations are currently serving app 130,000 of active clients and are managing credit potential in the amount of 150 million EURO.

Micro-finance Institutions (MFI) in Bosnia and Herzegovina rely mainly on funds from different international and local governmental and non-governmental organizations and institutions (including WB, EU, USAID, GTZ, Federal investment Bank). The network of MFI covers the whole territory of Bosnia and Herzegovina and they offer credits that amount 250 – 15,000 EURO for agricultural producers and cooperatives, rural groups and individuals and entrepreneurs under following conditions: repayment period from 12 to 36 months, grace period from 6 – 9 months, with interest that varies from 0.7% up to 3% on a monthly basis. No business plan is needed in most of the cases, and when such a document is needed employees of MFI are available to help. No collateral is requested, only co-signers. Application and evaluation procedures are very quick so the money can be at applicant's disposal within few days.

Federal Investment Bank: Besides these credit lines, it is important to mention the Federal Investment Bank (FIB) and its credit lines, as they are the most important source of credit finance for the agricultural sector. The FIB was founded by the Government of the Federation of Bosnia and Herzegovina. The FIB has a special credit line aiming at providing long-term investment credits for agriculture. The beneficiaries are farmers, cooperatives and agricultural enterprises from the Federation of Bosnia and Herzegovina. The credit amount depends on the purpose of the loan, and the interest rate is between 8% and 10%. The repayment period is from 18 months to 7 years. What makes this credit line unique is its sensitivity to the biological characteristics of agricultural production, particularly plant production. This is reflected through a grace period that no other bank in Bosnia and Herzegovina offers. The grace period in the FIB credit line is from 6 months up to 36 months (for fruit and wine growing). Apart from agricultural investment credits, the FIB also has investment credits for SMEs under following terms: amount up to 1 million EURO, payment period up to 84 months, grace period up to 9 months and interest rate equivalent to EURIBOR + 5%. All credits from the FIB credit lines are distributed through 18 commercial banks in the Federation of Bosnia and Herzegovina.

Assessment of domestic credit sources: In evaluating the available credit sources, the ease of obtaining credit and the adequacy of the credit terms need to be analysed separately. For short-term credits, agricultural producers are very satisfied with the procedure for getting credits from micro-finance institutions, it is simple and very quick, and for most of the poor rural inhabitants this is the only credit they have access to. Business plans are required only for larger amounts of credit, and in most cases there is no need for collateral. Personnel from MFI are willing to help with a business plan and in most cases are familiar with agriculture and other rural businesses. They also inform the rural population

about existing credit possibilities, even in direct contacts they themselves initiate. However, the interest rate for this type of credit is typically far too high for agriculture, and the cost of access to borrowed capital is much higher in MFI than in commercial banks. Furthermore, instalments are repaid monthly regardless of seasonal factors, so the only advantage of MFI for small rural businesses is the easy and quick procedure for obtaining short- term loans.

When it comes to medium and long – term credit, the situation is worse. The only permanent source of this form of credit is the commercial bank. The application procedure is more complicated, a lot of administrative work has to be done, a detailed business plan has to be submitted, and adequate collateral is needed (at least in most cases, see section 2:1) all of which tend to make investment credit lines inaccessible for most of the poor clients in rural areas. Being registered as business entities, entrepreneurs and small and medium enterprises are in a somewhat better situation. Even so, interest rates for long – term credits are too high for both agricultural producers and other rural businesses. The efforts of the government to subsidize agricultural credits is praiseworthy, but is far from being enough to meet the needs of the sector. As funds are not enough for all credit applicants in the sector there is an opportunity for corruption, and many farmers claim that they all do not have the same chance to be subsidized.

6.2 AGRICULTURAL EDUCATION, EXTENSION & INFORMATION SYSTEMS

Nowadays there are several institutions in B&H (many of them located at universities in Sarajevo and Banja Luka) that carry out research in the areas of agricultural production, processing and food technology and food safety control.

Table 18: Main agricultural research institutions and agricultural faculties in B&H

Relevant research institutions	Relevant areas
Veterinary Faculty in Sarajevo (FBH)	Food hygiene and food technology, poultry diseases and technologies, environment control, cattle farming, fish diseases and technologies
Agricultural Faculty in Sarajevo (FBH)	General agriculture, agro-economy, food technology
Agricultural Faculty Banja Luka (RS)	General Agriculture
Faculty of Technology in Banja Luka (RS)	Food technology, food safety control
Agricultural Institutes in Sarajevo and Mostar (FBH) and in Banja Luka (RS)	Plant production, fruit and vegetable production, food control, certifying of seeds
Faculty of Science in Sarajevo (FBH)	Department of fish science
Faculties of Economics, Sarajevo, Banja Luka (RS), District of Brcko	Economics, Management and Marketing
Institute for Gene Technology, Sarajevo (FBH)	Gene Technology

Source: Own compilations

Financial constraints are common to all these institutes. Equipment is often outdated, and most research activities were interrupted by the war. After the war, some equipment was purchased with financial support from donor organisations, but the equipment is now rarely used due to unaffordable running costs. There is also a lack of specialised academic staff for modern subjects like marketing, agricultural economy, EU laws, EU quality norms, and there

has been a strong emigration of young educated people since the war ended (between 1996- 1998, about 42,000 highly qualified people left the country (USAID 2000).

Support functions for farmers, rural population, processors, and other stakeholders are generally underdeveloped. Subsidy programs are organised in an inefficient way. Due to a lack of staff and know-how sufficient program planning, monitoring and evaluation mechanisms are missing. The absence of multi-annual support programs and the domination of product linked support schemes leads to a limited impact of present support measures.

Within an EU PHARE Project implemented in 2000, extension service offices were founded throughout Bosnia and Herzegovina. Among other tasks and assignments, employees of these offices were put in charge of helping farmers with designing business plans and providing other advisory services when applying for credit finance.

In the RS the system established with support of the project still remains in place and includes Municipal based advisers in most areas, supported by a central support unit with specialist adviser capacity, based in Banja Luka. Generally the service appears to be well appreciated and used, though it remains poorly equipped, under-funded and generally under-manned.

In the Federation of B&H the system was established at Canton level but the commitment of most Cantons was minimal and no central services were established to support the system. Farmers generally tend to disregard the existing public services and rely, where available, on private providers (though these are very limited).

In the reorganization of the extension services it must be realized that the technologies devised by the social farms are inappropriate to the needs of the private farms. Many principles of production have been inherited from the social farming systems and are widely practised by small farmers. Cultivation systems with inappropriate ancillary equipment, high levels of unbalanced concentrates fed to housed cattle, and general high-cost production systems are having an increasingly serious effect on small farm incomes. The current advice given is therefore technically unsound, financially non-viable and high risk. The rate at which the transition required can be effected remains questionable, as a complete reversal of production technologies related to profitability of farming systems is now required.

In future, the agricultural knowledge system including education, research, extension and agribusiness now needs to focus on how to improve the farm family's income, as opposed to just improving production. This requires a much sharper focus on the economics of technology and other investments and on its risk acceptability to small farmers. An appropriate technology would enable farmers to reduce costs, increase yield, improve quality and diversify production. Both public and private benefit would ensue, the latter already in evidence amongst a core group of more knowledgeable farmers.

Instruments to support technology promotion are limited. There are some small extension adviser networks attached to certain former Agro-kombinats (socially owned, integrated production and processing firms), some Canton-based advisors and some elements of the scientific community constitute the main farmer information sources. These poorly

developed extension elements generally lack market or farm management focus, are short on appropriate technology and, in the public sector, are largely unaccountable to their farmer clients. A stimulus is required which would engage the farmer in constraint analysis and technology development, better employ the often under-utilized public and private extension resources to address identified needs, increase client accountability and, ultimately, transfer responsibility for the delivery of technical advice to the private sector. Plans are being made to establish certain B&H support structures to guide the development of such services (within the new draft Law on Agriculture, Food and Rural Development) but these have not yet been adopted.

6.3 INPUT SUPPLY

During the conflict Bosnia and Herzegovina suffered and experienced enormous damage to its economy and infrastructure. According to World Bank estimates, agricultural production was reduced to one third of the pre-war production level. This was partly due to the destruction of important input factors such as the stock of agricultural machinery (where losses are estimated at 80%), livestock assets for breeding, irrigation systems, warehouses (also for seeds and fertilizers) and other farm facilities – all were almost completely destroyed or significantly damaged.

Even though there is no specific data available for the input industry in B&H it can be stated that it has (same as the food industry) not recovered from this shock. Nowadays some agro-processing have formed partnerships with wholesalers and suppliers in an attempt to vertically integrate supply and marketing (see also chapter on food industry). They supply farmers with seeds and other production materials in order to secure the supply of the raw material they need for their production. By doing so they take some risk but at the same time they can directly influence the quality of raw material they later process. Farmers benefit from this kind of input supply as they get better prices.

Sadly the relationship between agricultural producers, processors and traders is characterised often by distrust and disagreement, another reason for the lack of raw material supply that the food industry suffers from (see above).

7 AGRICULTURAL AND FOOD POLICY

7.1 INSTITUTIONAL FRAMEWORK AND POLICY CONCEPTS

Institutional framework: Agriculture is defined within the Constitution to be within the exclusive domain of the Entities (and Brcko). However, the B&H Constitution also empowers the State to co-ordinate activities within the exclusive domain of the Entities. For example, the B&H Presidency and the Council of Ministers have the authority to facilitate inter-Entity co-ordination on matters not within the responsibilities of B&H, as defined under the Constitution, unless an Entity objects in any particular case.

Of significance for the agricultural sector, at the B&H level, the Ministry of Foreign Trade and Economic Relations (MoFTER) was established, with wide-ranging competencies, including (but are not limited to) the following of relevance to the agricultural sector:

- Foreign trade policy and customs tariff policy of B&H including preparation of bilateral and multilateral agreements
- Relations with international organisations and institutions in the domain of foreign trade and economic relations
- Enforcement of the single economic space including preparation and drafting of macro-economic or strategic documents in the domain of economic relations
- Import and export control of goods and services
- Consumer protection and competition
- Veterinary matters including legislation, international cooperation & animal registration.

In brief, MoFTER is responsible for carrying out tasks related to defining policies, coordinating activities and harmonising plans of Entity authorities and bodies at international level – among others in the fields of agriculture, energy, protection of the environment, development and use of natural resources and tourism. The competencies of MoFTER in the agricultural sector have tended to focus on foreign trade, external relations, general veterinary matters and the coordination of the Entity MoAs. However it has never been sufficiently resourced to undertake any substantial role in sector strategy or policy planning and data collection. These and other areas remain significant gaps in the State level functions that are generally required for effective management and administration of the agricultural and rural sector in other countries.

There are on-going political discussions in B&H in 2006 to revise the B&H constitution and establish greater capacity at state level but these have been put on hold due to the latest elections, held in October 2006. If agreement can be found, following the formation of a new government, on final changes then it seems certain that this would allow for Agriculture, Rural Development and Environment to be established as shared competencies between the State and Entities.

Detailed discussions have also be held in 2006 concerning the establishment of a dedicated B&H Ministry of Agriculture, Food and Rural Development (MAFRD) which would be vested with sector coordination competencies currently held by MoFTER and may, with consent of the Entities, extend its mandate to other areas. However, despite the development of

relevant draft legislation to allow this to be achieved, the holding of elections (October 2006) have also caused this debate to be put on hold. In the absence of any strengthened B&H state level structure the sector, services, support and data at country level remains scarce. Sector governance therefore remains divided between the three key administrations in charge of the agriculture sector, namely:

- (i) The Ministry of Agriculture, Forestry & Water Management (MAFWM) of RS
- (ii) The Ministry of Agriculture, Water Management & Forestry (MAWMF) of FB&H
- (iii) The Department of Agriculture, Forestry & Water Management of District Brcko.

The situation is further complicated by the Cantonal structures in the Federation of B&H. According to the FB&H Constitution, both the FB&H MAWMF and the Cantons are responsible for the management and use of natural resources. This provision was explicitly included in the Cantonal Constitutions as well. There are ten Cantons in the FB&H. All Cantons have established administrations in charge of agriculture, veterinary, forestry and water management. These administrations have to implement the relevant Canton and FB&H legislation and policies. Canton administrations in charge of the agricultural sector have to co-ordinate their activities with the FB&H MAWMF, as well as with other Cantons and the Canton's Municipalities. Canton agriculture administrations are the main implementation bodies for policies and legislation prepared by the FB&H MoA. However, Cantons are presently neither appropriately involved in the preparation and monitoring of support and development policies on Entity level, nor do they have their own sufficient planning, programming or data collection and analysis capacity to guide or manage implementation of sector support measures. Data co-ordination mechanisms with the FB&H MAWMF are not sufficiently formalized and therefore do not function effectively. This system is unique to the Federation of B&H. In the RS and Brcko District no such system exists and the Ministries have direct control over all regional policies, supported by administrative capacities at the Municipality level. Municipalities represent the administrative layer in B&H, which is closest to farmers and rural households. There are currently 80 Municipalities in FB&H and 63 in RS (District Brcko is not divided into Municipalities). Unfortunately there is generally a poor flow of information and support between the administrative levels. Due to the general scarcity of staff and resources to support them, data collection, inspectorial and extension functions are often undertaken as shared tasks.

As part of the wider Public Administration Reform (PAR) process of B&H the EU funded a detailed Functional Review of the Agricultural Sector in 2004. This was completed in October of the same year. The findings of the review, endorsed by all key stakeholders involved in the management of the sector, revealed significant institutional weaknesses, the most important of which was the general lack of institutional capacity to develop, co-ordinate and monitor agricultural, food and rural development strategies, policies and legislation. The absence of such capacities on State level is particularly problematic with regard to EU integration and international agricultural trade policies and legislation.

Staffing: Present total staff numbers in public administrations dealing with the B&H agriculture sector are very modest when considering the size and importance of the agricultural sector in B&H and when comparing with other countries. Especially problematic is the weak or non-existent staffing at State level dealing with the agricultural sector. Key

functions such as policy planning, coordination and monitoring as well as drafting of legislation, EU harmonization and direct support of farmers are understaffed or not staffed at all.

