

***DELEGATION of the EUROPEAN COMMISSION***



**Bosnia and Herzegovina**

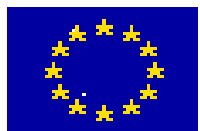
**Value Chain Mapping Analysis**

**Contract N° : MC/5043/025/001/2008**

**PROJECT N°: 2007/146271**

**Final Report**

**15<sup>th</sup> June 2008**



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*“Evaluation and presentations in the field of trade, businesses  
and regional economic integration”*

***LOT<sub>5</sub>***

**AESA Consortium**

# *Delegation of the European Commission*

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## *List of content*

<b>1. EXECUTIVE SUMMARY</b>	<b>9</b>
<b>2. METHODOLOGY</b>	<b>12</b>
<b>3. RELIABILITY AND PRESENTATION OF INFORMATION</b>	<b>14</b>
<b>4. TOTAL OVERVIEW OF INSTITUTIONAL SUPPORT ORGANISATIONS FOR THE ENTERPRISE AT VARYING STAGES OF DEVELOPMENT</b>	<b>15</b>
4.1.1 BUSINESS SUPPORT SERVICES PROVIDED BY GOVERNMENTS	20
4.1.2 BUSINESS SUPPORT SERVICES PROVIDED BY REGIONAL DEVELOPMENT AGENCIES (RDAS)	20
4.1.3 BUSINESS SUPPORT SERVICES PROVIDED BY DEVELOPMENT AGENCIES AND BUSINESS SUPPORT CENTRES (BSCs)	22
4.1.4 BUSINESS SUPPORT SERVICES PROVIDED BY CHAMBERS OF COMMERCE (CoCs) AND ASSOCIATIONS	26
4.1.5 BUSINESS SUPPORT SERVICES PROVIDED BY PRIVATE SERVICE PROVIDERS	28
4.1.6 FINANCE PROVIDED BY DEVELOPMENT BANKS	30
4.1.7 CREDIT GUARANTEE FUNDS (CGFs)	31
4.1.8 COMMERCIAL BANKS	32
4.1.9 SPECIAL CREDIT LINES	33
4.1.10 OTHER PROVIDERS OF FINANCIAL SERVICES	34
<b>5. VALUE CHAIN ANALYSIS OF THE FRUIT, BERRIES AND VEGETABLES SUB-SECTOR</b>	<b>36</b>
5.1.1 PRODUCT, PRODUCTION, SUPPLIES AND INFRASTRUCTURE BERRIES, FRUITS AND VEGETABLES	39
5.1.2 HUMAN RESOURCES – FRUITS, BERRIES AND VEGETABLES	42
5.1.3 MARKETING – FRUITS, BERRIES AND VEGETABLES	43
5.1.4 STANDARDS AND CERTIFICATION – FRUITS, BERRIES AND VEGETABLES	46
5.1.5 FINANCE – FRUITS, BERRIES AND VEGETABLES	63
<b>6. VALUE CHAIN ANALYSIS OF THE DAIRY PRODUCTS SUB-SECTOR</b>	<b>70</b>
6.1.1. PRODUCT, PRODUCTION, SUPPLIES AND INFRASTRUCTURE - DAIRIES	72
6.1.2. HUMAN RESOURCES - DAIRIES	76
6.1.3. MARKETING - DAIRIES	77
6.1.4. STANDARDS AND CERTIFICATIONS – DAIRIES	80
6.1.5. FINANCE - DAIRIES	81
<b>7. VALUE CHAIN ANALYSIS OF THE MAP SUB-SECTOR</b>	<b>81</b>

7.1.1.	PRODUCT, PRODUCTION, SUPPLIES AND INFRASTRUCTURE - MAP	81
7.1.2.	HUMAN RESOURCES - MAP	81
7.1.3.	MARKETING - MAP	81
7.1.4.	STANDARDS AND CERTIFICATION – MAP	81
7.1.5.	FINANCE - MAP	81

## **8. VALUE CHAIN ANALYSIS OF THE FABRICATED METAL PRODUCTS SUB-SECTOR 81**

8.1.1.	PRODUCT, PRODUCTION, SUPPLIES AND INFRASTRUCTURE - METALS	81
8.1.2.	HUMAN RESOURCES - METALS	81
8.1.3.	MARKETING - METALS	81
8.1.4.	STANDARDS AND CERTIFICATION - METALS	81
8.1.5.	FINANCE - METALS	81

## **9. VALUE CHAIN ANALYSIS OF THE FURNITURE SUB-SECTOR 81**

9.1.1.	PRODUCT, PRODUCTION, SUPPLIES AND INFRASTRUCTURE - FURNITURE	81
9.1.2.	HUMAN RESOURCES - FURNITURE	81
9.1.3.	MARKETING - FURNITURE	81
9.1.4.	STANDARDS AND CERTIFICATION - FURNITURE	81
9.1.5.	FINANCE - FURNITURE	81

## **10. VALUE CHAIN ANALYSIS OF THE JOINERY SUB-SECTOR 81**

10.1.1	PRODUCT, PRODUCTION, SUPPLIES AND INFRASTRUCTURE - JOINERY	81
10.1.2.	HUMAN RESOURCES - JOINERY	81
10.1.3.	MARKETING - JOINERY	81
10.1.4.	STANDARDS AND CERTIFICATION PLUS ASSISTANCE WITH ATTAINING CERTIFICATION - JOINERY	81
10.1.5.	BUSINESS SUPPORT SERVICES - JOINERY	81
10.1.6.	FINANCE - JOINERY	81

## **11. OVERVIEW OF THE CONSTRAINTS AND RECOMMENDATIONS – CROSS-CUTTING ISSUES 81**

<b>11.1.1.</b>	<b>SOME IDEAS FOR IMPROVEMENT OF INSTITUTIONAL SUPPORT TO COMPETITIVENESS OF THE SUB-SECTORS VALUE CHAINS</b>	<b>81</b>
<b>11.1.2.</b>	<b>CONSTRAINTS AND RECOMMENDATIONS ON CROSS-CUTTING ISSUES REGARDING STANDARDISATION &amp; CERTIFICATION</b>	<b>81</b>
11.1.2.1	INSTITUTES OF ACCREDITATION (BATA) AND STANDARDISATION (BAS)	81
11.1.2.1.1.	AWARENESS	81
11.1.3.	EDUCATION	81

## **ANNEX 1: TERMS OF REFERENCE 81**

## **ANNEX 2: COMPANY DIAGNOSIS METHODOLOGY 81**

<b>ANNEX 3: LIST OF MEETINGS</b>	<b>81</b>
<b>ANNEX 4: LIST OF DONOR PROJECTS</b>	<b>81</b>
<b>ANNEX 5: LIST OF WEB PAGES – STANDARDS AND CERTIFICATIONS</b>	<b>81</b>

## List of Acronyms

ARDA	Accredited Regional development Agency for the Economic Region North-West BiH
B2B	Business to Business
BAS	BiH Institute of Standardisation
BATA	BiH Institute for Accreditation
BHAS	Agency for Statistics of BiH
BiH	Bosnia and Herzegovina
BSC	Business Support Centre
CBBH	Central Bank of Bosnia and Herzegovina
CC	Cluster Competitiveness Project (USAID)
CGF	Credit Guarantee Fund
CE	European Conformity
CEN	Comité Européen de Normalisation - European Committee for Standardization
CENELEG	Comité Européen de Normalisation Electrotechnique - European Committee for Electrotechnical Standardization
CGF	Credit Guarantee Fund
CoC	Chamber of Commerce
CoM	Council of Ministers of BiH
DFID	UK Department for International Development
DIN	Deutsches Institut für Normung e.V.)
EA	European co-operation for Accreditation
EBRD	European Bank for Reconstruction and Development
EC	European Commission
EEC	European Economic Community
EFSE	The European Fund For Southeast Europe
EICC BiH	Euro Info Correspondence Centre Bosnia and Herzegovina
EMAS	Environmental Management Assessment System
EPA	Export Promotion Agency
EPPU	Unit for Economic Planning and Implementation of the B&H MTDS/DEP Directorate for Economic Planning
EU	European Union
EXPRO	Export Promotion Project
F&V	Fruits and Vegetables
FBiH	Federation of Bosnia and Herzegovina
FDI	Foreign Direct Investments
FIPA	Foreign Investment Promotion Agency
FSA	Food Safety Agency
FTC	Foreign Trade Chamber
GDP	Gross domestic product
GMP	Good Manufacturing Practice
GTZ	Deutsche Gesellschaft für Technische Zusammenarbeit
HACCP	Hazard Analysis and Critical Control Point
IFAD	International Fund for Agricultural Development
IFC	International Financial Cooperation

IFOAM	International Foundation for Organic Agriculture Movements
IMF	International Monetary Fund
IMO	Institute for Marketecology (Swiss)
IP	Integrated Production
IPPC	International Convention on Protecting Plants
ISO	International Organization for Standardization
ISPM	International Standard for Phytosanitary Measures
IT	Information Technology
ITA	Indirect Tax Authority
JICA	Japan International Cooperation Agency
JUS	Yugoslav standards and by-laws
LAMP	Linking Agricultural Markets to Primary Producers Project (USAID)
LDA	Local Development Agency
LVU	Local Veterinary Unit
MAP	Medical and Aromatic Plant
MCO	Micro Credit Organization
MOFTER	Ministry of Foreign Trade and Economic Relations
MSMEs	Micro, Small and Medium Enterprises
NACE	Nomenclature Générale des Activitiés Economiques dans l'Union Européenne (General Nomenclature for Economic Activities in the European Union)
NERDA	Regional Development Agency for the Economic Region North-East BiH n
NGO	Non-Government Organization
NoE	Non-Observed Economy
NOP	National Organic Program (of US market)
OECD	Organization for Economic Cooperation and Development
OK	Organska Kontrola (organic certification company in BiH)
PDO	Protected Designation of Origin
PfD	Partners for Development
PGI	Protected Geographical Indication
PHPA	Plant Health Protection Administration
PREDA	Prijedor Economic Development Agency
Prodcom	
PRSP	Poverty Reduction Strategy Paper/B&H MTDS B&H Mid-Term Development Strategy
R&D	Research and Development
RCA	Revealed comparative advantage
RDA	Regional development Agency
REDAH	Regional Development Agency for Herzegovina Region
REZ	Regional development Agency for Central BiH Region
RIC	Regional Info Centre
RS	Republika Srpska
SEED	Southeast Europe Enterprise Development
SERDA	Sarajevo Economic Region Development Agency
SIDA	Swedish Agency for International Development and Cooperation
SIPPO	Swiss Import Promotion Program
SME	Small and Medium sized Enterprises

TNC	Trans-National Cooperation
TSG	Traditional Speciality Guaranteed
TÜV	Technischer Überwachungs-Verein
UNECE	United Nations Economic Commission for Europe
USAID	
USAID LIST	
VDA	Verband der Automobilindustrie e. V. -
WB	World Bank
WTO	UN World Tourism Organization
WTO	World Trade Organization
WTO-SPS	World Trade Organization - Agreement on the Application of Sanitary and Phytosanitary Measures
YU	Yugoslavia/Yugoslavian
ZEDA	Zenica Economic Development Agency



# 1. Executive summary

## Objectives and specific objectives and results

“The global objective of this assistance is to support BiH to create a competitive and dynamic knowledge-based economy capable of sustainable growth with more and better jobs and greater social cohesion.