Sector strategic framework: There is currently no overall B&H Agriculture and Food Policy framework or strategy. Draft Sector Strategy papers were developed for both Entities and Brcko District in 1999-2000, with the support of FAO and the EU, but these were never officially endorsed or followed. In 2004, an EU funded functional review of the sector resulted in the publishing a matrix of policy objectives for government consideration (see table below). In the same year both Entities began to work separately on new strategies and policy frameworks. However, no coordination mechanisms were put in place to ensure even the most basic harmonisation of these strategies or policies. Both Ministries have since produced extensive (unrelated) drafts and made these available for comment (mid 2006) in local language. The draft documents provide no clear analysis or framework for their implementation, or allocation of resources to support measures. The Federation document has not yet been officially submitted or ratified by its Parliament. The RS strategy has since been adopted by the RS Parliament (July 2006). In addition, the RS recently adopted a new Agricultural Law (also in July 2006) which defines their Entity policy objectives and measures. The Law is based on a Slovenian Agricultural law is not well adapted to the Entity requirements or assessed in terms of its implications for sector budget support or means of implementation.

At state level, work has recently been completed on a new B&H draft law on Agriculture. The draft was submitted for Council of Minister's consideration in July 2006. This was too late to allow submission to the full legislative process prior to the Parliamentary recess and new elections. It is the intention of MoFTER, as the main proponents of the draft Law, that this will now be submitted in October/November 2006, supported by endorsements from both Entity Administrations. If adopted by the new Government, it will establish a more-clear EU integration path for the sector, linked to EU policy frameworks. The objectives of this Law include establishment of a clear framework for sector governance and development of sector strategies, policies and specific implementing measures to improve the coordinated development of the agriculture, food and rural development sectors, throughout the country. The draft law also provides a set of sector framework objectives for B&H sector policy. Once approved, detailed support measures and mechanisms for their implementation will be defined in planned B&H sector strategies for Agriculture and Rural Development and action plans. However, there is a risk that following the new elections in October 2006, that resistance to new state level institutions and central coordination by the state will grow and the political will to proceed with a new State level Ministry will not exist. If this occurs, sector strategy and policy development will require strengthening through existing

Table 19: Objectives (strategies) of B&H agricultural policy

Main goal 1 Sustainable development of agriculture, fishery and forestry	Main goal 2 Overcome the major consequences of war and remnants of former state economy system	Main goal 3 Ensure supply of healthy safe and high quality food for consumers at reasonable prices	Main goal 4 Participation in international trade with agricultural and forestry products at fair conditions	Main goal 5 Preservation and rational use of natural resources, protection of landscape, development of tourism and animal welfare	Main goal 6 More effective governance and approach to EU acquis communautaire
Improving efficiency , profitability and competitiveness of production, processing and marketing (1.1)	Privatization of former state farms and processing firms (2.1)	Production of food according to the demands of domestic consumer wishes (3.1)	Establishment of a coherent and comprehensive trade and development of a B&H single market (4.1)	Rural development, protecting and enhancing domestic natural resources, improvement of water use, protection of environment (5.1)	Clear allocation of competences in order to achieve a more effective administration (6.1)
Increase standard of living of rural population, enhance per-capita income of persons engaged in agriculture, fishery and forestry (1.2)	Support resettlement of refugees and displaced persons in rural areas in combination with creation of job opportunities in non-farm activities (2.2)	Harmonization of food health and safety protection, supporting bio production, control of pesticide, herbicide and medical inputs in agriculture (3.2)	Preparing for association with EU and accession to EU, WTO membership (4.2)	Preservation and rational use of natural resources, notably water and land, protection of forestry and agriculture against erosion and flooding (5.2)	Improve cooperation between government levels, strengthening economic relations between entities (6.2)
Strengthening of farm enterprises, producer organisations for marketing and processing of agricultural products as well as co-operation with food industry (1.3)	Develop land and tenancy market, supporting of reconstruction process in competitive farm units, optimizing land use (2.3)	Standardization, certification of agricultural and forestry products, establishment of a quality guarantee and management system (3.3)	Encouragement of B&H agricultural, fishery, forestry and food exports in order to decrease negative trade balance (4.3)	Providing incentives for small towns and large villages to offer suitable locations for establishment of SMEs, improving access to rural areas through infra-structure, services, trans-port and communication, promotion of sustainable agro-, hunting- and ecotourism (5.3)	Improve credit facilities and support for agriculture by interest rate subvention programs, through set up of credit institutions in the rural areas, facilitating farm credits by public grants (6.3)
Establishment and strengthening of agricultural institutions and sustaining extension service for farmers and food processors (1.4)	Cleaning agricultural and forestry land from mines to reduce accidents and increase production capacity (2.4)	Development of design for new food processing plants to be ready for EU certification, establishment of reference laboratories (3.4)	Promotion for attracting foreign tourists for holidays in B&H countryside (4.4)	Increase of sustainable economic capacity of forest lands, increasing forest biodiversity, promoting animal welfare (5.4)	Elaboration of support programs and preparation for implementing a paying agency to administrate EU funds (6.4)

Source: *Functional Review of the Agricultural Sector in B&H, 2004*

institutional frameworks within MoFTER at state level or will be in danger of stagnating. In consequence the sector will continue to suffer from weak management, poor coordination and limited capacity to address and drive forward the EU integration agenda so urgently required to guide the sector and improve overall competitiveness.

7.2 BUDGETARY RESOURCES

In 2005, as in previous years, no significant government funds were allocated to supporting agriculture and developing the agricultural sector. Out of a total government budget in the two entities of approximately € 1 billion, only € 25.7 million or 2.6% of total government expenditure were allocated for the development of agriculture.

Table 20: B&H total agriculture support (2002-2005)

	2002	2003	2004	2005
Total B&H (€)	12,773,800	16,567,244	20,725,754	25,700,000

However, the general trend is positive. The total budget has actually doubled in the last 4 years from €12.7 to €25.7 million. In 2005, as in all previous years, the RS allocated a far higher amount of funds to the sector. For 2005 this represented 3.5% of the total entity budget or €16.9 million, whereas for the FB&H it was only € 8.8 million, representing 1.7% of the total entity budget. The breakdown for 2002-2004 reveals that the Cantons within FB&H and the Municipalities within RS provide a significant share of current funding. Spending in Brcko District is negligible.

Table 21: Agriculture support to the sector (2002-2004) by Entity (& Brcko)

2002	2003	2004
A: Total FBiH Ministry of Agriculture budget		
€ 1,140,915	€ 522,359	€ 1,108,178
B: Total Cantons agriculture budget		
€ 348,407	€ 855,080	€ 3,132,460
C: Total FBiH Agriculture budget (A+B)		
€ 1,489,321	€ 1,377,439	€ 4,240,638
A: Total RS Ministry of Agriculture budget		
€ 5,583,534	€ 6,457,924	€ 6,914,665
B: Total RS Municipalities agriculture budget		
€ 5,160,542	€ 8,373,160	€ 9,555,021
C: Total RS Agriculture budget (A+B)		
€ 10,744,076	€ 14,831,084	€ 16,469,686
A. Total District Brcko Agriculture budget		
€ 540,402	€ 358,721	€ 15,431

Source for table 20 & 21: Ministries of Agriculture, draft WTO AMS calculation tables – Note: numbers do not include the costs of operating the sector administration i.e. Ministries and cantonal operational costs (which are estimated to be higher in the Federation than the RS).

7.3 AGRICULTURAL AND FOOD POLICIES

The tables below provide a detailed breakdown of individual Programmes by Entity (and Brcko District) and additionally those programmes supported directly by Canton and/or Municipality:

Table 22: B&H Agriculture Support Programmes by Entity and Brcko District (2002-4)

Type of support measure	Federation of BiH			Republika Srpska			Brcko District		
	2002	2003	2004	2002	2003	2004	2002	2003	2004
Veterinary services	-	-	-	1,706,259	1,848,260	1,936,776	-	-	-
R&D projects for crop selection/multiplication	-	-	-	717,200		2,068			
R&D projects on plant protection	-	-	-		224,622	271,386			
R&D project on livestock selection	57,350	67,800	27,000						
Livestock registration in herd-books	-	-	15,705	111,825	60,000	699,000		320,600	16,933
Training & Advisory services	-			64,243		179,275			
Infrastructure services					365,600				
Payments for relief from natural disasters					6,266,957				
Regional assistance programmes						2,967,159			
Income insurance /safety-net programme				164,800					
Other non defined support				2,579,551		1,542,103			
Support for revival of Production									
Interests				3,698,703	1,990,922	2,042,872			
Diesel purchase				910,945					
Incentives for Production of Vegetables	213,830	86,019	96,193	910,945		613,325	29,445	68,201	13,157
Incentives for Production of Fruits					886,291	337,285	524,065	157,566	
Artificial insemination	24,100				454,150	588,700	465,915	1,680	
Incentive for planting new orchards & vineyards	1,669,237	864,782	2,022,049	13,420		1,421,344			
Incentive for cultivating medicinal plants					293,660	663,488	34,360	103,220	
Incentive for cultivating forage grass				10,000	202,490	218,815		48,238	
Incentive to improve livestock breed quality	260,267								
Incentive to invest in new greenhouses									
Total KM	2,224,784	1,018,601	2,160,947	10,887,892	12,592,952	13,483,596	1,053,785	699,505	30,090
Total Euro	1,140,915	522,359	1,108,178	5,583,534	6,457,924	6,914,665	540,402	358,721	15,431

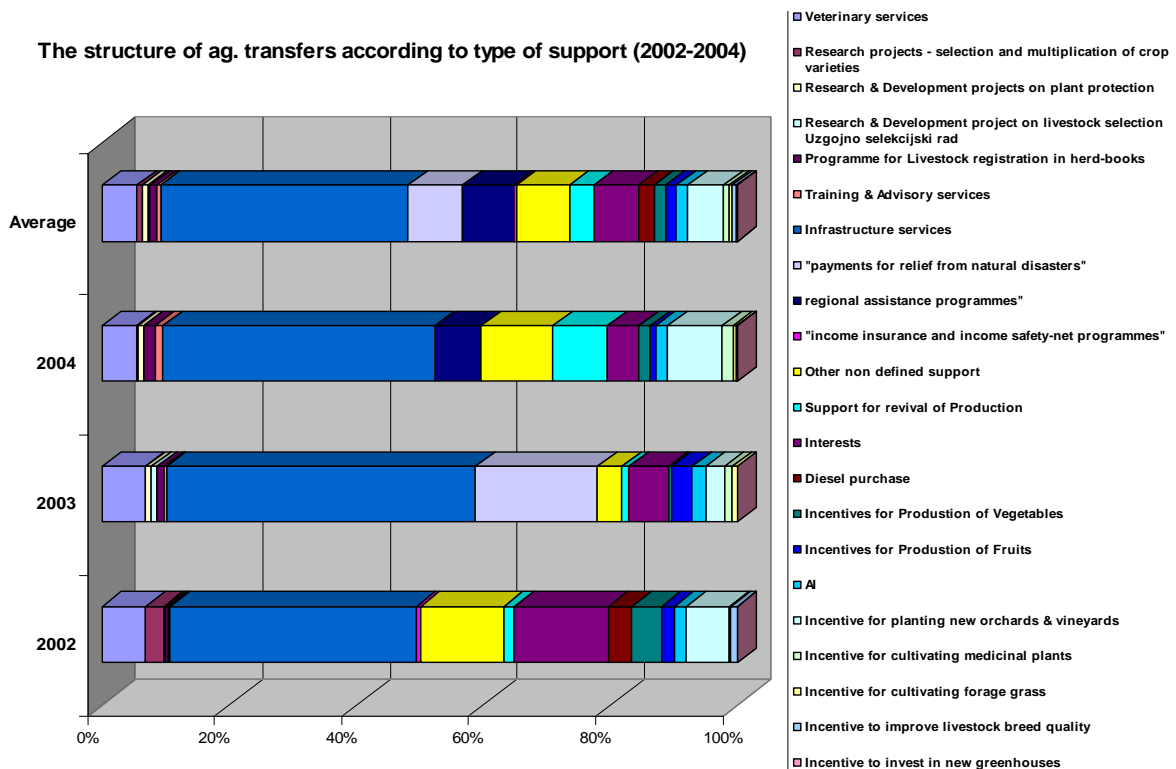
Table 23: B&H Support Programmes by Canton & Municipality (2002-4)

Types of support measure	Total cantons			RS municipalities		
	2002	2003	2004	2002	2003	2004
Veterinary services		383,000	298,000			
Research projects - crop selection/multiplication		10,000	80,000			
Research & Development projects on plant protection		95,000	90,000			
Research & Development project on livestock selection	25,000	112,480				
Programme for Livestock registration in herd-books						
Training & Advisory services		47,000	150,000			
Infrastructure services			120,000	9,635,878	15,564,927	17,378,136
Payments for relief from natural disasters		20,000	30,000			
Regional assistance programme						
Income insurance /safety-net programmes						
Other non defined support	257,793	502,507	1,702,775	427,180	762,736	1,254,155
Support for revival of Production	396,600	357,419	3,487,522			
Interests		30,000				
Diesel purchase						
Incentives for Production of Vegetables		10,000				
Incentives for Production of Fruits						
Artificial insemination						
Incentive for planting new orchards & vineyards		100,000	80,000			
Incentive for cultivating medicinal plants						
Incentive for cultivating forage grass						
Incentive to improve livestock breed quality						
Incentive to invest in new greenhouses			70,000			
Total KM	679,393	1,667,406	6,108,297	10,063,057	16,327,663	18,632,291
Total Euro	348,407	855,080	3,132,460	5,160,542	8,373,160	9,555,021

Source for table 22 & 23: Ministries of Agriculture, draft WTO AMS calculation tables

Between 2002-2004, the major part of funds were allocated to market price support measures, with the remainder going to a variety of small-scale schemes and development programmes. The tables and the classifications provided by the Ministries shield the fact that the majority of funding has been historically provided to the wheat, dairy and livestock sectors, utilising outdated mechanisms that have remained unchanged for more than a decade, allocated predominantly through socially owned enterprises, ensuring the maintenance of inefficient SOE's but doing little for private producers. This product-linked support still makes up more than 70% of the FB&H state support to agriculture. However, in the RS it is now just ¼ of state support. This is one of the last remaining legacies of the former Yugoslav system and reflects the weak and largely unreformed corporate governance of the sector. However, in 2004 & 2005, in both Entities, modest adjustments and innovations have been piloted in some areas, albeit at low levels of expenditure, to support a variety of production incentives (e.g. in fruit, planting of new orchards and support for on-farm research). It is envisaged that with the adoption of new Entity strategies for the sector that the type and range of measures will be gradually adjusted. But historically in B&H, changes in budget allocations and linkages between actual spending and defined sector policy objectives have been weak. No policy impact assessment is currently undertaken at any level and little or no information is collected on farm performance to gauge the effectiveness of existing or past government support. The figure below illustrates the structure of B&H agricultural support by type of measure from 2002-2004.