The specific objective of this project is to propose the sectors in the BiH economy that are or have the potential to be competitive and to complete a blueprint map of selected sectors to determine the constraints within the sector that are obstacles to (*competitiveness and*) growth and propose viable solutions for interventions in overcoming these constraints”.

At the start of Component 2 the project was limited to consider viable solutions for interventions in public and private services to businesses and not interventions in enterprises. The environmental impact studies were also taken out as it was realized that with analyses of six sub-sectors the available time would not allow for such analyses.

## Findings, main conclusions and recommendations

The EC Delegation chose six sub-sectors for analyses:

1. Berries, Fruits and Vegetables - Processed Products
2. Dairy Products
3. MAP Products
4. Metal Products (ferrous and non-ferrous)
5. Furniture
6. Joinery

The enterprise analyses revealed that no matter the sector all enterprises had more or less the same problems. In addition the agricultural sub-sectors had some specific supply related problems. It can be summarised as follows:

- Standardization and certification according to international standards such as HACCP, ISO, Organic, Phytosanitary, CE marking etc. are not available in BiH and very few enterprises are therefore certified.
- Enterprises lack training in general management, modern production planning and management and (export) marketing management and most managers and staff lack English and other language proficiency.
- In marketing many enterprises lack managers and staff who can access export market information on data bases and the internet. They lack a basic understanding of marketing and handling of large accounts (as

subcontractors or suppliers to large customers). Most of them have no written strategies or business plans and they need assistance to make such documents. They also need assistance with physically accessing export markets outside Balkan.

- In the finance area most companies are using outdated financial accounting and training is urgently needed. Funding for investments in newer and more efficient technology and marketing are needed in some of the sub-sectors in order to compensate for increasing wage levels.
- In the Berries, Fruits and Vegetables and Dairy Sub-Sectors there are specific needs for increasing the supplies (farm output) through increasing the farm sizes and / or shift to crops which are profitable on small (5ha) farms; improving the yield per cow and improve sanitary and cooling conditions. Most farms need to learn how to improve farm management.

The state of the public and private institutions assigned to assist the enterprises increasing their competitiveness can be summarised as follows:

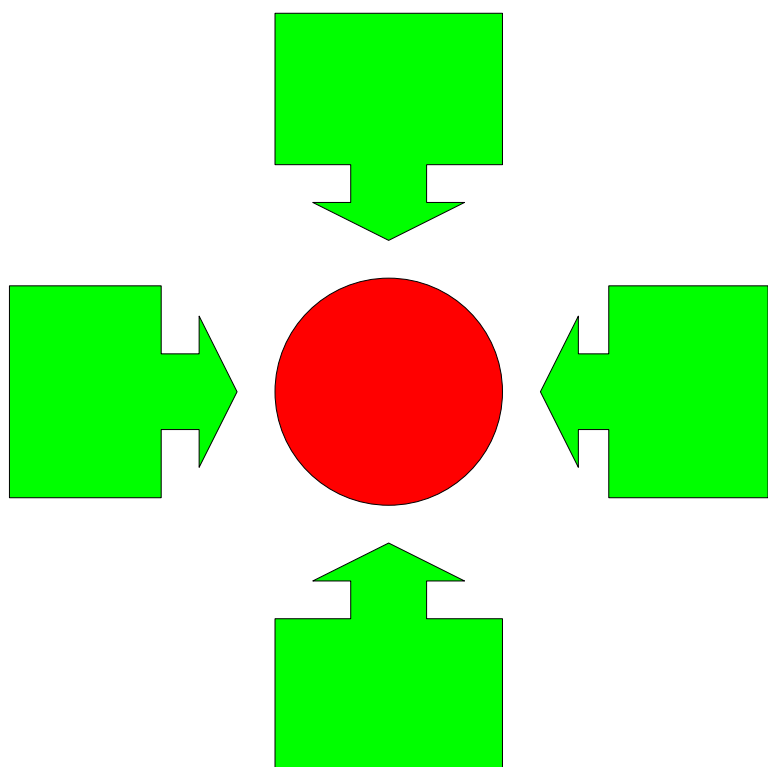
- Although drafts have been produced, a national strategy for SMEs has not yet been produced. The RS Agency for SMEs has prepared a strategy for RS, but none has been produced for FBiH. The lack of an overall strategy severely hampers development of, and co-operation between, the various business support institutions.
- Standardization and certification according to international standards such as HACCP, ISO, Organic, Phytosanitary, CE marking etc. are not available in BiH because in some cases the standards have not been transposed and in all cases the accreditation institute BATA is not yet fully accredited wherefore they in turn can not certify the institutes supposed to certify enterprises. There is also a shortage of consultants to assist the enterprises setting up the procedures. Consequently, enterprises have go abroad to be certified.
- Most of the business support centres are not co-ordinated, understaffed, underfinanced and concerned mostly with easing the administrative burdens of the enterprises and serving mostly the start-ups. One of the best BSCs had only two customers per day in 2007 even though their services are virtually free. The SME managers stay away and complain that they do not think that the BSCs are worth their attention. The BSCs of RS are in some cases doing quite good work and it would be worthwhile learning from them (the PREDA BSC of Prijedor is a good example). The BSCs need to be defined, organised (as NGOs), funded and run by the stakeholders, the SMEs with financial support from the public budgets. In order to manage and co-ordinate their activities and ensure technical and management back up they need a national umbrella organisation and networking with technological institutes and university faculties.

- The RDAs are naturally mostly concerned with overall development of the regions. They are reasonably newly established, but although they have set up some SME initiatives they fall far short of what is needed in terms of facilitation of business support. To increase effectivity in SME support they need to concentrate on facilitating the establishment of BSCs as NGOs, letting these be managed by representatives from the SME community and drawing the staff from industry.
- The network supporting SMEs in RS include 4 regional agencies (not all established yet) and local agencies. The regional offices mainly support the Agency for SMEs in the coordination of and support to local development agencies. If this initiative turns out to be similar to the BSCs it should be organised along the lines of these.
- The Foreign Trade Chamber, which has 40.000 paying members, is in charge of export promotion and other export oriented actions having the Export Promotion Agency and the European Information and Communication Centre in house. It would seem that even though the FTC is doing good work it could be improved as regards assistance to SMEs and its work could be enhanced by closer co-operation with the BiH embassies, the industry associations and networks of foreign (EU) co-operation partners. The local chambers of commerce have experienced a reduction of members, staff and competencies since membership became voluntary in 2004. They clearly need to listen better to the business community and design and direct their activities at their potential members.
- Private service (advisory) providers have been trained by several donor funded projects in attempts to get the local consulting business going. Most of these attempts have failed. The causes of this failure might be a combination of a mismatch between the offered services and the needs of the enterprises; the quality of the consultants; the lack of effective SME awareness building and promotion of the cost-benefits of the services; and that the enterprises are now used to getting these services for free by donor funded projects. Whatever it is it needs to be studied closer and strategies have to be devised to get this very vital part of the business community to function well.

EU and other donor support could add to the national efforts to increase the effectivity of the public and private institutions set up to assist enterprises by sponsoring and assisting at all levels from ministries to business support centres. To maximise the effect of the support, it would be helpful to commission further and deeper analysis of each type of support initiative in order to determine the needed type and amount of assistance.

## 2. Methodology

The analysis is guided first of all by Porters' 5 Forces of Competition<sup>1</sup>



Threat of New  
Entrants

Using this model New Entrants are regarded first of all as EU enterprises entering the BiH market. Looking at Bargaining Power of Buyers we are first of all thinking of EU importers, BiH or other countries' Export Agents and subcontractors who might want to have products or services produced in BiH. Bargaining Power of Suppliers is first of all suppliers of managers (MBA Schools), technical staff (universities), skilled labourer (vocational schools), raw materials and sub-assemblies or parts, in particular from countries where competitors can wield high influence over the suppliers. Threat of Substitution Products or Services is first of all from superior products from the EU. Rivalry Among Existing Enterprises is not the dominant force in relation to penetrating the EU markets or staving off competition from these markets. Its importance is thus played down in the analyses of the value chains.

Bargaining  
Power of  
Suppliers

Rivalry Among  
Existing Competi

The underlying methodology for analysing the value chains and the enterprises within it is a Cause and Effect, Diagnosis Model. The questions asked are simply: "What need to be improved in a given area of the business / value chain?" – say production. See Annex 2 for a diagram of the model.

We are required to recommend how public institutions and private support organisations can help improve the competitiveness of SMEs. We are not

<sup>1</sup> How Competitive Forces Shape Strategy by Prof. Michael E. Porter, Harvard Business School, 1979

Threat of Substit  
Products or Serv

attempting to devise strategies for the six sub-sector value chains nor of their individual enterprises as we do not have enough information or the time to do so. Instead we concentrate our efforts on analysing and evaluating the potential for improvements of the typical enterprise on parameters which are the more important ones for increasing their competitiveness with support from the public institutions.