Figure 5: The structure of B&H agricultural support, by measure (2002-4)



Source: Entity MoA's; Consultants calculations.

Taxation: The vast majority of farmers in B&H do not pay income tax since they are not registered as business entities. There are no other significant tax breaks or incentives provided to farmers in either Entity at this time. The most significant tax policy change affecting agriculture was introduced in 2005, which is likely to have far reaching implications for the sector, namely the introduction of value added tax (VAT) of 17% for all products, which is also applicable across the board in the agri-food sector, without exemptions. The actual impact on prices and incomes for the sector is not yet fully understood by sector stakeholders and decision-makers due to the newness of the tax. However, agricultural producers and their representative institutions are among the most severe critics of the introduction of the new value added tax and have been requesting discretionary rates for certain products. Inflation did rise in 2005 and in 2006 was running at 4.5% for the first five months of the year. However, since this was affecting both agricultural output and input prices and in many cases production systems operate on low-input models, the overall effect of any price changes as a result of VAT are likely to be positive for most commercial producers. For subsistence and semi-subsistence farmers who do not market their production, the impact is likely to be negative. However, more analysis is required to determine more clearly the dynamics of the impact of VAT for different types of producer.

7.4 FOOD SAFETY

There is currently no B&H Food Safety Strategy. At the beginning of 2005, a State Food Law was adopted, applicable within the whole of B&H. This law provides for, amongst other things, the establishment of an independent B&H Food Safety Agency. The Agency's Director has been appointed, but the agency has not yet been fully established. A budget has been allocated and it is anticipated that an operational agency with a staff of at least 20 people will be active by the end of 2006. There is currently an EU project providing technical assistance in support of the Agency that is supporting the preparation of a wide range of draft food safety legislation based on EU regulations and Directives. Once the Agency is operational it is anticipated that this draft legislation will be officially proposed to the B&H Council of Ministers¹⁰ for approval and ultimately for adoption by the B&H parliament. However, at this time the Food law is the only legal basis for regulation in this area. The main problem facing the Agency, once established, will be the lack of accredited laboratory services available to enforce any new laws or regulations. An audit of the available laboratory services is expected to be completed in 2006 and should form the basis for an investment strategy over the next period, as new regulations on food standards are introduced.

Bosnia and Herzegovina has adopted some new laws in the veterinary, phytosanitary and food safety areas and has continued its implementation efforts, notably in the veterinary sector. While these are steps in the right direction, much remains to be done if B&H is to develop a competitive agriculture sector compatible with EU standards. In this respect, an important element is the development of a comprehensive agricultural strategy for the

¹⁰ This is the highest executive body of the B&H government at State level and includes all State level Ministers.

country, which should be a central element in policy-making and overall coordination in the sector.

There has been limited progress in adopting legislation compatible with EU standards in the agriculture sector. Due to the absence of State-level legislation, the Entities have in some areas been issuing their own agricultural standards, occasionally resulting in incompatible internal standards. Administrative capacity to enforce legislation also remains weak in most areas.

The agricultural infrastructure is outdated and insufficiently integrated, and the quality of products remains poor. Firms are struggling to meet sanitary and phytosanitary standards and, consequently, are unable to utilise fully their export potential. In addition, uncertainties regarding land ownership further constrain the development of the agricultural sector.

However, some positive developments have taken place in the veterinary sector over the past two years. A B&H State Veterinary Office has been established, which includes the agency for identification animals and registration of their movements. In June 2004 the Council of Ministers (the highest executive body of government in B&H) agreed to place veterinary border inspection under State-level authority. The State Veterinary Office was also made formally responsible for issuing veterinary export certificates. There was a recent success in securing certification for two companies for export of certain fish products to the EU. Other certification processes for meat and meat processing are being evaluated. The FVO in Dublin has made certain recommendations in a past visit on how this can be achieved. A new EU twinning project started in July 2006 to support the development of the State Veterinary Office and will assist in this process.

A National Veterinary Council was established in early 2005 to provide policy guidance to the State Veterinary Office on strategic matters related to B&H animal health and welfare issues. In June 2005, an amended Decision on the Veterinary Certificate on the Health of Animals and Shipments products of animal origin came into force. This decision has helped remove barriers regarding the certification of products of animal origin. Bosnia and Herzegovina has also developed export certificates, which are generally in line with the *acquis*.

Nonetheless, the uniform and harmonized application of veterinary and food safety standards has still not been assured. A decision on the establishment of a national network of veterinary laboratories was adopted in August 2005. However, the laboratory capacities and structures to support inspections remain uncoordinated and of uneven quality. In the veterinary field, the current decentralised structures hamper effectiveness. Results of analysis performed in one Entity are not recognised by the authorities in the other Entity.

A B&H Animal Identification Agency was established in 2004 and consists of a main office, based in Banja Luka supported by nine regional centres throughout the country. The animal identification and movement control scheme has started in both Entities, although with significant delays. Laboratories should be certified and their management centralized, with upgrades to reference laboratories and substantial privatisations or closures. Laboratory methods should be standardised, documented and accredited by the EU.

There is currently no B&H registration system for processors and/or importers of meat and meat products. There is no HACCP system operational and no legislative base or institutional structures to support their introduction.

In general, the phytosanitary sector suffers from an unclear legal framework and lack of laboratory capacity, although relevant legislation was adopted in September 2004 (laws on mineral fertilizers, plant protection products, seeds and seedlings and protection of plant breeder's rights). The Council of Ministers has also adopted a decision establishing a B&H Plant Health Administration. The Office has a budget but has yet to establish a team, despite the appointment of a Director and a Deputy Director.

Once the new State Ministry is established the State level agencies for veterinary and phytosanitary will be transferred to its responsibility, at which time it is hoped more direct support can be provided and effectively coordinated to ensure these offices develop and that the legislative basis they are currently responsible for can be progressed.

8 AGRICULTURAL TRADE AND TRADE POLICY

8.1 TRADE POLICY

Legal / institutional basis: B&H's foreign trade policy is currently governed by the 'Law on Foreign Trade Policy'. This Law entered into force in October 1997 (subsequently revised and published in May 1998). The purpose of the law is to regulate the basic elements of the system for importing and exporting goods and services and to determine the conditions for carrying out economic activities abroad. The flow of goods and services is, in principle free, with a view to promoting a free international market. The law does not exclude the possibility of forbidding or restricting import, export or transit in order to protect the health or lives of people, animals or plants, to protect national treasures of artistic, historical or archaeological value, to protect the public interest, or for reasons of national security.

The law also allows for the protection of domestic production. Refusal or restriction of this sort should not be based on discrimination and must be applied in line with the international rules of trade, the purpose being the exceptional application of protective measures to protect domestic markets from unfair international competition. An example of such unfair international competition is dumping or the subsidized sale of foreign goods on local markets.

The Law assigns sole responsibility for foreign trade policy to the State of B&H and her institutions. In practice this responsibility is assigned exclusively to the B&H Ministry of Foreign Trade and Economic Relations (MoFTER). According to Article 3, by foreign trade policy is meant consistent political principles for the application of unilateral measures with regard to the flows of goods and services in international commerce. These principles are also related to negotiations and the making of any and all agreements with third countries and with the regional and international organizations that regulate international trade.

In the last period MoFTER has attempted to establish a coherent and comprehensive trade policy and to gradually revise existing legislation to ensure consistency with international agreements. Establishment of State-level certification and other procedures for the export of animal products and a phytosanitary office that are EC-compatible, with a view to promoting exports, but also enhancing standards and the single economic space have been key elements of this policy. The State Veterinary Office is now established and is currently supported (from June 2006) by an EU funded twinning project. It is intended that similar assistance will be provided to support the sanitary and phytosanitary areas, once state level institutions are fully established.

Free trade agreements: B&H is currently lagging behind, when compared with most other countries of the region, in securing membership of key multilateral agreements. The country is currently still in negotiations with the World Trade Organisation (WTO) to secure membership. It is also currently exploring potential membership of CEFTA and the signing of a Stabilisation and Association Agreement (SAA) with the EU. All these negotiations are on-going.

However, a series of bilateral free trade agreements have been concluded in the last five years with B&H's most significant trading partners and with some other important countries in south-east Europe. These include the following:

- Free trade agreement with the Republic of Croatia - signed in 2000 (ratified – Official Gazette of B&H 11/04)
- Free trade agreement with the Republic of Slovenia – signed in 2001 (ratified - Official Gazette of B&H, 9/02)
- Free trade agreement with the Federal Government of the SR of Yugoslavia – signed in 2002 (ratified - Official Gazette of B&H, 4/02)
- Free trade agreement with the Former Yugoslav Republic of Macedonia – signed 2002 (ratified - Official Gazette of B&H, 9/03)
- Free trade agreement with the Republic of Moldova (applied from 01/05/04)
- Free trade agreement with the Republic of Bulgaria (applied from 01/12/04)
- Free trade agreement with Romania (applied from 01/12/04)
- Free trade agreement with the Republic of Albania (applied from 01/12/04)
- Free trade agreement with UNMIK/Kosovo (initialled on 15/02/06 but not fully ratified)

Trading partners: Three of B&H's five main trading partners are currently countries of the former Yugoslavia, namely Croatia, Serbia and Montenegro, who, together with Slovenia, accounted for nearly 38% of B&H's total foreign trade in 2004. Despite progress made in securing these agreements, B&H appears to be not yet fully committed to trade liberalisation. For example, negotiations on CEFTA stalled in the last years due to the unilateral actions taken by B&H in response to dramatically increasing agricultural imports from Croatia, Serbia and Montenegro over the last period. The government announced in early 2004 that it was reinstating customs tariffs, at previous 2003 levels, on a range of agricultural goods imported from these countries. The tariffs, which had been zero-rated, were increased to between 7% and 40% of import value. This move was undertaken

despite commitments under existing free trade agreements (FTAs), primarily in response to domestic lobbying. B&H subsequently unilaterally postponed for three months tariff reductions on agricultural goods from Croatia and Serbia and Montenegro. This development, though purportedly temporary, was later extended. This indicates certain weaknesses in the analytical capacity within the country to estimate the likely impact of such agreements. The approach taken has inevitably caused problems with the WTO negotiations. Currently a government appointed working group is preparing the WTO technical annexes for negotiations which will define B&H's aggregate measure of support.

With regard to the SAA negotiations, negotiations with the European Commission are ongoing and cover agriculture and other key areas including movement of workers, justice, freedom and security, institutional, general and final provisions. A reform process monitoring meeting was also held to assess progress with selected European Partnership priorities. Further necessary efforts were identified in recent negotiation rounds, in particular in the fields of police reform, public broadcasting, public administration and in achieving a single economic space.

8.2 GENERAL TRADE PATTERNS

With regard to B&H's foreign trade patterns, the value of exports of goods rose by a factor of 2.7 or an average annual rate of 22 % from 2000, i.e. just after the Law on B&H foreign trade policy was adopted (1998) and the single B&H currency introduced, to the end of 2005 (although the main rise in exports took place between 1998 and 2000 with exports doubling and imports rising 24.3% during the same period).

Between 2000 and 2002 was the period of greatest stagnation in foreign trade - exports fell 4.7%, while imports grew 11 %. The negative trend of Current Account Deficit growth, from 1998 to 2002 came to a halt in the last three years (with 2005 being the first year in which the trade deficit was reduced in absolute terms). During the last three years, 2003-2005, there have been positive developments in simultaneously reducing the trade and current account deficits. The main reason the trade deficit has been falling in relative terms is that exports to European Union countries have expanded and so the trade deficit with those countries has been significantly reduced. Liberalizing trade with the EU has clearly yielded positive results and is enabling further expansion of exports from B&H.

Throughout the post-war period B&H's most significant trading partners have been Croatia, Slovenia, Germany, Serbia and Montenegro, and Italy. The ranking of these five countries has changed over the period, with the exception of Croatia, which has consistently been B&H's most important trading partner. In the overall balance of trade, Slovenia has fallen from second place, which it held from 1998 to 2002, to fourth place in 2005. The volume of trade with Germany has risen significantly over the past three years, and is now B&H's second largest trading partner. After these five, B&H's most important trading partners are Austria, Hungary, Turkey, Russia and the Czech Republic. These five countries together, account for 14.34% of B&H's foreign trade. Following the signing of a free trade agreement, Turkey has significantly increased its exports to B&H, while the B&H economy has only modestly increased exports in return.

Although there have been certain positive trends in trade flows over the past years, comparison with other countries in South-East Europe shows that B&H's foreign trade position is the least comfortable in the Western Balkans group, by a long distance. B&H has a persistent merchandise trade deficit (in 2005 estimated at over 30% of annual GDP). The agricultural and food sector (including food & beverage production, & primary agriculture) has over the last two years, accounted for the most significant share of the trade deficit, with over 25% (food and drink production 17.7% and agriculture 7.3%), with the chemicals sector accounting for 12.7%, while oil, oil derivatives and coke account for 11.1%, and machinery and equipment for 9.6%. In 2005, these five main importing sectors accounted for 58.4% of the total deficit.

8.3 AGRI-FOOD TRADE

B&H is a significant net importer of agri-food products. Agriculture and food products contribute significantly to the overall negative trade balance of B&H.