These parameters fit roughly into the Porter model and although they are not sufficient for assembling the total picture necessary for devising competitive strategies they are nonetheless sufficient for outlining programs for the public, and to a certain degree private service institutions:

1. Product and production technology and research for design, quality and productivity
2. Skilled labour and upgrading of skills
3. Domestic and export Market access, info and marketing channels
4. Standards and certifications and assistance with attaining standards and certifications
5. Organisation, management and upgrading of management and technical skills to access higher value markets
6. Public and private business support services and association membership
7. Infrastructure in the immediate surroundings of the enterprises
8. Input of supplies
9. Financing

The activities followed the following pattern:

1. Information gathering by desk research of the reports listed as references throughout the report.
2. Interviews with key informants including donor organisations involved in the field of study.
3. Visit to and interviews with key managers at roughly three enterprises for each of the six sub-sectors.
4. Visits to and interviews with key managers at ministries (of state, entities, cantons and municipalities), Foreign Trade Chamber, Chambers of Commerce, regional and local development agencies and business support centres.
5. Visits to and interviews with key managers at standardization and certification institutes.
6. Visits to and interviews with managers at Central Bank, development banks, commercial bank, funds and other providers of financial services.
7. Visits to and interviews with the head of faculties and professors at universities and technological institutes.
8. See Annex 6 List of Meetings. The full list of contact details is presented as it may be useful for the further work.

### **3. Reliability and presentation of information**

Information is collected via desk research of available documentation stemming mainly from recent donor funded reports and interviews with donors, and BiH stakeholders and informants in Entity, Cantonal and Municipal offices. This information is supplemented by interviews of managers at 20 enterprise visits. This could hardly be anything close to a representative sample of the sub-sectors, but time did not allow for a bigger sample. The interviews should be regarded as no more than unverified indicators of sub-sector development. Nevertheless, we succeeded in interviewing good sources of information so we believe that, apart from, hopefully not too many mistakes, we can present a reasonably good overall analysis which does not pretend to be more than a set of rough suggestions for future development of support to the sectors.

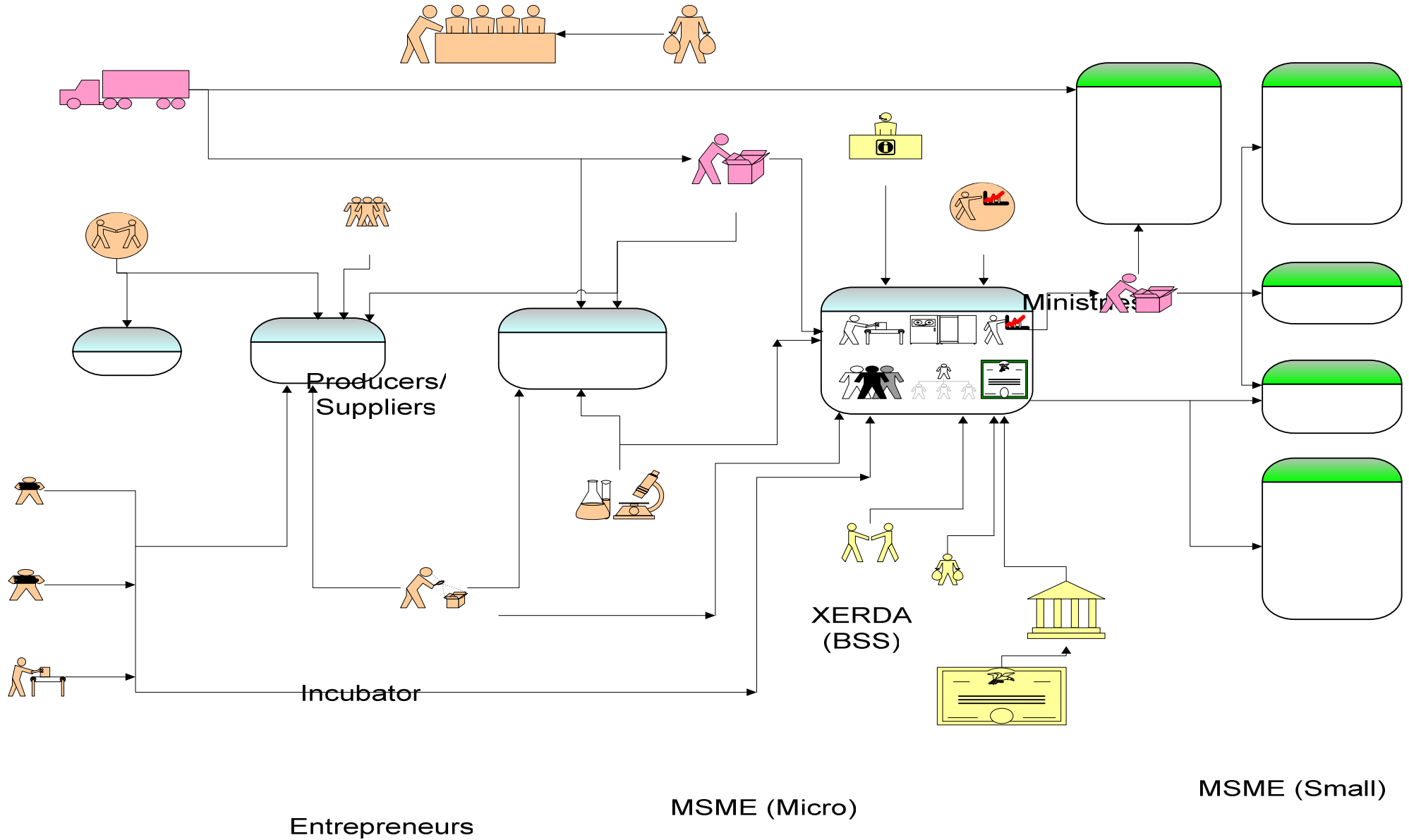
The statistical data are either non-existent or we got widely varying figures for the same parameter. We therefore used averages or our own estimates.

**The report on the six sub-sectors chosen for analysis is written in such a way that each sub-sector contains presentations of findings, analysis, conclusions, sector constraints and recommendations. This presentation method causes quite a lot of repetitive information as many sectors have similar constraints.**

The nine parameters under investigation is combined into six areas of analysis as follows:

- (1) Products, production, supplies and infrastructure (parameters 1, 7 and 8)
- (2) Human resources (parameters 2 and 5)
- (3) Marketing (parameter 3)
- (4) Standards and certifications (parameter 4)
- (5) Business support services (parameter 6)
- (6) Financing (parameter 9)

#### 4. Total overview of institutional support organisations for the enterprise at varying stages of development

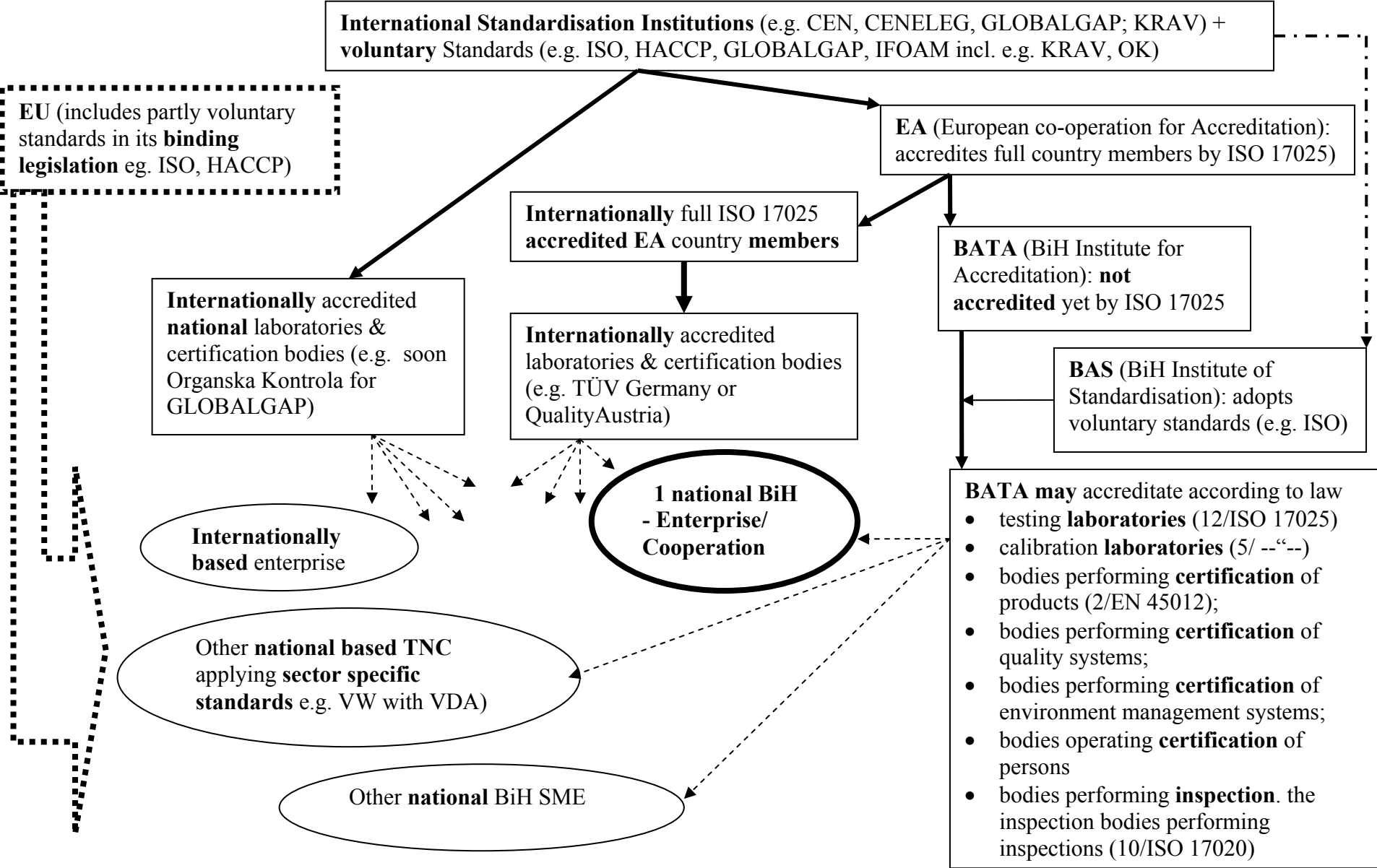


The overview portrays the enterprise in four development stages, entrepreneur / start-up, Micro, Small and Medium size enterprises. The main public and private service organisation are drawn to illustrate how they roughly fit into the various stages of enterprise development. The main markets and supply channels are illustrated as well in order to complete the picture of the network of supply, production, product development, funding, training, output and supporting organisations.

With the enterprises' competitiveness at the centre of the analysis we attempt to evaluate the effect on the enterprises of the actions or the lack of some of the business support institutions surrounding the enterprises and recommend possible ways to support and strengthen them.



**Diagram of standardization and certification institutions**



**BiH enterprises stand in the centre of a variety of activities and institutions with regard to accreditation, standardisation and certification as shown in the previous figure.**

The requirements for internationally acknowledged certification, which in many cases is a pre-condition for exporting to the EU are based on internationally agreed standards. Accreditation of a national certification body such as BATA in BiH can only be awarded by internationally accredited institutions. BATA is, however, not yet fully accredited hence all institutions accredited by BATA are also not fully accredited at the international level and are therefore not able to provide BiH enterprises with any internationally valid certificate.

A BiH enterprise can get certified according to all standards by any international body fully accredited by international standardisation. For a BiH enterprise this of course means always the direct or indirect involvement of an institution from abroad which in many cases leads to higher costs.

This can occur when a BiH enterprise decides without external influence to get certified according to a certain standard or if it is explicitly requested by a (national or international) business partner to do so.

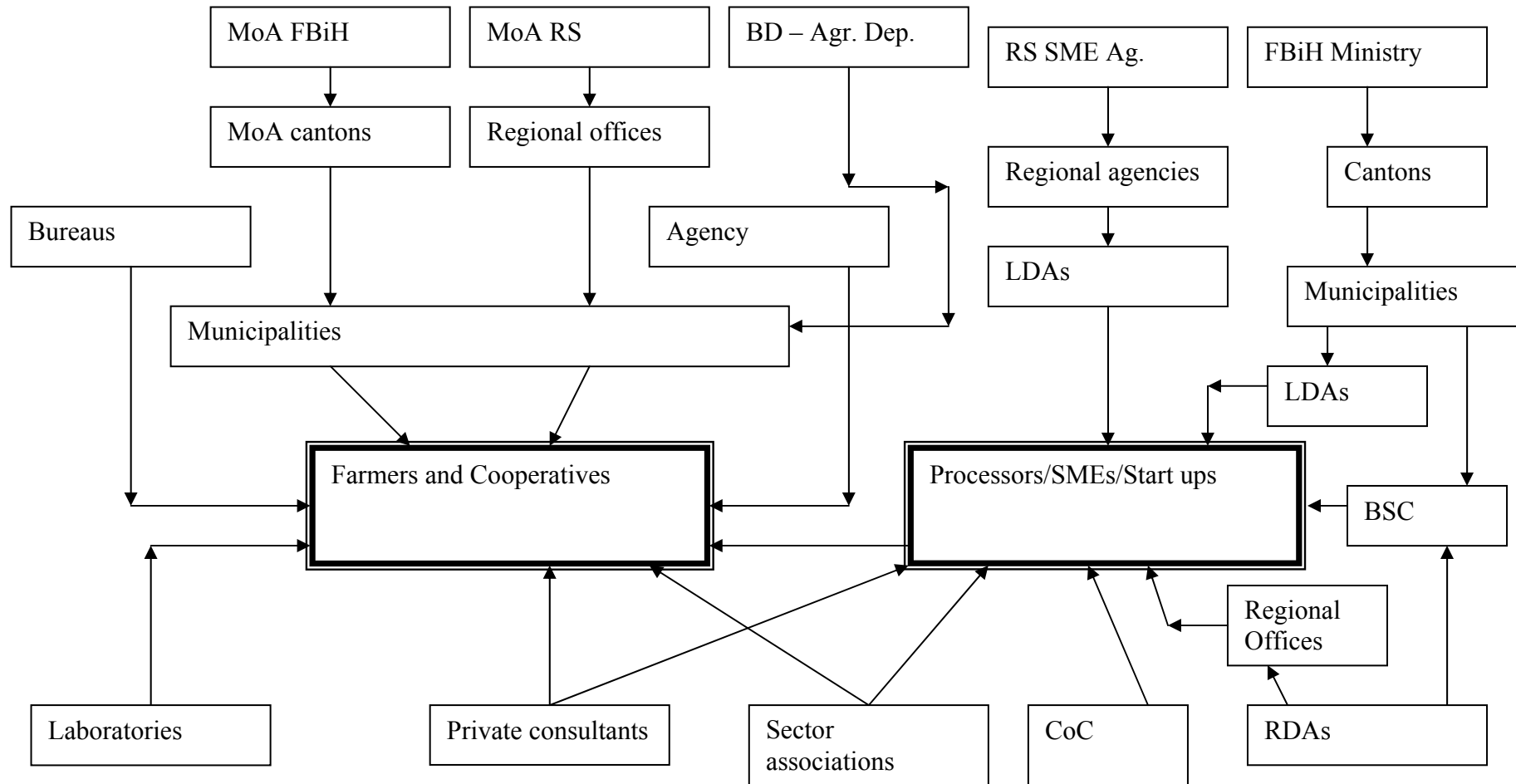
The standard requested from a BiH enterprise can be one that is not developed by an international standardisation institution but only applies within one enterprise such as is often the case within large transnational corporations (e.g. VW with its VDA I and II standards).

Besides that, standards can be also required by law which makes them mandatory for BiH enterprises. This happens internationally for example with ISO standards which are included within EU-regulations and directives. Those EU-regulations and directives (including the standards) are in the following – previous to or after EU-access of BiH - mandatory for BiH enterprises trying to export into the EU.

Nationally also mandatory standards binding for BiH enterprises exist in many areas where old YU legislation still is in force including e.g. JUS standards. These JUS standards are still applied by inspection bodies during their official controls of products of BiH enterprises.

The sub-sector specific standardisation and certification issues are elaborated in each sub-sector while the cross cutting issues are explained and evaluated in chapter 10.

## Diagram of business support services



#### 4.1.1 Business support services provided by governments

Governments provide extension and business support services to the farmers and cooperatives in the agriculture sector and the system and services are described in appropriate chapters related to F&V and dairy sector.

#### 4.1.2 Business support services provided by regional development agencies (RDAs)

Five RDAs were established in 2004, based on the initiative and with the assistance of the EU RED program 2004-2006. RDAs have the following major objectives: (1) development and implementation of regional economic strategies, (2) monitoring regional projects, (3) support to SMEs and (4) cross border cooperation (in relation to IPA funds). Their priority sectors are (1) SME, (2) agriculture, (3) human resources and infrastructure development, (4) support to local authorities in development and (5) implementation of local economic development strategies and plans. The expectation that EU funding would be replaced with funding from municipalities has not been fulfilled and RDAs still depend on EU's financial support. RDAs receive 125.000 EUR annually, during the period 2007-2010; 25.000 EUR per RDA per year. EU coordinates their activities at monthly meetings. Although EU expects that the governments (mainly municipality level) should take over the financing of RDAs, all RDAs seem to see their future in the implementation/facilitation of IPA funded projects. That would make it difficult for them to create and maintain focus on major tasks envisioned by EU such as regional development, support to municipalities and monitoring of projects implemented by a number of other organizations. Instead, they might accept the more lucrative implementation of different SMEs projects offered by donors, playing the role of implementer, provider of services and/or facilitator.

The following table provides a quick overview of the five RDAs.

<b>RDA</b>	<b>Region</b>	<b>Number of municipalities</b>
ARDA	Northwest	34
REDAH	Herzegovina	22
REZ	Central	16
NERDA	Northeast	34
SERDA	Sarajevo Macro-Region	32

The least active among RDAs is ARDA, covering the northwest region with the majority of included municipalities from RS. Although the RS government accepts the concept of regional development agencies, it does not approve of the current geographical coverage of the five EC-supported Regional Development Agencies. This partly explains the lack of funding, staff and activities in these RDAs even though municipalities pay their contributions regularly. Management plans to start projects in the agro and wood sectors, assist SMEs in finding reliable consultants, as well as to initiate and manage a voucher scheme for consulting and training services and a credit guarantee fund.

REDAH covers Herzegovina region including 22 municipalities, 16 from FBiH and 6 from RS. Two projects implemented by REDAH provide business services to SMEs. One is Regional Info Centre (RIC), financed by EU (2 year project, started in October 2007). The objective is to support SMEs by setting up a system for collecting and exchanging information on regional level and creating a network for private and public partnerships. The RIC project includes support to municipalities for establishment of one-stop-shops which will provide information and administrative services to SMEs, establishment of RIC web portal, assessment of training needs and training delivered by a Mobile education team. The other project targets SMEs from all sectors. This project is financed by the Spanish government and started in March 2008. The Project will last 2 years and the budget is 250.000 EUR. The project will provide training and consultancy services through voucher scheme in the amount of 100.000 EUR. Supply side intervention will include subsidized training and certification of 50 local consultants. Demand side intervention will be done by vouchers covering full consultancy/training costs for start ups and 50% of the costs for existing SMEs. The voucher scheme will be implemented by 6 selected business support centres in the region. The objective of this project is to transfer the voucher scheme to cantonal authorities, but there is no specific plan or agreement regarding this.

The agency REZ covers the region of central BiH and includes 16 municipalities, 15 from FBiH and 1 from RS. The agency implements a large number of small, short term projects with a focus on SME development. Most projects are financed by donors. Key activities are related to the implementation of regional strategy with REZ playing the role of facilitator and coordinator connecting all stakeholders. Priority sectors are wood, metal and agriculture.

Regarding support to SMEs, REZ implements different projects (mostly financed by Dutch donors). Five employees have been trained and they work as advisers for SMEs since 2005. Services provided to SMEs include consulting (business plans, promotion and marketing), connection with local and Dutch consultants and various information services on financial resources, legal rules, demand/supply. These services are free or priced below the market rates.

NERDA covers the northeast region of BiH and includes 34 municipalities in both entities. NERDA implements two CGFs (credit guarantee funds). Most of the activities and projects completed by now have not been sector specific. Services provided to SMEs include match-making with Italian and Dutch enterprises, promotion of trade fairs and support to start ups through 4 sub-regional offices with one or two employees.