Table 24: Share of Agro-food trade in total trade 2005

	B&H
Agro-food export/ total export	5.9%
Agro-food import/ total import	17.9%
Agro-food trade/ total trade	14.8%

Source: Own calculation based on CBBH data using data from the ASBH

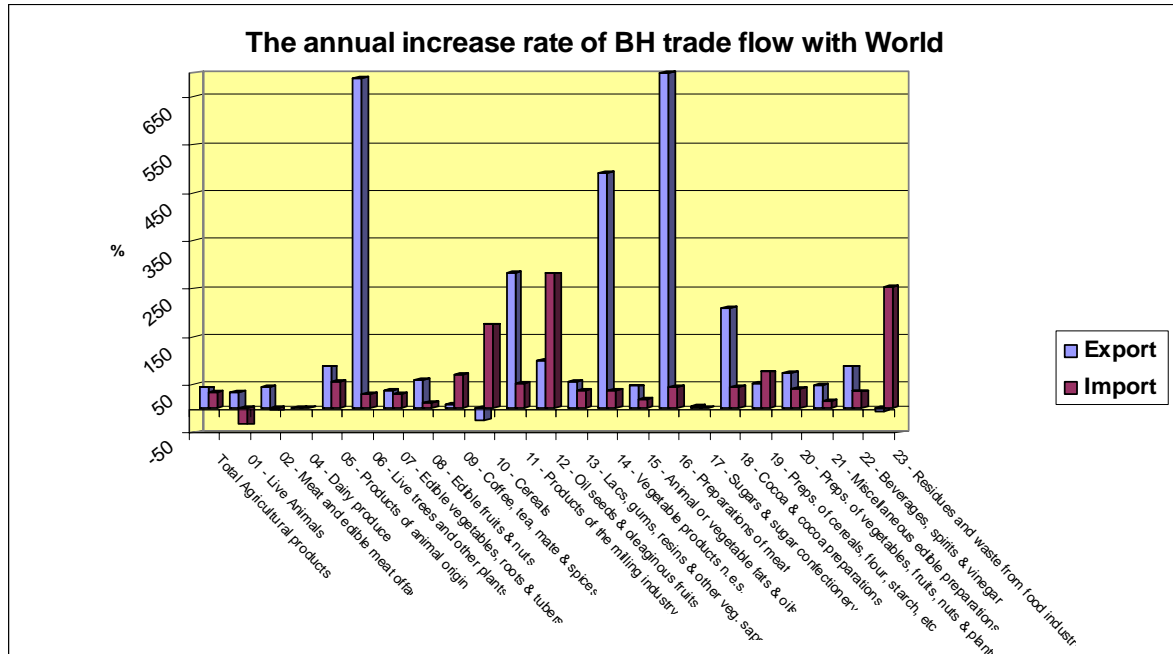
In real value terms, over the last decade, the trade deficit in agri-food products has been increasing. However, in relative terms, as a percentage of GDP, it has been decreasing modestly.

Table 25: Agricultural Trade (global) in Million Euro

	2000	2001	2002	2003	2004	2005
EXPORT						
World	42.8	55.5	60.4	76.8*	85.4*	114.9*
Thereof EU-25	14.2	19.2	16.3	17.8	17.9	26.7
IMPORT						
World	720.6	773.9	857.0	954.9*	1001.4*	1013.2*
Thereof EU-25	438.7	453.5	491.7	514.5	461.4	423.3
BALANCE						
World	-677.8	-718.4	-796.6	-878.1*	-916.0*	-898.3*
Thereof EU	-424.5	-434.3	-475.4	-496.7	-443.5	-396.6

*Source: Chamber of Commerce of Bosnia and Herzegovina (unless marked with * in which case it is CBBH using data from the Agency for Statistics of Bosnia and Herzegovina).*

Importantly, the last years have seen certain positive changes in trade patterns. The graph below illustrates the positive changes in the trade flows in agri-food products, between 2003 and 2004.

Figure 6: B&H Agri-food trade flows with the world, % change (2003/4)

Despite positive trends in trade patterns with the EU (see section 8.4 below), liberalizing trade with many of the countries in South-east Europe has resulted in an increase in imports and an expanding trade deficit. This has grown rapidly in the last three years (see figure below). The countries in the region with whom B&H's trade deficit has grown most (in absolute terms) are Serbia and Croatia. Only in trade with Croatia have B&H exports grown significantly during the period, since the free trade agreements came into force.

An analysis of agri-food trade¹¹ shows that beverages and alcoholic drinks have the largest share of imports (114.4 mio EURO in 2004 and 111.8 mio EURO in 2005), followed by cereals (102.5 mio EURO in 2004 and 89 mio EURO in 2005), sugar and sugar-based products (64.6 mio EURO in 2004 and 70 mio EURO in 2005), tobacco and tobacco surrogate products (84.4 mio EURO in 2004 and 62 mio EURO in 2005) and dairy products and eggs with (58.4 mio EURO in 2004 and 65 mio EURO in 2005). The main exporters to B&H in 2005 were the EU 25 with 42% of the value of total agricultural and food imports, Croatia with 30.5% and Serbia and Montenegro with 18.5%.

As regards the leading Bosnian agri-food exports, processed fruit and vegetable products earned 9.7 mio EURO in 2004 and 10.1 mio EURO in 2005, dairy products and eggs earned 5.9 mio EURO in 2004 and 12 mio EURO in 2005, animal and vegetable fat earned 6 mio EURO in 2004 and 12.4 mio EURO in 2005 and sugar earned 4 mio EURO in 2004 and 12.4 mio EURO in 2005. As with imports, the most important export markets (in 2005) were also Croatia (39%) and Serbia and Montenegro (27%). EU-25 countries accounted for 22.6% of total agri-food exports.

Table 26: Agro-food export and import according to export destinations/import origin (Million Euro)

Country:	1999	2000	2001	2002	2003	2004	2005
EXPORT							
Total	37.5	42.8	55.5	60.4	75.9	90.0	117.9
EU 25*	6.1	14.2	19.2	16.3	17.8	19.9	26.7
NIS	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Non EU member states in the region	29.9	26.7	34.5	40.4	54.5	65.1	85.9
Albania	0.3	0.0	0.3	0.2	0.3	0.2	0.2
Bulgaria	0.0	0.0	0.0	0.1	0.0	0.1	0.2
Croatia	22.0	5.7	11.8	20.3	23.5	33.9	46.1
fYR Macedonia	1.8	0.5	1.1	3.1	3.9	3.2	7.2
Romania	0.0	0.3	0.0	0.1	0.0	0.0	0.2
Serbia and Montenegro	5.8	20.2	21.3	16.6	26.8	27.7	32.0
Other	1.4	1.9	1.8	3.7	3.6	5.0	5.3
Exchange rate used	1.95	1.95	1.95	1.95	1.95	1.95	1.95
IMPORT							
Total	645.3	720.6	773.9	857.0	941.6	994.1	1,006.2
EU 25*	370.7	438.7	453.5	491.7	514.5	461.4	423.3
NIS	0.4	0.0	0.0	0.0	0.0	0.0	1.6
Non EU member states in the region	216.4	195.8	246.6	294.8	381.2	475.1	519.8
Albania	0.1	2.0	0.0	0.4	0.0	0.0	0.0
Bulgaria	0.3	1.8	3.9	1.3	1.8	3.1	2.7
Croatia	185.4	140.4	182.5	219.5	264.8	288.7	307.0
fYR Macedonia	3.8	4.5	3.5	4.6	8.0	8.7	16.7
Romania	4.4	2.4	4.1	6.0	7.7	6.1	7.5
Serbia & Montenegro	22.4	44.7	52.6	63.0	98.9	168.5	185.9
Other	57.9	86.1	73.7	70.5	45.9	57.6	61.7
Exchange rate used	1.95	1.95	1.95	1.95	1.95	1.95	1.95

Source: Chamber of Commerce of Bosnia and Herzegovina 1999-2005; **Note:** Minor discrepancies in the aggregate data compared to table 14 above are due to the fact that in table 14 data of the CBBH was used that was compiled according to the Balance of payment methodology.

* Note: Data referring to the EU 25 before 2004 relate to the EU 15 plus the 10 new Member States.

¹¹ The analysis is based on data provided and processed by CBBH for 2004 and 2005 drawn up according to the Balance of

Throughout the post-war period, B&H has had very high trade deficits with countries of Central Europe. Exports of B&H products to those countries have remained stubbornly low. But the patterns of trade have changed dramatically in the last 3-5 years, following accession of the New Member States to the EU. There has been a modest decline in the imports from these central European countries but a marked increase in imports from other, former Yugoslav countries, namely Serbia and Croatia. These increases appear to be directly linked to the signing of the free-trade agreements with these countries. Unfortunately B&H has not taken as much advantage of the more favourable trade relations with regard to export of agri-food products, with only modest rises in export trading volumes. Food and drink production and agriculture were responsible for the largest part of the overall trade deficit. This can be illustrated by the following selection of agro-food commodities:

Table 27: Agricultural and food imports and exports, 2005 (in million Euro)

	Imports	Exports	Balance
Meat	43.6	1.1	-42.5
Cereals	89.1	0.4	-88.7
Beverages	111.0	7.5	-103.5
Dairy	65.3	12.1	-53.2
Sugar equivalent	69.9	11.2	-58.7

Source: CBBH using data from the ASBH

8.4 AGRI-FOOD TRADE WITH THE EU

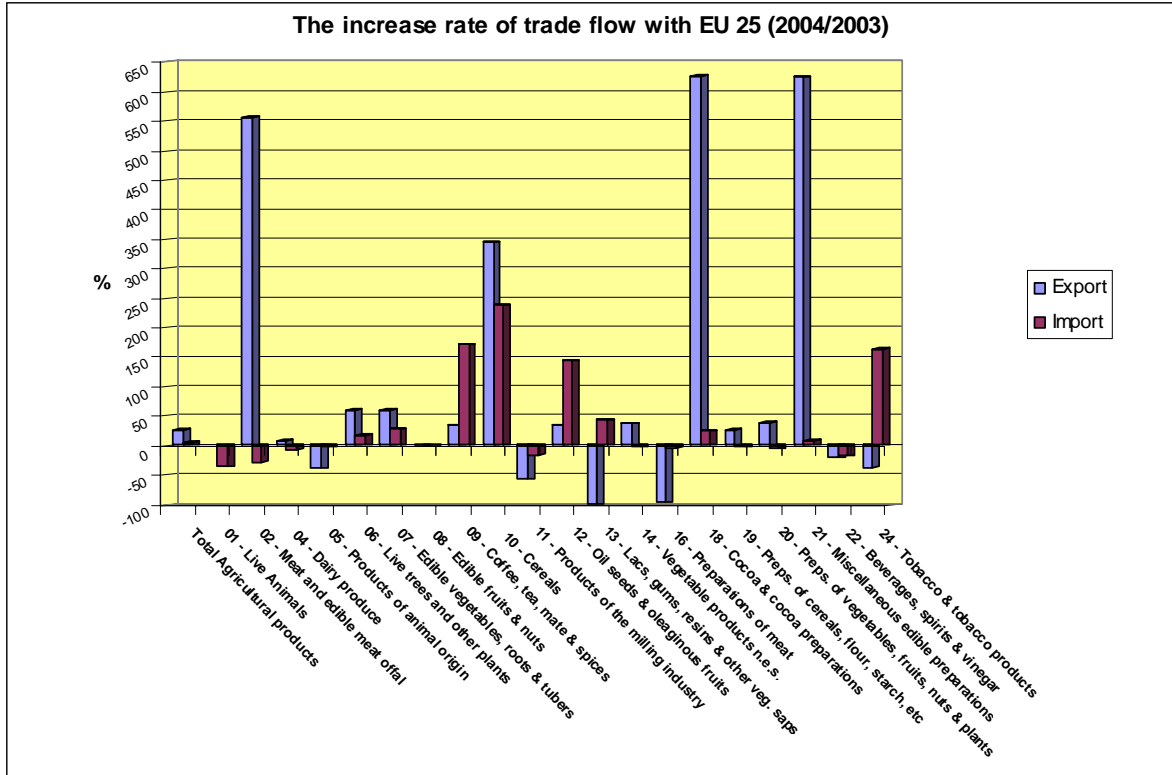
With the expansion of the EU from 15 to 25, the EU has become the most significant agri-food trading partner for B&H. In 2005 the EU 25 provided 42% of the value of the total agricultural and food imports. In terms of exports, the EU provided a market for 22.6% of all B&H agri-food exports. However, the balance of trade between B&H and the EU 25, whilst reducing modestly in the last years, still stands at €397 million in favor of the EU which is a considerable sum, representing approximately 44% of the total agri-food trade deficit of the country.

Total imports from the EU in 2004 valued €367.5 million. The main products that were imported from the EU (based on 2004 data) include meat and livestock with 21.9% of total agri-food imports from the EU, in value, cereals (12.1%), sugars and sugar confectionary (10%), beverages, spirits and vinegar (9.4%).

Total exports to the EU in 2004 valued €37.34 million. The main products that were exported to the EU (based on 2004 data) include edible vegetables, roots and tubers with 7.95% of total agri-food exports to the EU, Sugars and sugar confectionary (7.2%), Edible fruits and nuts (5.4%), and other WTO defined niche products outside chapter 1-24 product listings (57.8%).

Overall, despite the large negative trade balance between B&H and the EU, closer analysis indicates an increasing positive trend in favour of B&H. The graph below shows the general positive trend that emerged between 2003 and 2004 for specific products.

Figure 7: B&H Agri-food product trade flows with EU25, % change (2003/4)



Further detailed data on trade flows by commodity for both the EU and the rest of the world are provided in Annex 3 of the report.

9 RURAL SITUATION AND DEVELOPMENT

9.1 MAIN CHARACTERISTICS OF RURAL AREAS

Historical context: There are no officially defined rural regions and no official definition of what constitutes a rural area in B&H, however, it is estimated that today about 43 % of the B&H total population live in what is generally accepted to be rural areas¹². When considering the rural population and rural characteristics of B&H it is essential to analyse the current situation within its broader historical context. This naturally includes the impact of the war but is also very much influenced by the earlier growth and subsequent collapse of industrial development in former Yugoslavia. Rural development today is not a matter of former farmers returning to their villages. The challenges for rural areas and for the alleviation of rural poverty in B&H are primarily related to the loss of employment opportunities in structurally declining industries and the rationalised public sector and the need to reconstitute rural communities that were already heavily dependent on urban employment before the war.