A new project that started in 2007 is sector specific. The project is financed by SIDA (Swedish Agency for International Development and Cooperation); its duration is 44 months and the budget 3,1 million EUR. The major objective is to create conditions for increasing enterprise level productivity and to strengthen the role of local governments by creating an enabling environment. The additional objective is to strengthen the local market for consulting services through demand side intervention. Phase one of the project resulted in the

identification of the sector, enterprises and the municipalities with highest growth potential. The selected sectors are metal, food and wood industries. This means that the enterprises from these sectors will get consulting services and/or training financed partly by enterprises and partly by the Development Fund (to be set and managed by the project). Selected municipalities will also get assistance in form of capacity building and equipment, financed by the Development Fund. The total budget of the Fund will be 1,5 million EUR - 50% for enterprises' interventions and 50% for support to the municipalities.

SERDA includes 32 municipalities. It implements the largest number of projects among all RDAs. According to the information published in the media, in 2007 SERDA implemented 75 projects in the areas of business development, education, infrastructure and tourism.

Most of the projects and activities are related to the support of municipalities, through the implementation of infrastructure projects initiated by municipalities and support to 16 business centres, established and financed by municipalities (see next section). SERDA established and has been managing one business incubator. Thirty four enterprises located in the incubator are mainly in services or IT sector. Also, six sector development strategies were completed in 2006 and they provided the framework for several initiatives relevant for different sectors (F&V, milk, MAPs, industrial and business zones, rural development, and labour market).

Services available to SMEs (from all sectors) include training and financial services. Training sessions include topics such as export to EU, project management, computer training, training and certificates for in-enterprise HACCP consultants. All training courses are financed by donors or government institutions and are free for participants. Training courses are delivered by consultants and experts from other organizations. Financial services include credits based on two CGFs.

SERDA plays the role of focal point for coordination of activities and cooperation among governments (cantonal and municipality level), large producers, an employment agency, business support centres, Chamber of Commerce (Canton Sarajevo), Economic Faculty, technical schools and other key stakeholders.

#### **4.1.3 Business support services provided by development agencies and business support centres (BSCs)**

There is no institutional structure supporting development of the SME sector at state level. This has resulted in very different networks of development agencies and business support centres in FBiH and in RS.

In FBiH there is no agency on Entity level that supports development of the SME sector and coordinates work of development agencies and business support centres at lower levels. The FBiH Ministry for Development of Entrepreneurship and Craft is supposed to be leading institution in this field, but its work is mainly limited to the incentive policy and distribution of grants. Local development agencies have been established in just a few municipalities. Business support

centres are established in most municipalities. They are in most cases related to RDAs, which coordinate their work and provide the centres with technical assistance and staff training.

The institutional structure for SME development is much stronger in RS than in FBiH. Local development agencies and business support centres are in most cases related to the RS Agency for SMEs. The agency coordinates the work of all local agencies and centres.

Local development agencies play the role of focal points for all stakeholders, implement projects based on municipality development strategy and connect the private and public sectors. Business support centres provide services for start ups and for small enterprises. Legally, most of the local development agencies and business support centres are municipal offices and they are financed from municipal budgets. However, they also implement projects financed by donors, usually different kind of training courses. In general, all services are free and this approach limits the scope of their work. The cost sharing approach would enable business support centres and development agencies to provide more services and reach a larger number of SMEs. Their activities are usually not sector specific.

#### ***4.1.3.1 The RS Agency for SMEs***

The RS Agency for SMEs was established in 2004. One of their first activities was preparation of the Strategy for SME Sector Development. According to the strategy the priority sectors are agriculture, wood, metal, IT and tourism. The Agency has 11 employees and an annual budget of 450.000 KM, financed from the entity budget.

The Agency's major activities are related to the incentive policy and instruments, changes in the education system (for example, entrepreneurship is a new subject in middle and primary schools), support to the establishment and operation of University Banja Luka Entrepreneurship Centre, and the business incubator for new enterprises established by students. Additional activities include the initiative for the establishment of a Technology Innovation Centre (to be financed by Norwegian government), organization of SMEs trade fairs, round tables, regional conference of development agencies, and surveys on available locations for business incubators (in close cooperation with local agencies).

Incentive policy and instruments in RS changed in the previous period, from direct grants to enterprises (in 2005 and 2006, in total 330.000 KM; maximum amount 10.000 KM, 50 beneficiaries), to incentives for the establishment and initial activities of local clusters (in total 100.000 KM; maximum amount per cluster is 15.000 KM). Several local clusters in wood, solar energy, metal and MAP sector have used this incentive. A new initiative proposed for 2008 was the establishment of a fund for consulting services, based on cost sharing with enterprises. However, this initiative has not been accepted by the government.

#### ***4.1.3.2 Regional offices and regional business support centres***

The network supporting SMEs in RS include 4 regional agencies (not all established yet) and local agencies. The regional offices mainly support the

Agency for SMEs in the coordination of and support to local development agencies.

In FBiH, there is only one business centre at the cantonal level. This business centre was established by Canton Zenica-Doboj in 2003, as a local government department tasked with the support to enterprises. The centre has 5 employees and activities are fully financed by the cantonal government (approximately 600.000 KM per year). However, the centre also implemented a project financed by Italian funds. Focus of the project was establishment of business connections between the cantonal and Italian enterprises. The centre does not focus on any specific sector. Its activities include:

- Regional co-operation through trade fairs and business meetings connecting domestic and regional enterprises
- One-stop-shop, administrative services for established enterprises or start ups - all services of the cantonal government are provided to enterprises through the BSCs; information on all legal and administrative procedures and financial sources; approximately 120 clients per year (50% existing and 50% new enterprises)
- Analyses of barriers to business and drafting proposals for improvements to cantonal and municipal governments (related to building permits and procedures)
- Data base on enterprises/clients – 500 enterprises included
- Promotion of cantonal enterprises through joint promotional materials – based on cost sharing with enterprises.
- Implementation of CGF

In the region of Bihac, PLOD – the regional centre for business relations between domestic SMEs and enterprises from EU has been established in May 2008. The establishment and the first 2 years of operation will be financed by the municipality of Bihac (15%) and EU (85%), in total 182.000 EUR. The centre will focus on four sectors: wood processing, tourism, agriculture and construction. It will have 4 employees and the work will be supported by two municipality employees dedicated to co-operating with PLOD. The long term (after the project completion) sustainability and the scope of the work are not defined yet. The obvious dilemma is between regional or local development focus.

Out of five RDAs, only two, NERDA and ARDA have regional offices, with one to two employees. ARDA has three regional offices focused on cooperation with municipalities and implementation and monitoring of local development plans. NERDA has four regional offices which work as business support centres, providing assistance to start ups and preparing business plans for them.

#### ***4.1.3.3 Local development agencies (LDAs)***

In RS, 15 local development agencies have been established in larger municipalities. There are plans for establishment of several more during 2008. All local development agencies are financed by the municipalities.



Activities of local development agencies in RS could be illustrated by the work of PREDA, the local development agency in the municipality of Prijedor. This agency was the first LDA established in RS (in 2004) and is one of most active and best positioned within their local community and we can expect, or at least suggest, replication of their activities in other LDAs in RS, since all LDAs are connected in the same network led by the RS Agency for SMEs.

PREDA is financed by the municipality with a relatively small budget (90.000 KM annually), has 5 full time employees and usually 2-3 volunteers/students. PREDA implements or facilitates donor projects the budgets of which are used to cover implementation costs. All activities are closely co-ordinated with the municipality and PREDA plays the role of focal point for all stakeholders in economic development. The major tasks of the agency are:

- Promotion of entrepreneurship and start ups: a) training in entrepreneurship for students from high schools and business idea competitions; professors have been trained and the schools took over this activity; this is a low budget activity (3.000 KM) but very well accepted among students and the community; b) training in business plan development for start ups (160 participants over 4 years), coupled with grants provided by the municipality (grants have been given to 10 enterprises until now); business incubator with 4 manufacturing enterprises, premises costs are 50% lower than market price and enterprises get training services and advice from the PREDA staff for free; the incubator will be expanded with the support provided by EC (250.000 EUR).
- Capacity development of existing enterprises and connections with foreign suppliers and buyers: a) initiation of the establishment of 5 local branch associations (registered as NGOs) and their transformation into clusters; b) training courses, financed in most cases by donors and facilitated by PREDA; c) study tours, trade fairs and participation in all municipal missions abroad; d) incentives provided by municipalities for the introduction of international standards (in 2007 in total 35.000 KM, 12 enterprises introduced standards using the incentive).
- Support to potential investors and promotion of the municipality to potential investors: a) information and assistance in getting licences from the municipality; b) participation at real estate fairs; c) active search for investors and initial meetings and negotiations; d) promotion of investment opportunities based on territorial marketing.

In FBiH there are just a few LDAs and three of them are located in Canton Zenica-Doboj, in Zenica, Maglaj, and Zavidovici. The first established and most active is the one in Zenica, ZEDA, established in 2004 by the municipality with the objective to assist realization of the municipal development strategy. The agency is the focal point for local economic development and connects all stakeholders in the municipality. The agency manages one very successful business incubator with 30 enterprises that will soon be enlarged in order to accommodate 20-30 more start up enterprises. In addition to the support to enterprises located in the incubator, the agency organizes different seminars for SMEs.

#### **4.1.3.4 Business support centres (BSCs)**

Most business support centres in FBiH have been established in municipalities on the initiatives from RDAs and with their technical assistance.

SERDA initiated and provided support to 16 BSCs in its region, most of them in 2005. These centres are financed by municipalities and have one to two employees. The BSCs provide advisory services to SMEs, mostly to start ups and individual farmers in the following areas: assistance with business registration, credit applications, business plans, market information, information on available credit lines and education, mostly in basic computer skills. Their major targets are start ups and all services are free of charge. SERDA still provides support to staff capacity building in BSCs and coordinates their work and information exchange. The scope of services could be assessed through the services provided by BSC Novi Grad (Sarajevo) in 2007:

- Support with business registration for 25 start ups
- Support with finding financial resources for 35 small enterprises and start ups
- Support with market research (mainly for business plan preparation) for 26 start ups
- Business information and advice to 110 start ups and small enterprises
- Total number of visits to the BSC during the year was 276 (less than two per working day).