Migration trends: The war dramatically changed the rural landscape throughout the country. It effectively introduced a process of compulsory urbanization for large numbers of the rural population. Evidence of the conflict can still be seen today in almost every rural village, including damaged physical infrastructure, buildings and divided communities. The Peace Implementation Council, which was established to coordinate donor reconstruction assistance to B&H, following the signing of the Dayton Agreement, stressed the importance of gradually seeking to reverse the ethnic cleansing that was caused by the war and encouraging people to return and repopulate their villages. Donor funding was directed to support this aim, including an extensive house rebuilding programme. A large proportion of the housing that was constructed for returnees has been in rural areas, most of whom had no other income opportunities apart from agriculture or migration. Today, large and expensively reconstructed housing can be found, even in relatively isolated rural areas of the country. Sadly, some of this housing remains empty. But overall, donor programmes have contributed enormously to reintegration of displaced persons and communities in B&H and these programmes have shown that ethnic cleansing can be reversed in rural areas (progress in recreating multi-ethnic communities has been much more limited in urban areas). But this success may have been misplaced, when comparing B&H changes in demographics with other countries of the region. The general trend of rural-urban migration was clearly well underway, prior to the outbreak of hostilities. Therefore, the post-conflict intervention of the international community, when taking into account the extent that it sponsored the movement of urban dwellers back to rural and often marginal villages, effectively ran counter to "natural" modernization and urbanization trends. In effect, the international community was underwriting a process of urban to rural migration. Millions have been spent on reconstruction and utility provision to marginal rural regions. The longer term viability of these returns is questionable and it remains to be seen if prioritizing rural

¹² Based on estimates derived from the LSMS survey 2001

return programmes over local integration and poverty reduction in urban areas was an appropriate policy of the international community.¹³

Demographic profiles: Many of those who have returned to rural areas are primarily young or elderly. Anecdotal survey results from various NGO's active in rural areas suggest that many of the younger returns see their status as temporary, farming in order to obtain a minimal income, whilst waiting for alternative employment in other sectors. The elderly, on the other hand, see agriculture as a food security measure and as a modest complement to their pensions, rather than a commercial activity. The most economically active sectors of the population, from 25 to 49 years of age, appear to be under-represented in farming. It is this group who would normally be expected to have the drive and the capacity to develop viable commercial farming enterprises. This demographic profile in rural areas has generally resulted in very low average income levels in rural areas of B&H.

Accurate and reliable data on the rural population and on labour markets in B&H are very limited. This is mostly due to the fact that there has been no official census in the country since 1991 (pre-conflict). In the last 15 years the demographics of the country have changed dramatically. Data from 2004 official sources reveal the following:

Table 28: Labour force in Bosnia and Herzegovina (2004)

Total population	Men	Women	Total labor force (population capable to work)
3 843 397	1 847 631	1 995 766	1 110 770

Source: B&H Statistical Agency, Bulletin 6/2003; B&H Central Bank, Report on Main Economic Indicators, 2004.

Table 29: Analysis of unemployment in B&H

Application – characteristics	2004
Total number of unemployed	366,000
Total number of unemployed (%)	43.58%
Number of beneficiaries of unemployment benefits	8,547
Number of beneficiaries of health protection	291,512

Source: Republica Srpska Employment Institute, December 2004; Federal Employment Institute, December 2004; Employment Institute of Brcko District of B&H, December 2004

Table 30: Analysis of the state of employment in B&H

Application – characteristics	2003	2004	Ratio 2004/2003	% change
Total employment	634,046	626,463	98.80	-1.20 %
Total active working population	1,085,450	1,110,770	102.33	2.33 %
Employment rate	58.41%	56.42%		
Total unemployment	451,404	484,307	107,29	7,29%
Total active working population	1,085,450	1,110,770	102,33	2,33%
Unemployment rate	41,59%	43,58%		

¹³ Toathail and Dahlman 2004

Source: *Republica Srpska Employment Institute, December 2004; Federal Employment Institute, December 2004; Republica Srpska Statistical Institute, September 2004.*

Table 31: Unemployment by gender, age and level of education

Application – characteristics	2004	% of total
Overall number of registered unemployed	484 307	100.00
Men	260 275	53.74%
Women	224 032	46.26%
15 – 18 years of age	9 088	1.81%
18 - 30 years of age	151 294	30.12%
30 - 45 years of age	177 957	35.44%
45 years of age and above	163 833	32.63%
With primary education	176 512	36.45%
With secondary education	294 000	60.71%
With college and university education	13 795	2.84%

Source: *Republica Srpska Employment Institute, December 2004; Federal Employment Institute, May 2004*

Statistical agencies in B&H do not currently publish data on the shadow economy or informal employment, which in the agriculture and rural sector, are recognized by most analysts to be significant. The most recent source of information on labour markets published by the B&H Agency for Statistics, the Labour Force Survey (July 2006) provides a slightly different picture of the labour market than previously published. The survey is intended to be undertaken annually and is likely to become the best official source of information. The first survey results, conducted in 10,000 households, suggests that the B&H labour force consists of 811,000 persons in employment and 366,000 unemployed persons, with a further 1,566,000 inactive persons. Data show that half of the working age population in B&H were active persons, that is, persons who participate in the labour market as employed or unemployed.

The structure of persons in employment, by the status in employment, shows that relations between three basic categories of persons in employment on the labour market did not change: the share of employees is the largest and amounts to 72,5%, and 35,2% of them are women; there are 21,7% self employed persons of total persons in employment with 25,6% of women included in that number; and 5,7% of unpaid family workers, almost two thirds of them being women.

The structure of persons in employment by sectors of activity shows that less than half of the total number of persons in employment (48,7%) worked in services, 30,7% in industry and 20,6% in agriculture.

The breakdown of total unemployed persons by sex shows there are 58,7% of men and 41,3% of women. Age structure of unemployed persons shows that as much as 62,2% belong to the most active group (aged 25 to 49); more than a quarter (28,1%) are young persons aged 15 to 24, and the remaining 9,7% are persons older than 50. The largest part of unemployed persons (75%) had been seeking work for longer than two years.

The educational structure of persons in employment shows that the largest share (60,6%) have persons who have finished the vocational secondary or the grammar school, followed by persons who finished the basic or lower education (25,3%) and 14,0% of persons who have graduated from college, university or have postgraduate degrees. Unemployed persons have slightly different educational structure: 70,2% have finished vocational secondary or grammar school, 25,4% are persons with basic or lower education, while 4,4% have graduated from college, university or have a postgraduate degree. At the same time, data from the Labour Force Survey show that inactive persons older than 15 have lower educational structure. Amongst them, there are almost 66,9% of persons with basic or lower education, 30,1% with secondary vocational or grammar school and remaining 3,0% have graduated from college, university or have a postgraduate degree.

Subsistence farms: Agricultural production remains the dominant activity in rural areas. A large proportion of rural returnees have established small-scale subsistence or semi-subsistence farms, seeing no alternative economic opportunities. However, many of these people are former industrial and public sector employees, returning to farm land owned by their families. They have limited skills and experience to effectively manage their land. Their farms are characterized by a few animals and a high number of low volume crops, most of which are consumed or exchanged locally, with very little marketable surplus to enhance incomes. There are now an estimated 350,000 such small-scale farms and agricultural households, with an average of only 2,5 ha. Only 15% of the total number of these farms can be considered as commercial farms (with more than 5 ha) based on available production statistics. The nature of poverty among these farmers is complex and livelihood strategies are diverse, including reliance on remittances, pensions, urban employment, services and small enterprise. Small-scale farming is a very significant part of these livelihood strategies in terms of food security and in the opportunities it provides for women, youth and the elderly, all of whom may have difficulties obtaining other forms of employment.

Poverty levels: Although as stated above, there are no officially defined rural areas or regions in B&H, the 2001 Living Standards Measurement Survey (LSMS) suggests that approximately 43 % of the entire population live in rural areas and of those, 44 % survive at incomes below the poverty line. Therefore it would appear that rural areas have the same poverty rate as the country as a whole (i.e. 19 %). The depth of poverty in rural areas also appears to be the same as the national average, according to available data. However, there is some variance with rural areas, as poverty levels appear to be higher in the RS than in the Federation of B&H. Given the importance of agriculture to the RS economy when compared to the Federation, it would suggest that strategies which target improvements in agricultural competitiveness would have a greater impact on RS poverty rates than in the Federation.

Statistical analysis, allowing for the impact of all variables together, shows a small positive correlation between living in rural areas and higher consumption. In other words, rural areas have higher consumption *per caput* than urban areas, other things being equal. This holds true whatever the definition of adult equivalent is used. The LSMS also makes the

point that food prices are up to 30% lower in rural areas, when compared with Sarajevo, and housing costs are also much lower when compared with urban areas.

An Economic Policy Planning Unit update of 2004 to the LSMS data showed a small overall decline in the rate and depth of poverty for all areas, including rural areas. The pattern of poverty had not therefore changed significantly. There has been no further analysis by area type and further data collection and research is clearly required to understand the dynamics of rural households to ensure appropriate rural development programmes can be developed.

Rural infrastructure: In terms of other dimensions of poverty, the LSMS found B&H rural areas disadvantaged in a number of ways, namely: fewer waste collections and disposal facilities; rural poor have particularly poor access to clean water; rural areas are more blighted by and exposed to risks from landmines (15% of farm land is not yet de-mined); public transport is much worse in rural areas; given the distances to public services such as doctors and hospitals, accessing these services is more expensive for those in rural areas; educational levels of those in rural areas are lower, but current primary school enrolments are no different in rural areas from urban areas. These disadvantages generally reflect the higher cost of providing services to dispersed populations rather than those concentrated in towns or cities. The poor infrastructure, especially roads and public transport, are a particular concern for future regional and rural development planning. Historically there was never an expectation that people would want or need to travel any distance on a regular basis. Homes were provided near the work place, and daily travel was minimal. A household survey carried out in 2001 found that the average travel to work distance was only 2 kms for respondents in 4 towns, two of which were forest centres. Less than 2% of respondents travelled more than 15 kms to work. The economic hinterland of these regional centres was very limited. A housing, employment and transport pattern developed under central planning is not going to be appropriate in a market economy. While housing patterns will change only slowly, better transport facilities would allow individuals and firms to respond more dynamically to market opportunities. To date, little has been done in developing a road system suitable for modern needs.

9.2 RURAL DEVELOPMENT POLICY

As outlined above, rural development policy in B&H has to be seen in terms of the post war situation. Agricultural and forest land has to be cleaned from mines to increase natural production capacities; the resettlement of refugees and displaced persons in rural areas (and urban and peri-urban areas) needs to be further supported and job opportunities in & outside the agricultural sector have to be promoted; severely damaged rural infrastructure needs to be either re-built or rehabilitated, including (but not limited to) health and education services, transport, communication facilities and community facilities. This will require a high degree of cooperation within and between all levels of government which is a major challenge for B&H government administrative structures which remain both vertically and horizontally fragmented.

Rural development is currently the primary responsibility of the two Entity Ministries of Agriculture (and Brcko District Department of Agriculture). There is no State level body

currently with responsibility for Rural Development. The Ministries of Agriculture have both in the last two years, established Rural Development Departments by these have minimal staffing. Entity 'draft' mid-term strategies for Agricultural development in both the RS and the Federation of B&H also encompass, to a great extent, rural development issues. However, both Entity administrations have only limited knowledge and experience of what rural development means and what specific measures could be used to support rural areas. Funds that have been allocated to specific rural support measures remain meagre.

In the absence of state level or Entity policy support or leadership, rural development strategic planning in B&H is occurring at both Canton and Municipality level. Rural development plans, reflecting the needs and aspirations of local people and the nature of the local resource bases are being designed by proactive, locally based organisations. Local government, non-governmental organisations (NGO's) and donors are gradually beginning to use these plans as the basis for designing job and business training programmes and to establish micro-credit lines, suited to small enterprise development.

In addition, at the end of 2004 and the beginning of 2005, several regional strategies for economic development have been developed, within the framework of EU CARDS Programme. These strategic documents have used an integrated development approach, encompassing the broad problems of rural regions. These documents are now being used to attract potential domestic and international financial support (see regional development section 9.3 below).

The draft state law on Agriculture, Food and Rural Development is likely to introduce dramatic changes in this area of policy if adopted. The law will introduce an EU type rural development framework to guide design and implementation of specific measures. Rural development policy measures will broadly divide into three basic groups, in line with EU core RD policy 'axis', namely focused upon: *(i) increasing competitiveness; (ii) protection of the rural environment and (iii) diversification of activities in rural areas to improve quality of life.*

It is envisaged within the draft law implementation of rural development measures in Bosnia and Herzegovina will be defined within an overall B&H Rural Development Plan. However there has been no progress in the establishment of a working group or agreement on the way forward in this area in 2006. It is hoped that this initiative will be more fully supported post-elections (i.e. early 2007).

9.3 REGIONAL POLICY

Bosnia and Herzegovina has been gradually emerging as an active participant in regional cooperation forums. It successfully chaired the South East Europe Co-operation Process from April 2003 to April 2004 and has also participated actively in other regional initiatives such as the Central European Initiative, the Adriatic-Ionic Initiative, the Southeast Europe Cooperation Initiative, and the Danube Cooperation Process.

Institutionally the Ministry of Foreign Trade and Economic Relations, who is responsible for development of the single economic space within B&H, provides the leadership role at state level. However there is currently no inter-ministerial forum or mechanisms currently in place

to coordinate regional development within a coherent strategic framework. The country is in the first stages of development of a regional policy framework and development process of its own, officially led by MoFTER, supported by an EU technical assistance project. With this support, there has been the gradual introduction of a policy framework that is intended, over time, to allow the adoption of a range of EU economic and social cohesion policies. Five regions have been defined over the last three years, across the country and integrated economic development strategies have been developed for each of the economic regions. The five regions are illustrated in the diagram below. The regions are not formally established under law and there is some dispute between Entities concerning the boundaries and definition of regions. Current regional divisions are based on a combination of economic, social, geographic and administrative factors.



Each of the five economic regions are covered by a Regional Development Agency (RDA). The RDA's are essentially non-profit making organizations, founded by the public, private and non-governmental sectors, established to contribute to overall economic development in each region. They are used as coordinating bodies and instruments to support economic regeneration, job creation and human resource and infrastructure development in the different regions. The RDAs have a permanent staff and a network of stakeholders who have a detailed understanding of the regional development process because of their involvement in drafting the regional economic strategies. Today the five RDAs have a high profile in their respective territories and are seen by their founders and by other donors as important conduits for regional economic development. A brief summary of the five agencies is provided below¹⁴:

¹⁴ For more detailed information on regional development see the following website: www.eured-bih.org

ARDA NW for the Northwest Region: Representatives of 35 key development organisations from the economic region North-West BiH agreed to establish a new development organisation as an Accredited Regional Development Agency called ARDA NW. The organisations include economic ministries, municipalities, economic institutes and faculties, chambers of commerce, employers' associations, trade unions, youth associations, as well as economic experts. These signatories signed the agreement on the Agency's Foundation on 25 March 2004.

NERDA for the Northeast Region: 25 representatives of municipalities and development organisations from Semberija, Brčko District, Posavina, Birač and Tuzla Canton signed an Agreement, on 19 April 2004, on the Foundation of a Regional Development Agency NERDA for the economic region North-East BiH. This initiative is supported by the five local development agencies that are already established in the region (RDA Tuzla, BDDA Brcko District, RAS Bijeljina, DAP Srpski Brod, and BREDA Zvornik).

REZ-RDA for the Central Region: On 24th February 2004, Zenica-Doboj Canton, 15 municipalities from the Central BiH Region, 14 entrepreneurs associations, REZ Fond and CHF signed an Agreement on the Foundation of a new Regional Development Agency, REZ-RDA for Central BiH Region. The Agency is established with the financial support of SIDA - Swedish International Development Cooperation Agency, and the technical assistance of the EU RED project.

SERDA for the Sarajevo Macro-Region: The SERDA Agency exists since May 2003. It was established by Canton Sarajevo, Srpsko Sarajevo City and 20 municipalities, which agreed to create the Sarajevo Economic Region. In the terms of economic regions in BiH, this Sarajevo Economic Region needs to be expanded to include also the Upper-Drina area, where REDRIN Agency operates. In order to form an umbrella Agency for the wider Sarajevo Region, SERDA will sign a Memo of Understanding on cooperation with REDRIN to co-ordinate the regional development process and activities within the Region.

REDAH for the Herzegovina Region: On 28 November, 37 representatives of key development organisations from Herzegovina (26 municipalities from the Herzegovina Region of BiH, entrepreneurs associations, local development agencies, chambers and independent experts) signed an Agreement on the Foundation of the Regional Development Agency for Herzegovina, REDAH. This agency is now operational and fully involved in the regional strategy work for Herzegovina.

9.4 AGRI-ENVIRONMENTAL POLICY

Environmental issues are primarily dealt with at Entity level through laws, regulations and standards. Nevertheless, the Ministry of Foreign Trade and Economic Relations at State level has since been given the authority to deal with issues of natural resources, including environmental protection on behalf of B&H, particularly as this relates to trade. The Ministry's administrative capacity needs to be significantly strengthened to ensure it can

carry out these tasks. Currently it only has a small Department for Environment of 3 persons and has very limited knowledge and capacity to guide this important policy area forward. The main focus of the European Delegation at this time is on the establishment of an independent Environmental Protection Agency for which it is willing to support with a dedicated technical assistance project. However, at this time there is no confirmed government commitment or timeframe to establish the Environmental Protection Agency and the assistance available is on hold. A detailed functional review of the environmental sector was completed in October of 2004 which recommended strengthening the capacity of the Ministry of Foreign Trade and Economic Relations and establishing the State Environment Agency. This document remains the main guidance source for actions in this area at all levels. This approach has not yet been formally adopted by Government. It is hoped that this issue will be revisited post elections (October 2006).

As regards the integration of environmental or agri-environmental issues into other policies, no particular developments can be reported. The B&H authorities are aware of this basic principle but not yet in a position to implement a policy in this respect.

Regarding **horizontal legislation**, Entity legislation provides for Environmental Impact Assessment (EIA) on the basis of the EIA Directive. Both Entities have adopted by-laws on EIA. In the Federation of Bosnia and Herzegovina a regulation on environmental permits for existing facilities was also adopted. As regards **air quality**, a monitoring system has been established and is now operational, although an overall structure in charge of the National Environmental Monitoring System is still to be established. The Entities have also adopted legislation on air protection and relevant by-laws.

In the field of **waste management**, there have been some improvements on the legislative front. Current legislation is being implemented according to the Waste Management Strategy. In 2005, the Federation of Bosnia and Herzegovina adopted a considerable amount of implementing legislation in this area. A register of polluters is currently being developed. However, the "polluter pays" principle is not yet being applied.

As regards **water quality**, the collection of data on water quality is not yet functioning well and reporting to the European Environment Agency is not systematic. Poor water quality and insufficient wastewater treatment remains a key environment challenge.

Water quality is in general poor due to the discharge of almost 95% of municipal and industrial waste directly into rivers, the disposal of waste along riverbanks, and run-off from agricultural areas. Sewage connection is around 50% in urban areas but does not reach 10% in rural areas.

In December 2004, Bosnia and Herzegovina signed the Danube Convention on the sustainable use of the Danube river.

Both Entities and the Brcko District have adopted legislation on **nature conservation**. However, relevant implementing legislation is still missing. Bosnia and Herzegovina's **administrative capacity** in the field of environmental protection continues to be insufficient. The institutional structure in this field is complex and there is a lack of central

coordination and implementation even for international agreements. Capacity on the State level is particularly weak. There is a gap between attribution of environmental responsibilities and means to fulfil them. The number of vacant posts is significant and administrative development is limited. This is shown in the low number of professional environmental specialists in the subject fields, and the many officials who are multifunctional in order to cover for the lack of specialists. In addition, stronger State-level responsibility for environment is not always accepted by the Entities. Bosnia and Herzegovina also suffers from limited absorption capacity and has very limited own financial resources, which has a negative effect on the possibilities to put in place important environmental investments.

Furthermore, there is an absence of environmental policy and strategy. Although a National Environment Action plan exists, there is no capacity amongst the authorities for deciding on priorities, policy or measures to implement it.

To conclude, some legislative steps have been taken by B&H regarding air, water and waste management but little or no framework for EU type Agri-environmental policy development currently exists. The development of effective legislation in these areas should be treated as a matter of priority. It is also important that B&H ensures that environmental impact assessments are carried out in compliance with the law and that a functioning environmental monitoring system is in place. B&H should take steps towards the progressive application of the "polluter pays" principle. Attention should also be paid to identifying financing sources for the investments needed in the fields of water quality and waste management.

A key prerequisite for real progress is to substantially enhance B&H's administrative capacity and to strengthen the institutions involved in environmental protection, in particular at State level. Establishing a well-equipped and operational State level Environmental Agency would be a significant step forward in this respect. The establishment of a nationwide and harmonised legal framework for environmental protection is also important.

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ANNEX 1

DONOR FUNDED ASSISTANCE IN THE AGRICULTURAL SECTOR

EU ASSISTANCE (Post-conflict to Present);

Assistance Provided During the Post-conflict Period (1996 – 1998);

Projects financed over this period were characterised as 'emergency relief and humanitarian assistance'. The aim was to provide some form of rapid assistance in the rural areas to begin to reverse the damage caused by the war. Funds were dispersed through a Project Coordination Unit staffed by both international and local experts. Although, elaborate details of the projects financed are not known, a short list of the activities funded is provided below.

- Supply of cattle and associated technologies;
- Supply of sheep and development of commercial innovation;
- Supply of pigs within integrated genetic improvement programmes;
- Supply of chickens and feed;
- Increased access to agricultural machinery and equipment in rural areas;

The impact of the assistance provided was limited and in some cases negative in regard to building partnerships with local governments and organisations. Assistance was developed in a rapid fashion within an environment in which most institutions were still not operational after the war, and inter-entity cooperation was virtually impossible. The relevance of the assistance in many cases was questioned given the huge need within the Sector for rebuilding and rehabilitation.

The 1998 EU-Phare Agricultural Programme (1999- 2003);

Following the post-war period, the EC adopted a strategy in the Sector to develop and implement programmes with the aim to enable the transition from a dependence on emergency relief and humanitarian assistance to re-building a sustainable agricultural base oriented towards a market economy. EU assistance focused on pilot activities in areas which had both a high level of war damage and high probability to receive a large number of refugees and displaced people during the period of the programme. The **20 mEuro** programme planned to provide assistance in the following areas; **(i)** 8.9 mEuro for livestock generation, **(ii)** 2.85 mEuro for machinery and equipment, **(iii)** 0.24 mEuro for land information systems, **(iv)** 5 mEuro for seed capital and rural credit, **(v)** 2 mEuro for extension services, **(vi)** 1 mEuro for institutional support, monitoring and supervision. The projects which were developed and implemented include the following;

- **Coordination, Institutional Development and Advisory Services to Support Private Farmers (PFAP):** (May 1998 to April 2000) This pilot project operated in two separate areas; Una Sana Canton in the north-west of the Federation (B&Hac) and in seven 'optsinas' in the north-west of the Republika Srpska (Banja Luka). The

project aim was the formation of advisory services in the project areas including extension services training. (Total Budget : unknown)

- **Agricultural Strategy and Programming Unit (ASPU):** (January 1999 to December 2000) The aim of the Project was to develop policy and programming capacity within Entity MoA staff to identify, co-ordinate and implement agriculture support policies and manage services in conformity with the EU's Agriculture Acquis and International Treaties. (Total Budget: 1.1 mEuro)
- **Technical Assistance for the Development of Machinery Rings:** (Sep. 1999 – Sep. 2000) The immediate objectives of the Project were; **(i)** to increase and develop capabilities in the present and future 'machinery rings' for their organisational structure and management, **(ii)** drive the members of associations through a more modern form of co-operation, **(iii)** support the local authorities in their effort to sustain the private initiative in this sub-sector. (Total Budget: 0.5 mEuro)
- **Development of the Pig Industry Sector in B&H:** (August 1999 to February 2001) The aim of the assistance was the regeneration of the Pig Industry sector, as a sector with short reproduction and production cycles, and therefore offering rapid opportunities of income generation for private farmers, smallholders and refugees. (Total Budget: unknown)
- **National Extension Services for Bosnia and Herzegovina.** (Dec. 2000 to Dec. 2002) The purpose of the Project was the establishment of extension organisations throughout B&H, institutionalised within regional and central government structures with sustainable training capacity tested and working. (Total Budget: 2.0 mEuro)
- **Technical assistance to the Animal Disease Task Force.** (February 2001 to October 2001) Project activities included; **(i)** planned strategies for disease control, **(ii)** legislative harmonisation with EU animal health regulations, **(iii)** preparation of contingency plans and staff instruction manuals for foot and mouth disease and classical swine fever, **(iv)** support to the development of State Level Veterinary Services. (Total Budget: 0.15 mEuro)
- **Technical Assistance to create an Animal Identification and Movement Control Scheme for B&H.(AIMCS).** (January 2002 to January 2003) The aim of the Project is to develop a stable livestock industry in B&H providing food that is safe for human consumption and enabling live animals and products of animal origin to be exported. (Total Budget: 2.1 mEuro)
- **Provision of Credit Facilities in Rural Areas.** (May 2001 to May 2003) The Project aim was to provide access to finance for SMEs in rural areas involved directly and indirectly in agricultural production, processing, distribution and marketing as well as related organisations and associations and also other SMEs. (Total Budget: 5 mEuro)
- **Brcko Rural Micro Credit Facility.** (November 2001 to February 2003) The specific objective of the Project was to develop small credit availability in the Brcko District, through a sustainable financial intermediation system, benefiting rural

populations dealing specifically with the agriculture sector (including agro-processing). (Total Budget: 0.95 mEuro)

- **Institutional Support to the Ministries of Agriculture.** (August 2001 to February 2003) The objective of the Project was to develop within the staff of the Ministries of Agriculture (MoA) a basic capacity to manage institutional reform, develop human resources, collect/organise/analyse sector information, and formulate sector policy. (Total Budget: 1.6 mEuro)

Although the impact of 1998 EU Agricultural Phare programme can be considered to be much greater than the post-war emergency relief which preceded it, the Programme suffered from over ambitious objectives and limited time frames for implementation. In many cases, Projects began to produce results and capitalise on positive relationships with beneficiaries shortly before time of project closure. The situation was particularly difficult in the case of institutional projects focused on capacity building. All projects within the 1998 EU Phare Agricultural Programme closed by February 2003, at which time no further EU Assistance in the Sector had been programmed. Hence, the impact of the above mentioned projects were reduced by the lack of future assistance to carry on successful initiatives.

The Brcko Agricultural Initiative (OBNOVA PROGRAMME);

In order to complement the aforementioned EU programmes, a rapid agricultural initiative for Brcko District was proposed under the 1998 OBNOVA Programme. The Brcko Agricultural Initiative was comprised of three components: **(i)** supply of cattle, **(ii)** supply of Agricultural Machinery, **(iii)** establishment of a micro/credit scheme

EU Assistance After the 1998 Programme (Feb. 2003 – Present);

After all funds for the EU Phare 1998 Programme for Agriculture were distributed, the Sector was no longer considered a priority within the framework of future EU Assistance in B&H. Both TA projects which have been contracted recently in the Sector are part of a cross-sectoral Public Administration Reform initiative and are described below:

- **Functional Review of the Agricultural Sector.** (February 2004 to October 2004) The overall objective of the review was **(i)** to analyse the performance of public agricultural administrations at all administrative levels of B&H, **(ii)** to compare this performance with public administration structures in other countries (benchmarking), and **(iii)** to elaborate recommendations for increased efficiency especially by avoiding overlapping competencies and by filling present functional gaps. (Total Budget: 0.475 mEuro).
- **Implementation of Functional Recommendations in the Agricultural Sector.** (March 2006 to February 2008 – 'under implementation') The specific objective of the Project is to support a transposition process of the functional organisation of the agricultural sector at state level leading to the establishment of a Ministry of Agriculture and Rural Development, with capacity to perform the core state level competencies related to the policy, legislation, administration and services to the Clients in order to strengthen the central coordination and harmonisation functions. (Total Budget: 1.0 mEuro)

There is a draft programme being considered for EU IPA funding in 2007 under the Natural Resources portfolio. This is not yet finally agreed or approved and is linked to the overall agreement on the B&H Multi-Indicative Programme (MIP). Future assistance in the sector is anticipated to take a sector-wide approach, in view of the European Partnership priorities (short-term, medium-term, long-term) and B&H Progress Report (to become available in November 2006 for 2006).