In the region of REDAH, there is one business support centre, for the city of Mostar, providing basic support to start ups (information, business plans, credit applications). Two new business support centres will be established in Jablanica and Trebinje. REDAH has initiated establishment of 22 business info centres in the municipalities of their region. Their services include only provision of information on legal and administrative requirements and available financial sources.

One specific business support centre was established at the University Tuzla in 2004, financed by the Austrian government. Targeted beneficiaries are students and the services offered are training in basic business skills and technical assistance to 20 new enterprises established by students. The centre has three employees. The idea behind the project was that University of Tuzla would finance the centre after project closure (in 2009) but there is no specific agreement about this.

#### **4.1.4 Business support services provided by Chambers of Commerce (CoCs) and associations**

The system of Chambers of Commerce in BiH includes the following 19 CoCs: one state level chamber – the Foreign Trade Chamber of Commerce (FTC), two entity level chambers and the Chamber of Commerce of the District of Brcko, five regional CoCs in RS and ten cantonal CoCs in FBiH. This system experienced major change in 2004, when all chambers except the state level FTC became voluntary. This transformation resulted in a decrease in the number of members and consequently in income based on membership fees. Because of

that, CoCs had to focus more on services provided on commercial basis. In the process, several cantonal CoCs in FBiH and regional CoCs in RS lost the majority of their staff and they merely survive without any real activity. There are expectations that the legal position of CoCs will be changed again, including introduction of obligatory membership. This change will not be welcomed by the enterprises, especially the SMEs and will result in a new shift in priorities of CoCs from commercial services and advocacy to lobbying relations with the governments.

CoCs offering most services for members / enterprises are FTC, RS CoC, two regional CoCs in RS (Banja Luka and Bijeljina), and 5 cantonal CoCs in FBiH (the Chambers of Sarajevo, Tuzla, Bihac, Mostar and Zenica). The CoC of Brcko District has only three employees and their activities are mostly based on voluntary work. CoCs are horizontal associations and SMEs from all sectors can benefit from their services. The major services are training courses, very often in the field of international and EU standards and EU legislation and general management skills. These services are in most cases offered at competitive prices. Demand from enterprises is increasing with a relatively high level of repeat clients. Also, CoCs organize joint visits and exhibitions at trade fairs, assisting with preparation of promotion materials and enterprise catalogues. These services are usually based on cost sharing and often with co-financing from donor projects. The only CoC that provides consulting services to enterprises is RS CoC. Several staff are educated as consultants specialising in international standards. They work with enterprises charging prices below market level.

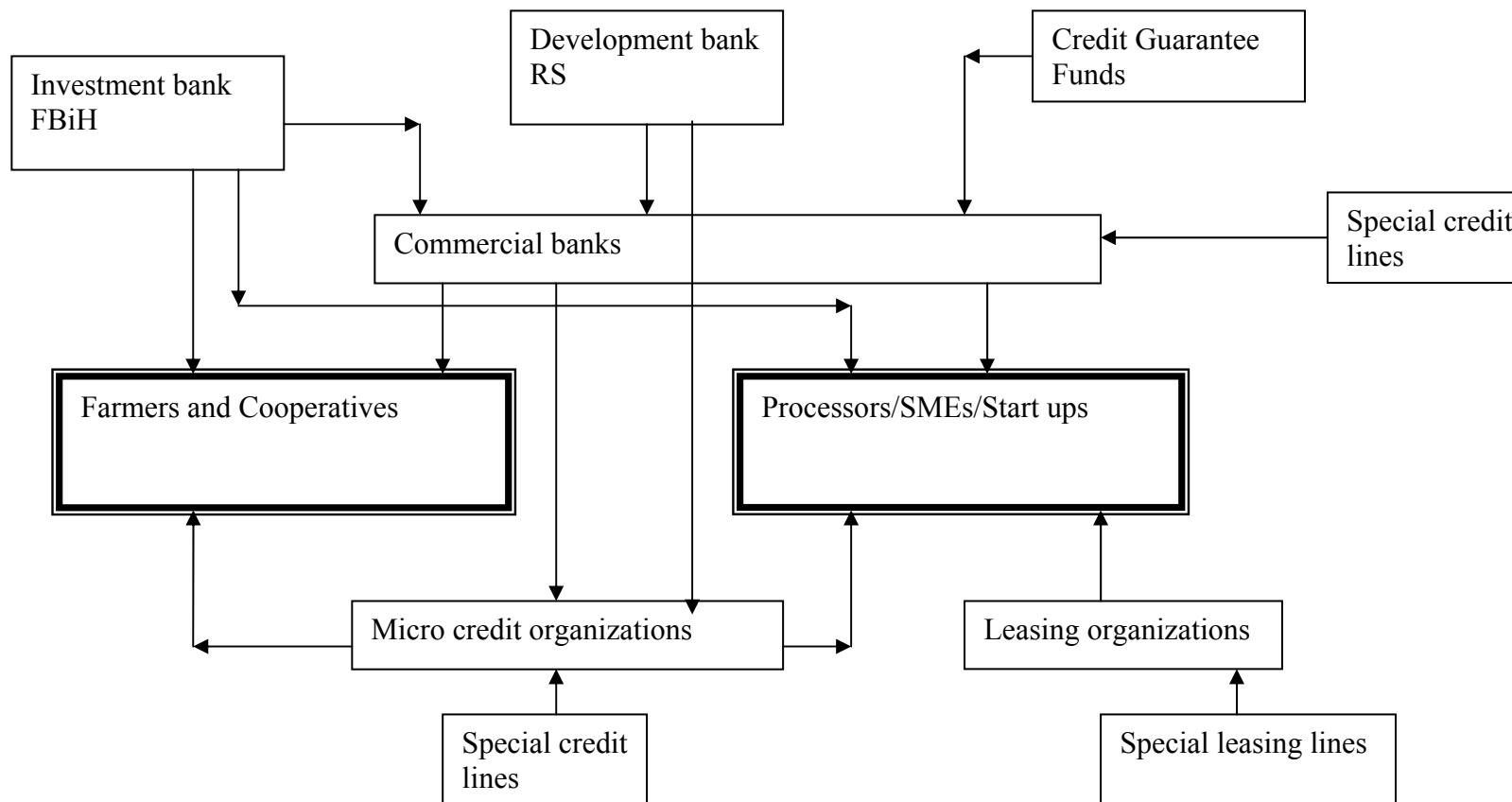
Services provided by FTC are mainly focused on export promotion, participation in trade fairs, information on foreign demand and business missions to other countries. Since 2006 EICC (European Information and Communication Centre) works within FTC. It is financed by EC (70%) and the chamber (30%). Its major task is to help enterprises to make EU contacts and search for business partners. In 2007 more than 220 enterprises asked for some kind of assistance. However, most activities are related to training seminars (usually provided for free or at very low prices) and information dissemination via monthly newsletters (1.700 copies distributed to enterprises monthly). Training on HACCP and CE mark attracted a large number of enterprises in 2007. Recently, the Export Promotion Agency has been established within FTC. EU EXPRO I project supported the agency in the preparation phase, and a new EU EXPRO II is expected to start soon with the focus on institution building. This project will also work with 22 enterprises within the selected priority sectors of food and drink, timber and wood products and metal (rather automotive) sectors.

Voluntary business associations do not have a long tradition in BiH. Most of them have been established after 1996 based on different donor's initiatives. Generally, they are weak, with small number of members, inadequate financial and staff resources, low reputation among enterprises and low advocacy power. Just a few of these were successful and financial sustainable able to maintain membership and continue their activities after the donor support ended.

#### **4.1.5 Business support services provided by private service providers**

Regarding business services for SMEs, many donor projects have supported development of private sector advisors, implementing different projects dealing with the weaknesses of demand and/or supply side of the business service market. In general, the accomplished results are far below expectations or stated projects objectives. However, there are many indications that demand, especially by medium size enterprises is increasing and many consultants that used to be employed or engaged by donor projects can sell their services at full price. Supply is especially strong in general management skills and is increasing in international standards (ISO, HACCP, CE mark). These are the subjects where donors have provided extensive capacity building for local consultants.

## Diagram of financial institutions



#### 4.1.6 Finance provided by development banks

The Investment-development bank of RS was established in 2006. There is no development bank in FBiH. The State owned Investment bank of FBiH performs some functions of a development bank. The proposed new Law on the Development Bank of FBiH has been accepted recently and transformation of the Investment bank into a Development bank is expected soon.

The Investment-development bank of RS manages two credit lines for enterprises and entrepreneurs (total amount for 2008 is 80,4 million KM), two lines are for agriculture (total amount for 2008 is 71,6 million KM), one for apartments and one for local communities. The total amount for all 6 credit lines for 2008 is 122,6 million KM. The implementation of these credit lines is performed by six commercial banks and three micro credit organizations. The total loan amount planned for all these lines is 668 million KM, for the period 2007-2010. Criteria are defined by RS Government and the government also decided on interest margins of 2.8 to 3.6%. The terms for the credit lines are the following:

- For start ups, max. 30.000 KM, 5 years, grace 6 months, interest rate 7,13-7,33%, depending on the location, amount for 2008 is 12,9 million KM;
- For entrepreneurs and enterprises, max. 5million KM, max 15 years, grace max 18 months, interest rate max 6,03%, special incentives for underdeveloped areas (5,83%), processing industries (5,73%), members of clusters (5,73%), exporters (5,03%) and tourism (5,73%), amount for 2008 is 67,5 million KM;
- For micro business in agriculture (for registered farmers), max 50.000 KM, max. 10 years, grace period up to 36 months depending on type of production, interest rates 7,33%, for cluster members 7,03%, amount for 2008 is 25,8 million KM;
- For agriculture (legal entities), max 3 million KM, up to 5 years, grace period up to 36 months, interest rates 5,73%, for cluster members 5,43%, amount for 2008 is 45,8 million KM;
- For apartments, max 100.000 KM, up to 20 years, no grace period, interest rate 6%, for young educated couples 4,7%, total amount for 2008 is 14,6 million KM, amount for 2008 is 56 million KM;
- For local communities, for local infrastructure, up to 3 million KM, up to 10 years. Grace 6 months, interest rate 6,73%, for undeveloped municipalities 6,53%, total amount for 2008 is 14,6 million KM.

All terms of loans, approved credits, available funds and application forms are posted at the web site.