EU Programmes planned to be implemented in the Agriculture and Veterinary sectors envisage support to creation of administrative structures required by the *acquis*; support to increased competitiveness of agro-business sector through assistance to commercial agriculture/ improved animal health and food safety standards, and support to improved welfare of rural population through fostering rural development.

Programmes planned to be implemented in the Environment sector envisage support to creation of administrative structures for transposition and implementation of the environmental *acquis*, improved investment climate for environmental management and infrastructure, support to integration of environment measures in regional and rural development strategies through introduction of nature preservation programmes, reinforce and support introduction of the environment information system, support creation of favourable conditions for introduction of environmental management standards by business operators.

Lessons Learned from EU Assistance in the Agricultural Sector (1996 – 2006)

Previous assistance in the Sector has generally not had the impact envisioned, for reasons which can be attributed to both EU programming, the approach used to engage local beneficiaries, and the conditions in B&H.

Cooperation between EU and Local Beneficiaries; From the EU side, assistance has typically been designed and programmed without significant participation of local beneficiaries and certainly in most cases programmes were EU driven as opposed to being driven from the local side. In many cases this contributed to a lack of ownership by local beneficiaries of projects and hence a lack of commitment. The last few years has seen a significant shift in the proportion of local staff in senior positions within the EU Delegation and this most certainly has improved cooperation. From the side of local beneficiaries their ability to participate and drive project programming has also been limited by their lack of understanding of the EU Programming process, and the limited number of staff fluent in English.

The Short-Term Nature of EU Assistance; The absence of long term planning in EU assistance has resulted in the implementation of numerous short-term projects that were not necessarily an integral part of a long term strategy for the Sector. In many cases, interventions have been too short in order to transfer capacity to local beneficiaries, and successful projects have had to come to a close at a critical stage of implementation, just when progress on expected results was accelerating. There are indications that current EU planning is following a long term planning approach, although the agricultural sector may not currently be considered as a priority.

A Complex Institutional Environment within the Agricultural Sector: All previous assistance has been affected by the complicated institutional environment which has existed since the end of the war and the Dayton Peace Accord. The question of who to work with, within the framework of projects which have a national scope was a serious one and in some cases the answer was not easily found. Most projects were therefore required to have a permanent presence in both entities and virtually implement two subprojects within one. It is hoped that the establishment of the Ministry of Agriculture at the State level will help to alleviate this problem, but it is sure to persist for some time.

Lack of Sector Information: The lack of available and current data in the Sector is a real tangible problem which inhibits development in all areas. At the moment, one reliable source of data on the sector does not exist, but rather several sources with incomplete data with sometimes questionable accuracy. The lack of data greatly inhibits the formulation and implementation of sector policy and leads to subjective decisions on important issues in the Sector.

Capacity of Government Staff: The limited capacity of staff within the institutions which comprise the Sector typically slows the implementation of projects and negatively affects their impact. Hiring more qualified staff and the provision of training in basic skills including English, computers, and EU issues is necessary.

International donor support in the area of credit:

During the conflict Bosnia and Herzegovina suffered and experienced enormous damage to its economy and infrastructure. One of the most important projects implemented after that time (1996-1998) was the Emergent Farm Reconstruction Project. The total Project budget was 42.4 million USD, of which the EU grant was 6.9 million USD, IFAD's soft loan 7.3 million USD and the World Bank's soft loan 20 million USD. The main components of the Project were reconstruction of agricultural machinery (32.3 million USD) and of livestock fund (14.4 million USD). The main beneficiaries were farmers from the regions where more than 50% of the agricultural facilities had been destroyed, those who used to have livestock and machinery before the war, or those who were refugees or displaced persons. Credits were given to the farmers under the following conditions: for machinery – 10 years repayment period, 2 years grace period, and 2% interest rate; and for livestock - 5 years repayment period and 2% interest rate. In the post-war period similar projects with a humanitarian character were implemented across Bosnia and Herzegovina.

Currently another long-term IFAD Project "Livestock and rural finance development" is currently being implemented in Bosnia and Herzegovina (2002-2008). The total Project budget amounts to 25.5 million USD (9 million USD for RS and 16.5 million USD for FB&H) and its main components are: the development of livestock production and entrepreneurship, the reconstruction of rural infrastructure and rural microfinance development. The third component has not been implemented due to the lack of an appropriate legal framework. Within the component reconstruction of rural infrastructure 51 micro-projects were implemented in FB&H (total amount 3.46 million EURO) and 26 micro-projects were implemented in RS (total amount 1.21 million EURO). Project Coordination Units from both entities estimate the number of this component's beneficiaries at 95,000

rural inhabitants. Furthermore, in this project there is a credit line for livestock and agricultural machinery acquisition and small and medium enterprises development. Funds are placed with clients through chosen commercial banks under the following conditions: a repayment period of four years for livestock, 3-5 years for machinery and up to 7 years for SME, grace period 6 months for livestock and up to 18 months for SMEs, and an interest rate of 6-7%. Own participation to the level of 10-15% of the total credit is required for machinery and SMEs.

The only credit line that is explicitly aimed at rural finance is the KfW funded credit line, called 'Credit for financing in rural areas' placed through Raifeissen Bank d.d. Sarajevo, funded by German bi-lateral assistance. The target group for this credit line includes SMEs with less than 50 employees involved in one or more of the following economic activities: food-processing, food and agricultural transport, the distribution and marketing of agricultural commodities, dealers of agricultural and food processing inputs from rural regions and any other economic activity in rural regions. Credit is given under the following conditions: the credit amount is between 2,200 – 46,000 EURO, the payment period is two years with a 9 months grace period for agriculture and 6 months for other activities for working capital, and 5 years with 9 months of grace period for agriculture and 6 months for other activities for investments. Interest rate is EURIBOR15 + 6%. Sound business plans and collateral is requested.

WORLD BANK ASSISTANCE

Bosnia and Herzegovina joined the World Bank and IDA in 1996, with membership retroactive to 1993. In the immediate postwar years, the Bank's first Country Assistance Strategy (CAS), helped reinvigorate the reconstruction effort through a series of emergency projects. Financial support was provided to a wide range of sectors including transport, power, de-mining, housing, health, education, public works, agriculture, and micro-credit financing.

The CAS for 2005–2007, which was adopted in August 2004, links the Bank's strategy with the country's medium-term objectives. The strategy focuses on three key areas:

- Improving public finance and strengthening institutions
- Promoting sustainable private sector-led growth
- Investing in key social and economic infrastructure

OTHER DONORS PROVIDING ASSISTANCE IN THE AGRICULTURAL SECTOR

Agriculture and the rural sector, in general has been a focus of support from many organisations involved in the provision of aid, including the World Bank, the Food and Agriculture Organisation of the United Nations (FAO), the International Fund for Agricultural Development (IFAD), and bilateral donors including the USA, Germany, Netherlands, Denmark, Japan and Sweden. The FAO was responsible for coordinating the preparation of

¹⁵ EURIBOR is a daily reference rate based on the interest rates at which banks offer to lend *unsecured* funds to other banks in the "interbank" money market.

separate agricultural strategies for both the Federation and the RS which were presented to the Entity Ministries of Agriculture in 1998. The strategies were never formally accepted and the recommendations were not adopted. The FAO has also assisted work on land resources inventories and has produced databases and maps on the 'Inventory of Post War Situation of Land Resources in B&H'.

Among EU member states, German bilateral aid was providing policy advice and support from 1998 to 2004 both to Entity Ministries and agricultural organisations in selected areas, namely the veterinary sub-sector, associations and self-help service providers and specific agro-industries. USAID has implemented a project providing support to the Ministry of Finance for information systems to support finance and accounting, and is currently implementing the LAMP project focused on providing advice to linking agricultural markets to producers to increase economic growth. The World Bank is implementing the Small Scale Commercial Agricultural Development Project in a pilot area of southwest B&H.

ANNEX 2

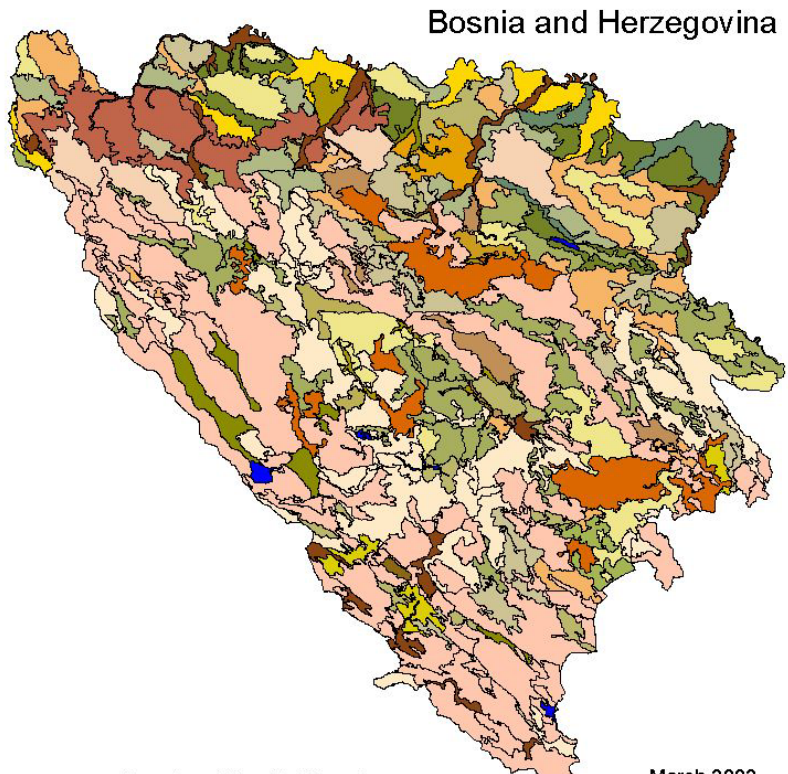
MAPS

Inventory of Post-War Situation of Land Resources in Bosnia and Herzegovina



- Dominant soils**
- ferric Acrisols
 - humic Acrisols
 - calcaric Cambisols
 - chromic Cambisols
 - dystric Cambisols
 - eutric Cambisols
 - gleyic Cambisols
 - ferralic Cambisols
 - humic Cambisols
 - vertic Cambisols
 - calcaric Fluvisols
 - eutric Fluvisols
 - eutric Gleysols
 - calcic Gleysols
 - mollic Gleysols
 - umbric Gleysols
 - ferric Histosols
 - dystric Leptosols
 - eutric Leptosols
 - rendzic Leptosols
 - mollic Leptosols
 - lithic Leptosols
 - umbric Leptosols
 - ferric Luvisols
 - haplic Luvisols
 - stagnic Luvisols
 - vertic Luvisols
 - chromic Luvisols
 - stagnic Podzoluvisols
 - eutric Vertisols
 - calcic Vertisols
 - lake

Classification: FAO 1997



20 0 20 40 Kilometers

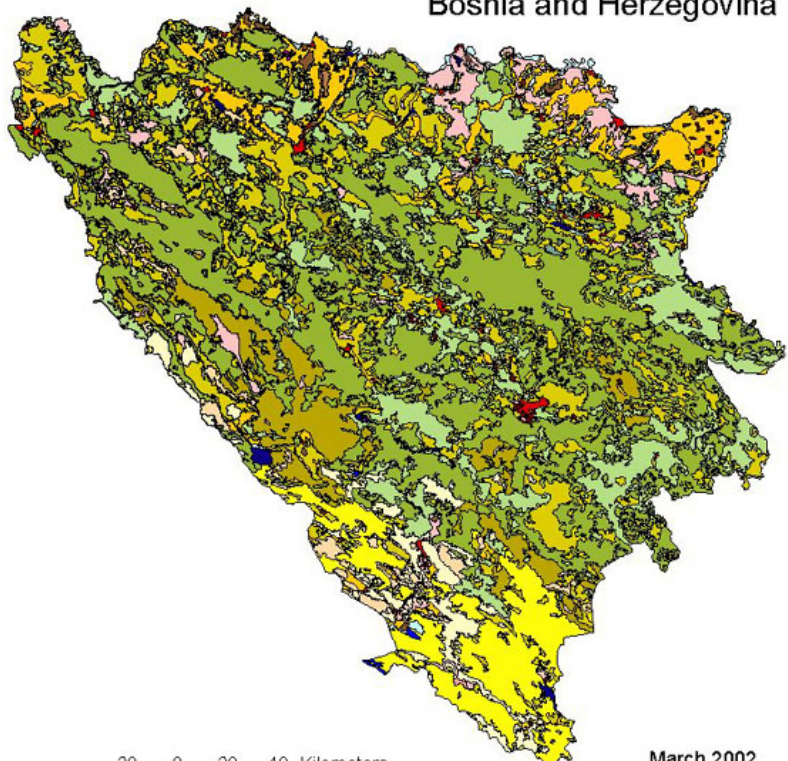
March 2002

Source: FAO (GCP/BIH/002/ITA)