Investment bank of FBiH carries out its operations directly and through commercial banks. Four credit lines are in implementation:

- For production and services, interest rate 5%, grace period max.1 year, maturity max. 7 years;
- For agriculture production, interest rate 4%, grace period depends on the type of production, maturity max. 7 years;
- For export, revolving credit, interest rate EURIBOR+1%, no grace period;

- For employment, terms for agriculture are: interest rate 3%, grace period 1-2 years, maturity max. 7 years; terms for industry and services: interest rate 4%, grace period 6 months, maturity max. 5 years; max amount is 500.000 KM, that is 10.000-25.000 KM per job.

A general impression of those interviewed is that both banks are not transparent enough and that approvals are based on political and economic criteria. Also, approval processes are long. The critics are much stronger regarding the Investment bank of FBiH than regarding the Investment-development bank of RS.

#### **4.1.7 Credit guarantee funds (CGFs)**

All credit guarantee funds in BiH operate in the same way: founders provide deposits and guarantee up to 50% of the credit amount. Partnering financial organizations provide credit lines from their own funds in the amount 2-5 times of deposit. Interest rates and collateral terms are more favourable than for regular credits offered by commercial banks. Approval procedures are usually done by financial organizations and final acceptance by fund management. The maximum credit amount is usually 50.000 KM and for some funds 100.000 KM.

The first credit guarantee fund was established in Brcko District in 2003, in order to support agricultural producers. The fund was increased in 2004 and targeted individual farmers and SMEs. The new cycle has started in 2008, with a total deposit of 1,300.000 KM provided by the government. Credit lines have been increased (deposit multiplied by 3 to 5) and four commercial banks were selected as implementers. Agreed terms are: interest rate 7.5%, the amount up to 100.000 KM, maturity up to 5 years. Clients will be agriculture producers with registered farms, SMEs and workshops. The banks process applications, make preliminary decisions and the fund management board makes the final decisions. The number of approved credits has been 150-200 each year. Clients are mainly from agricultural and trade sectors.

The next credit guarantee fund was introduced in 2004 by USAID in order to increase financing opportunities for agricultural producers and SMEs from sectors supported by two USAID projects (agriculture by LAMP and wood and tourism by CC – cluster competitiveness). USAID guarantee of 50% of the principal of loans issued through selected commercial banks and banks provided special credit lines from their own resources. Three commercial banks implemented the scheme, UPI, Zagrebacka banka and Volks banka. However, the expected change in the bank's approach toward agricultural producers and SMEs has not been seen and banks applied the same collateral requirements and interest rates as for their regular offers.

Also in 2004, a CGF was established in Mostar with a deposit of 300.000 KM provided as a donation (Italian). A credit line of 600.000 KM has been implemented by UniCredit and the fund has been managed by LINK, the entrepreneurship and job association from Mostar. The users have been members of the association. The fund has been increased in 2008 with additional deposit provided by the city of Mostar and the cantonal government. The total credit line now available is 4,6 million KM. Interest rate is 7%, the grace period is 6 months,

the amount up to 50.000 KM, maturity up to 5 years. Most users have been established SMEs (81%) and only 19% start ups. The agricultural producers do not use this opportunity because of the short grace period. The role of LINK is the identification of potential clients, preparation of business plan and credit application, and credit users pay to LINK 1,5% of the credit amount.

Special CGF for youth was also funded by an Italian donation. Eligible clients are individuals younger than 35 year and start ups. Credits amounts are from 5.000 to 30.000 (20.000 for start ups), interest rate 6,2%, grace period 6 months (9 months for agricultural producers), maturity 5 years. The fund covers the whole BiH and it is managed by LINK Mostar, SERDA Sarajevo, NERDA Tuzla, NGO TALDI Tuzla, MCO Sinergija Banja Luka and NGO CeBEDA Travnik. These organizations provide assistance in the preparation of business plans and applications and charge 1% of the credit amount for their services.

SERDA established one regional CGF in 2006, with a deposit of 1 million KM and a credit line provided by Zagrebacka banka in the amount of 3 million (to be increased to 4 million KM soon). 48% of users are farmers.

The success of the first established CGF has increased the interest of the governments as well as processors of agricultural products in providing deposits. Banks are also very satisfied with this instrument and they have started providing larger credit lines with lower interest rates. New funds have been established in Canton Zenica-Doboj (500.000 KM as deposit, credit line 1,5 million KM), in the municipality of Novi Grad Sarajevo (200.000 KM as deposit, credit line in the amount of 600.000 KM with interest rate of 5% for farmers), municipality of Prijedor (deposit of 600.000 KM, credit line in the amount of 3 million KM for agriculture and SMEs), NERDA, cantonal government and the municipality of Tuzla (deposit 600.000 KM, credit line 2 million KM, for SMEs and craft, interest rate 6.6%).

LINK has initiated informal network of CGFs in order to involve other institutions, increase number of funds and deposits and provide more favourable conditions for users, mainly SMEs.

#### **4.1.8 Commercial banks**

The banking sector in BiH is well developed and mainly owned by large foreign banks. The concentration is relatively high and 10-15 banks control over 90% of the market. The two largest banks UniCredit and Raiffeisen, control close to 50% of the sector.

The sector is characterized by high growth rates an increasing supply of credit, decreasing interest rates and increasing participation of personal loans in the banks' credit portfolios.

Regarding loans offered to SMEs, there are constrains on the supply as well as the demand side. Constrains on the supply side are not related to the lack of available loans but to the terms and conditions that clients have to satisfy in order to be accepted by banks and to the level of interest rate (about 9%). Major obstacles are



related to the requested collaterals and short grace period. The weakness of the commercial banks, very often pointed out by enterprises, is that staff has inadequate knowledge on the specific characteristics of SMEs and that is why banks do not offer credits tailored to the needs of SMEs. An additional barrier is that banks favour larger credits that are above credit capacities of small enterprises. Major demand side constraints are business skills of SMEs that limit their capability to develop and present reliable business plans and business strategies.

Among commercial banks, ProCredit Bank and Volksbank have the most experience in financing small enterprises. Comparing these two banks, ProCredit bank offers more favourable conditions regarding collateral, duration and grace period, tailoring them to the client's situation and charging interest rates between 10,5 and 18%. On the other side, Volksbank charges a lower interest rate to borrowers (9,5%) but has tighter conditions on collateral.

Local governments provide interest rates subsidies to SMEs resulting in an interest rate of 6%. Although this subsidy has increased use of credits offered by commercial banks, the application procedures are complicated.

Most commercial banks are becoming more involved in the micro finance sector, either directly by down scaling their offer or indirectly by financing micro credit organizations. The banks' advantage is related to the interest rates which are much lower than the rates charged by MCOs, but the MCOs have advantages regarding requested collateral and other conditions.

#### **4.1.9 Special credit lines**

Special credit lines are financed by donors and different levels of local governments. They are implemented by commercial banks and/or MCOs. Most of them target SMEs. Sometimes commercial banks add their own funds to increase the credit line.

The EFSE (the European Fund for Southeast Europe) is one of the major providers of long-term funding for local financial institutions lending to micro and small enterprises and to households. Partnering lending institutions in BiH are eight banks (including ProCredit bank) and seven MCOs. IFC and EBRD also support the financial sector with different credit lines and financing facilities in order to strengthen credits for SMEs and assist development of other financial instruments (leasing, factoring and mortgage credits).

In many cases these special credit lines increase the banks' offer for SMEs, but do not result in changes in procedures and terms. This means that they do not create more favourable conditions for clients.

Special credit lines funded by local governments and implemented by commercial banks and/or MCOs in most cases provide credits under more favourable conditions. Recently, the government of the Canton Sarajevo funded a new credit line (to be implemented by Nova Banka Banja Luka) in the amount of 7 million KM, with interest rate of 2%. Eligible clients have to be located on the territory of

the Canton. The municipality Centar Sarajevo and Raiffeisen Banka Sarajevo funded a special credit line in the amount of 1 million KM with an interest rate of 6%. City Banja Luka and NLB Banja Luka funded new credit line in the amount of 4,5 million KM with interest rate of 6,5%.

#### **4.1.10 the providers of financial services**

Among other financial service providers, micro credit organizations are the most active in financing start ups and SMEs. Leasing and factoring are still not important financial instruments for these market segments.

The micro credit sector in BiH is sophisticated and well developed. The sector's development was launched in 1996 with the support of the World Bank (WB) and international NGOs. Thanks to valuable technical assistance, provided by WB and numerous other donors, most MCOs are well managed, implementing most industry best practices and are among the strongest in Eastern Europe. The sector is characterized by high growth rates, increases in number of offers and maximum credits, increasing competition and concentration through merges. Similar to commercial banks, most MCOs are partner lending institutions of the European Fund for Southeast Europe (EFSE). Also IFC, EBRD, and local commercial banks provide funds for MCOs.

The new micro financing laws were adopted in 2006 in both entities. During 2007, MCOs had to register under the new laws as non-profit foundations and then to create a for-profit shareholder enterprise - in both cases as non-deposit taking financial organizations. Most MCOs will register as enterprises during 2008, since they have accumulated sufficient capital to satisfy legal requirements pertaining to minimum capital. That status will allow them to open their capital structures to investors and they will be able to offer larger credits than foundations (EUR 25.000 vs. EUR 5.000). Credits lower than 25.000 EUR will be the market segment where MCOs will continue to have advantages over commercial banks.