Inventory of Post-War Situation of Land Resources in Bosnia and Herzegovina



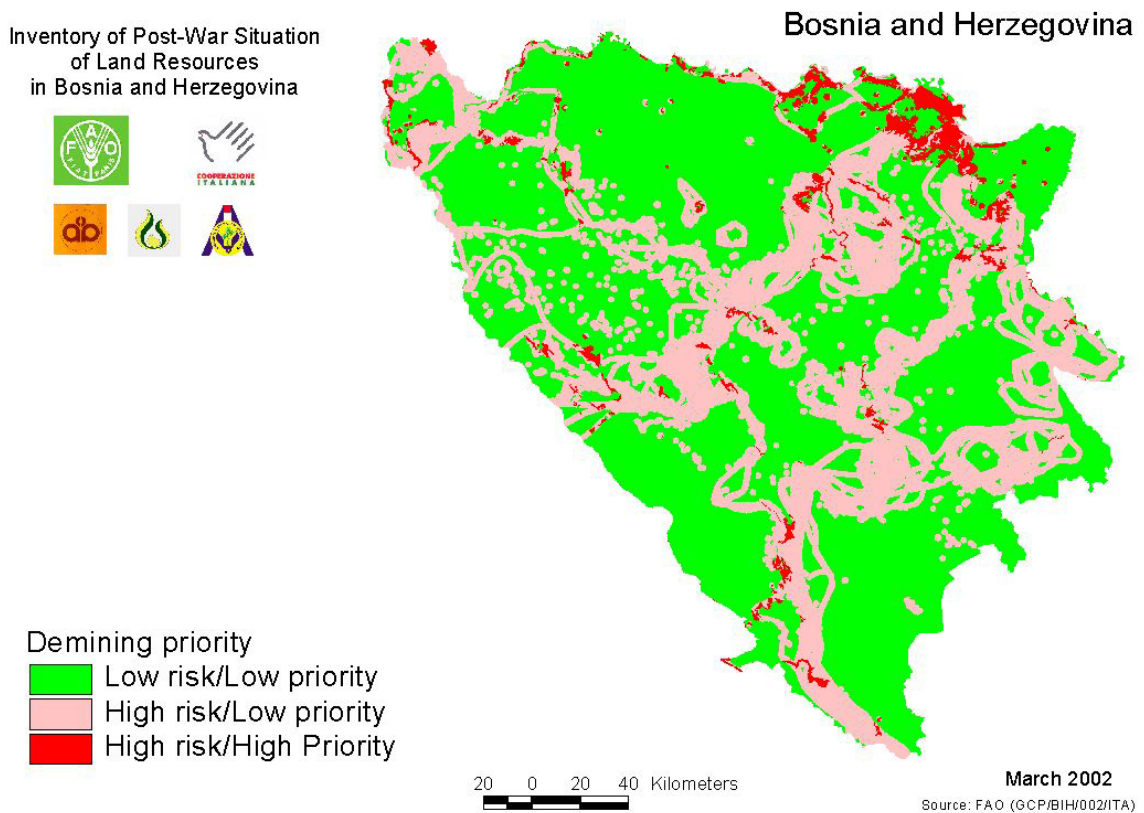
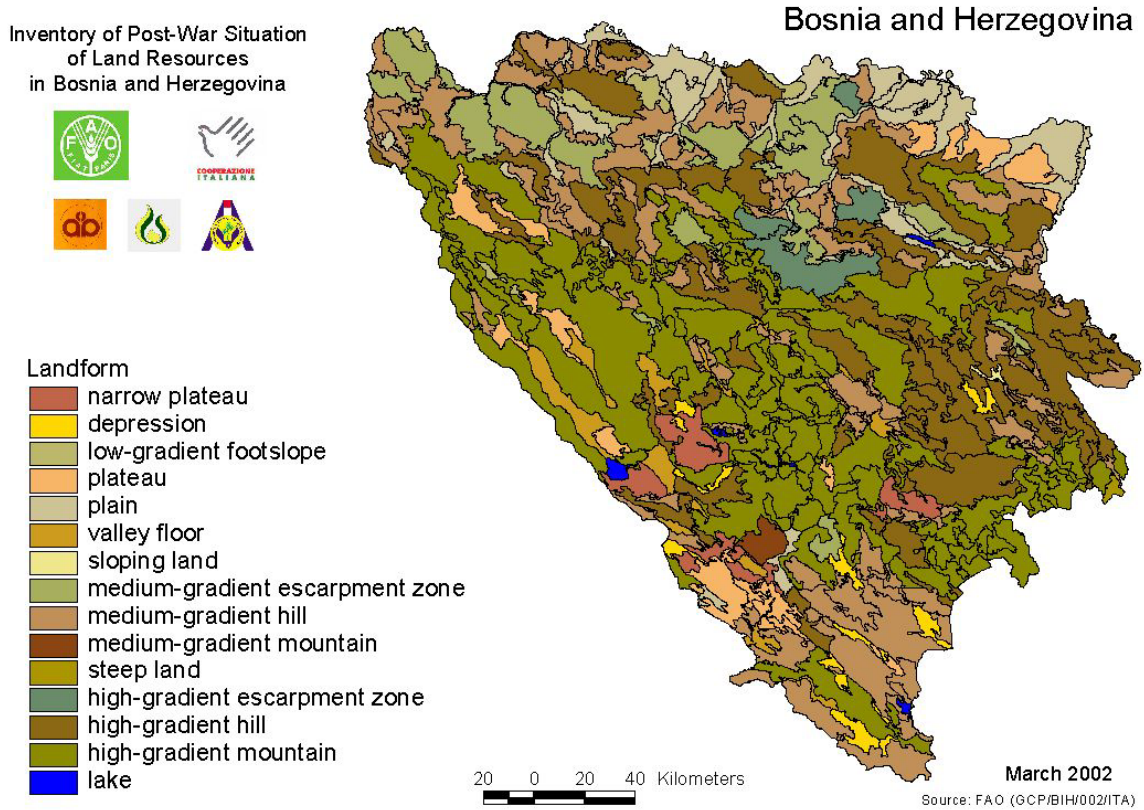
- Land use/Land cover**
- Arable Land - Rainfed
 - Arable Land - Irrigated
 - Predominant - Arable
 - Abandoned Land
 - Predominant - Aband.
 - Permanent Crops
 - Predominant - Perm. Crops
 - Pastures
 - Predominant - Pastures
 - Forest
 - Predominant - Forest
 - Shrubs
 - Predominant - Shrubs
 - Bare land
 - Open Mines
 - Built-Up Areas
 - Predominant Built-Up
 - Wetlands
 - Natural Water Bodies
 - Artificial Water Bodies



20 0 20 40 Kilometers

March 2002

Source: FAO (GCP/BIH/002/ITA)



ANNEX 3

AGRICULTURAL TRADE

COMEXT data: Bosnian Agricultural Exports (to EU 25) by sub-sectors in Million € (2000 – 2004)

	EXPORT					
	1999	2000	2001	2002	2003	2004
TOTAL	420.57	610.38	695.79	720.47	846.95	1001.45
Total Agricultural Products	23.05	40.83	40.55	41.59	45.39	52.63
01 - Live Animals	0.02	2.35	0.00	0.00	0.00	0.01
02 - Meat and edible meat offal	0.01	0.12	0.30	0.08	0.03	0.00
04 - Dairy produce	0.05	0.20	0.25	0.07	0.00	0.07
05 - Products of animal origin	0.00	0.00	0.05	0.01	0.00	0.00
06 - Live trees and other plants	0.01	0.02	0.04	0.12	0.32	0.25
07 - Edible vegetables, roots & tubers	3.99	6.51	7.10	6.02	3.65	3.44
08 - Edible fruits & nuts	1.13	2.33	2.02	2.36	4.36	2.71
09 - Coffee, tea, mate & spices	0.36	0.27	0.20	0.55	0.64	1.25
10 - Cereals	0.00	0.02	0.01	0.38	0.02	0.00
11 - Products of the milling industry	0.00	0.02	0.01	0.04	0.14	0.07
12 - Oil seeds & oleaginous fruits	0.39	0.29	0.28	0.29	0.84	1.15
13 - Lacs, gums, resins & other veg. saps	0.00	0.00	0.00	0.00	0.00	0.00
14 - Vegetable products n.e.s.	0.01	0.00	0.00	0.00	0.02	0.07
15 - Animal or vegetable fats & oils	0.01	0.00	0.37	0.00	0.32	2.66
16 - Preparations of meat	0.01	0.04	0.00	0.00	0.02	0.00
17 - Sugars & sugar confectionery	0.24	0.07	1.93	3.41	6.09	7.41
18 - Cocoa & cocoa preparations	0.05	0.12	0.02	0.07	0.10	0.37
19 - Preps. of cereals, flour, starch, etc.	0.21	0.18	0.28	0.57	0.73	1.03
20 - Preps. of vegetables, fruits, nuts & plants	0.94	1.01	1.04	1.15	2.31	1.34
21 - Miscellaneous edible preparations	0.41	0.09	0.06	0.18	0.37	1.15
22 - Beverages, spirits & vinegar	0.73	0.63	0.61	0.75	1.67	1.69
23 - Residues and waste from food industry	0.00	0.00	0.01	0.00	0.00	0.31
24 - Tobacco & tobacco products	0.56	0.47	0.38	0.34	0.23	0.07
Other WTO products outside chapters 1-24	13.92	26.09	25.57	25.19	23.53	27.59

Source: Eurostat (from <http://fd.comext.eurostat.cec.eu.int/xtweb>)

COMEXT data: Bosnian Agricultural Imports (from EU 25) by sub-sectors in Million € (2000 – 2004)

	IMPORT					
	1999	2000	2001	2002	2003	2004
TOTAL	1,552.62	1,853.01	2,047.46	2,273.47	2,190.94	2,346.37
Total Agricultural Products	354.58	396.20	491.42	524.53	473.17	390.35
01 - Live Animals	35.38	26.36	23.01	46.66	39.34	29.57
02 - Meat and edible meat offal	25.91	28.19	43.99	45.63	23.08	19.98
04 - Dairy produce	35.86	45.38	48.88	45.67	37.74	37.44
05 - Products of animal origin	0.32	0.65	0.46	0.44	0.58	0.53
06 - Live trees and other plants	3.89	5.12	6.30	7.30	7.03	7.19
07 - Edible vegetables, roots & tubers	7.69	10.99	16.55	12.71	13.63	12.47
08 - Edible fruits & nuts	11.56	15.55	17.63	21.69	17.40	13.94
09 - Coffee, tea, mate & spices	3.30	3.59	4.26	3.28	4.18	4.14
10 - Cereals	20.39	29.55	56.77	39.51	56.67	44.19
11 - Products of the milling industry	11.33	5.47	4.32	4.33	3.91	2.71
12 - Oil seeds & oleaginous fruits	3.63	3.64	5.13	5.56	4.99	9.09
13 - Lacs, gums, resins & other veg. saps	0.14	0.26	0.20	0.17	0.17	0.26
14 - Vegetable products n.e.s.	0.02	0.02	0.05	0.02	0.02	0.02
15 - Animal or vegetable fats & oils	26.78	26.11	25.34	33.16	30.86	23.07
16 - Preparations of meat	25.75	22.40	22.77	18.55	16.76	14.78
17 - Sugars & sugar confectionery	24.75	22.12	38.54	49.73	36.52	22.90
18 - Cocoa & cocoa preparations	14.45	15.75	19.28	19.90	20.46	19.43
19 - Preps. of cereals, flour, starch, etc.	12.13	14.46	14.54	13.51	13.93	13.88
20 - Preps. of vegetables, fruits, nuts & plants	7.61	11.40	11.07	12.02	11.68	11.60
21 - Miscellaneous edible preparations	17.86	22.35	27.24	30.13	29.66	25.67
22 - Beverages, spirits & vinegar	45.59	58.27	63.33	68.86	60.49	40.01
23 - Residues and waste from food industry	11.07	15.63	18.80	21.43	22.61	19.92
24 - Tobacco & tobacco products	3.21	4.57	9.89	11.25	7.58	6.61
Other WTO products outside chapters 1-24	5.97	8.35	13.07	13.03	13.88	10.95

Source: Eurostat (from <http://fd.comext.eurostat.cec.eu.int/xtweb>)

COMTRADE data: Bosnian Agricultural Exports and Imports (global and to EU 25) by sub-sectors in Million € (2001 – 2004)

	World				EU-25			
	EXPORT		IMPORT		EXPORT		IMPORT	
	2003	2004	2003	2004	2003	2004	2003	2004
TOTAL	908.14	1,298.63	2,926.89	3,965.80	482.65	701.07	1,685.46	2,058.67
Total Agricultural products	68.01	91.38	603.63	808.46	29.50	37.34	347.62	367.51
01 - Live Animals	0.05	0.08	40.14	26.56	0.00	0.00	37.77	24.24
02 - Meat and edible meat offal	1.05	1.06	27.12	25.90	0.02	0.10	22.66	16.14
04 - Dairy produce	2.55	4.76	48.59	48.88	0.05	0.06	31.08	28.86
05 - Products of animal origin	0.01	0.04	0.38	0.59	0.01	0.00	0.35	0.34
06 - Live trees and other plants	0.18	0.25	5.53	7.25	0.07	0.11	4.88	5.74
07 - Edible vegetables, roots & tubers	3.14	5.00	15.95	20.76	1.86	2.97	9.16	11.79
08 - Edible fruits & nuts	4.05	4.37	38.92	43.28	2.00	2.02	13.85	13.74
09 - Coffee, tea, mate & spices	1.21	0.91	13.10	22.22	0.25	0.34	2.34	6.38
10 - Cereals	0.12	0.47	30.03	82.58	0.02	0.07	13.15	44.59
11 - Products of the milling industry	0.66	1.31	5.72	8.72	0.14	0.06	2.81	2.35
12 - Oil seeds & oleaginous fruits	1.16	1.80	4.62	17.59	0.77	1.03	2.96	7.22
13 - Lacs, gums, resins & other veg. saps	0.00	0.01	0.39	0.53	0.00	0.00	0.25	0.36
14 - Vegetable products n.e.s.	0.07	0.10	0.04	0.05	0.07	0.10	0.01	0.01
15 - Animal or vegetable fats & oils	0.19	4.82	37.86	45.27	0.00	1.79	27.24	19.37
16 - Preparations of meat	2.86	3.01	18.52	26.95	0.26	0.01	11.18	10.79
17 - Sugars & sugar confectionery	1.05	3.26	51.60	52.07	0.06	2.67	42.47	36.75
18 - Cocoa & cocoa preparations	1.90	2.88	28.05	40.77	0.03	0.24	13.29	16.58
19 - Preps. of cereals, flour, starch, etc.	4.26	7.44	23.42	41.29	0.61	0.78	12.54	12.30
20 - Preps. of vegetables, fruits, nuts & plants	5.31	7.95	15.30	21.59	0.74	1.02	9.37	8.82
21 - Miscellaneous edible preparations	1.89	3.55	51.65	60.17	0.12	0.87	28.05	30.53
22 - Beverages, spirits & vinegar	7.85	7.30	68.20	92.55	1.49	1.19	42.19	34.64
23 - Residues and waste from food industry	0.01	1.31	9.52	33.74	0.00	0.18	7.70	18.04
24 - Tobacco & tobacco products	4.49	3.01	54.47	68.25	0.23	0.14	3.40	8.96
Other WTO products outside chapters 1-24	23.97	26.70	14.53	20.89	20.69	21.58	8.90	9.00

Source: UN Commodity Trade Statistics Database