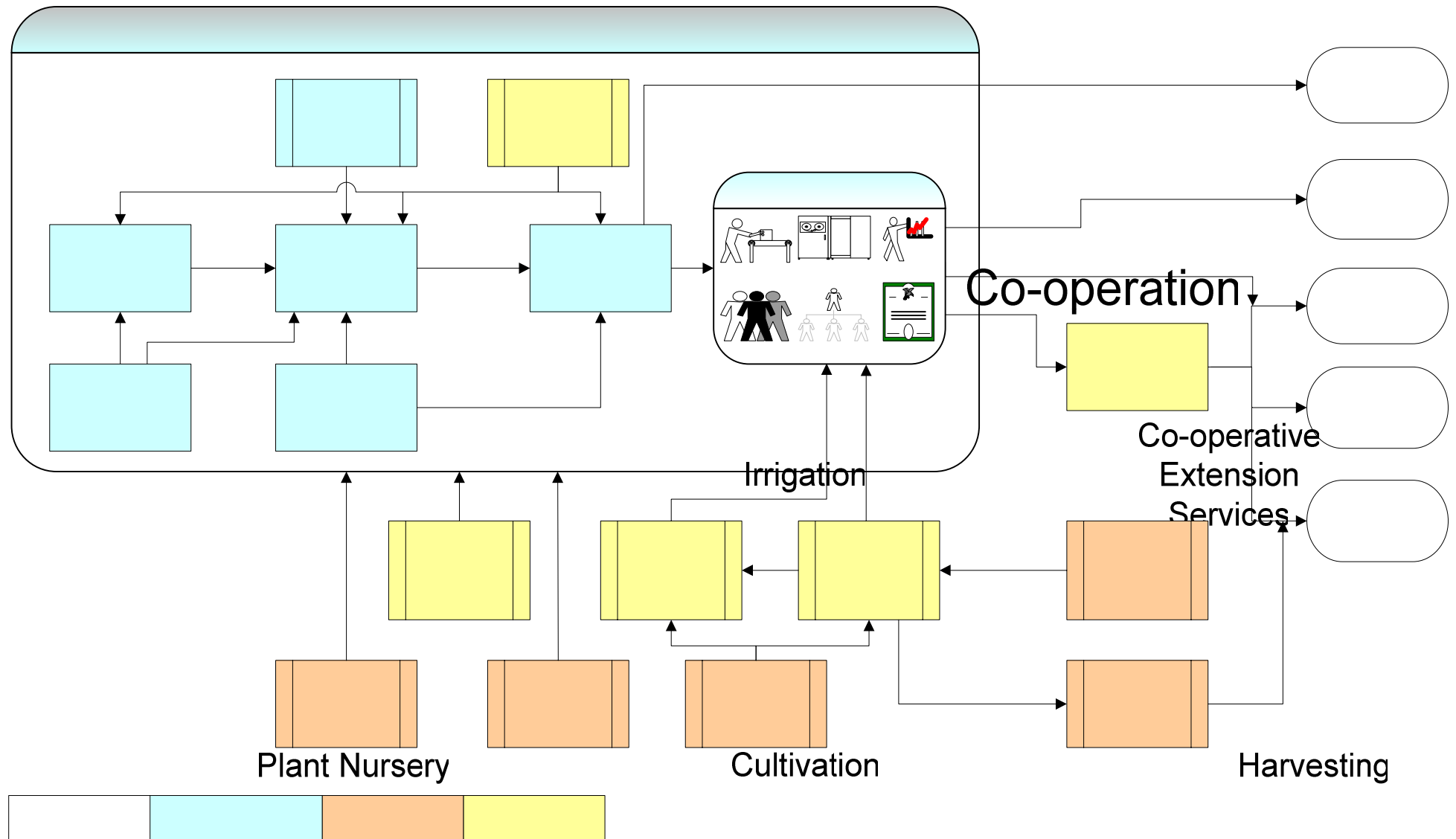
The recent legal changes resulted in further consolidation and commercialization of the sector. The number of MCOs decreased, since some of them couldn't satisfy legal requirement for registration (14 MCOs in RS recently were closed). However, the sector has continued to grow. The growth rate in 2007 was 80% for the whole sector.

Leasing is a relatively new financial instrument, with which SMEs are not familiar. This is a fast growing sector in BiH. The major barrier to SMEs is the request for 10-12% own financing. On the other side, leasing enterprises find individual sectors and stronger enterprises to be the most attractive segments, showing less interest to enter the lower end market segments. Micro leasing is not used. This could be an opportunity for MCOs to act as agents for leasing enterprises that want to reach the low end of the market. A new financing provided in May this year by EBRD to Raiffeisen Leasing in the amount of 10 million EUR has to be used for SMEs from all sectors. Defined types of leasing contracts are micro lease (maximum amount of EUR 10.000) and small lease (maximum amount of EUR 125.000). The expected average is EUR 50.000. This

will increase the offer to SMEs, but the same conditions will be used as for other leasing agreements.

Factoring has been introduced in BiH recently. This instrument is still not legally regulated. The state owned export credit agency, IGA, provides export credits and specific factoring services, but both services are provided in small amounts and don't play an important role. Recently one Slovenian factoring enterprise (Prvi Faktor) has registered its enterprise in BiH and one bank (FIMA) announced introduction of factoring. Because of the high costs attached to this instrument it is not expected that it will be accepted and used by SMEs soon.

## 5. Value Chain Analysis of the Fruit, Berries and Vegetables Sub-Sector



## Analysis of the Fruits, Berries and Vegetables Value Chain constraints to competitiveness

In a sector which was for many years protected in a closed economy there are potential productivity gains and opportunities to move the higher value added products throughout the Value Chain. The main figures of the agriculture sector are tabulated below.

<b>Agriculture</b>	<b>Results</b>	<b>Remarks/Growth Rate</b>
Number of enterprises	3,308 processors + 500,000 farms	High potential growth rate
Total Employment incl. NOS	21,100 + the farms	80% being in rural areas promises high potential rural employment generation
Domestic sales '000 KM	1,255,000	High Growth rate
Export Sales '000 KM	270,000	High growth rate, 18% in 2007
Total sales '000 KM	1,525,000	High Growth Rate
Share of GDP	10% + 12% NOS	
Competitiveness	Medium	In Fruit & berries and Vegetables
Potential increase of MSME income by production increase	High Potential	Only if export potential is realised

*The information in this table is obtained from the referenced reports and is mostly from 2006, but some are older. They are not very precise and they should therefore be used as indicators only.*

### Objectives for taking the sub-sector forward

To support increased productivity, move to higher value production and increase exports to the EU and regional markets.

### Basic conditions

The climate, the good soil and the relatively cheap labour compared to most EU countries certainly increases the possibility for achieving competitiveness of a number of products. Fruits and (some) vegetables and berries already have a competitive advantage, notably paprika and wild berries. It should be possible to transform other products of the sector to higher value added products with a competitive advantage.

The most important trading partners, for both import and export, are the neighbouring countries Croatia, Serbia and Montenegro. BiH Processors with the appropriate certifications also export to a few EU countries (Slovenia, Germany, Denmark, Holland a.o.).

Most of the primary and processor production units aim their efforts at the domestic and regional markets. It seems to be an ingrown attitude and in addition there appears to be widespread lack of market and marketing knowledge exacerbated by deficiencies in foreign languages.

### Strategic options

For BiH to compete in the EU and increase export and import substitution, productivity has to be strengthened by the production units of both primary and processor levels supported by the public as well as the private sector support systems (see 6.1 Value Chain F&V). Most of the processing units are not strong enough to gain effective market access and carry out support marketing to increase sub-sector profitability, so some form of marketing co-operation would

be required. This could be achieved e.g. by setting up a (co-operative) national marketing organisation or by forming alliances with (EU) companies already established in the EU market.

### **Overall Value Chain constraints on competitiveness**

The present land distribution where 80% of the farms are of an average of 4.3 ha prohibits economies of scale. The necessary policy framework supporting the land redistribution is not yet complete and even if it were it would take a long time to redistribute land as it would have to be driven largely by the market forces. This may actually turn out to be a good short term opportunity as it forces the small holders to produce products with a higher value per ha. To advance the sub-sector in the longer term and make the products competitive in a world of increasing buyer power it would, however, be necessary to undertake long term structural changes to bigger enterprises.

Primary as well as processing units are not very well aware of how serious a constraint lack of quality and safety certification can be to access EU and other sophisticated markets. This is probably to some extent due to their orientation towards regional markets where the public demand for certified and properly declared contents of products is not very loud. The lack of public awareness campaigns also plays a significant role.

There is a lack of institutions for the provision of a supportive public environment in areas such as permits, farm registration, sanitary and phytosanitary regulations, HACCP, ISO etc. of the processors. The experience of the few enterprises already having HACCP and ISO certifications is that there are no accredited certification institutions in BiH and there is a lack of qualified consultants to assist with setting up the systems. Consequently the enterprises have to get assistance from abroad for both design of the systems, training and certification.

It constrains the sub-sector that there is no well staffed and well funded technological institutions to support primary and processor level product and production development nor are there enough well functioning extension services to disseminate results and train and support the growers with technical and marketing advice. Five extension centres are operating quite well in RS while the 10 Cantonal centres in FBiH are assisting mainly with administrative issues.

The lack of brand development and investments to increase the level of technology to produce novel products addressed to the EU target markets and achieve economies of scale hampers the ability to export.

The home / regional markets orientation seemingly caused by the attitude and lack of knowledge on the part of management of, in particular smaller processors unduly inhibits the development towards increased exports.

The organisation of the primary part of the sub-sector into small farm unit constrains their development in several ways. On the supply side it prevents them from obtaining inputs such as seeds, seedlings, fertilisers, pesticides and herbicides and any other input at prices which can compete with bulk buyers.

Furthermore the seedlings are often of a poor quality resulting in use of excessive herbicides and low output.

On the output side the small farmers are unable to negotiate good prices against; in particular, larger processors when there are no alternative buyers in their vicinity. Some of the larger processors have smartly formed so called supplier co-operatives of which they own the majority share enabling them to fully control the grower's prices and delivery terms without having to bother negotiating with them individually. In return the growers get a 10 year supply contract.

Processors, even the larger ones are dwarves compared to potential export customers be it very large EU importers / wholesalers or very large retail chains. In addition, the competition from other Balkan countries and China is fierce although the Chinese quality is said to be inferior. They thus have very little influence on prices, delivery conditions or payments. The problem is exacerbated by the BiH processors lack of proper certifications to prove their quality and production conditions. This is of particular importance for organic production in which BiH has the potential to achieve competitive advantages.

### **5.1.1 Product, production, supplies and infrastructure berries, fruits and vegetables**

#### **Constraints in production of primary supply products**

To understand the product and production constraints we need to analyse both the processing plants and the input factors, in particular the supply of fruits, vegetables and berries and the major underlying conditions for their collection / cultivation.

Due to the excellent soil and climatic conditions the raw materials i.e. vegetables, fruits and berries (wild as well as cultivated) are said by the sub-sector participants to be of relatively high quality or at least to have the potential for high quality if managed correctly.

Given the present (and future) world shortage of food stuff driving up the prices the quantity of cultivated vegetables and fruits presently produced fall far short of EU demand and thus offers a very good opportunity for export – again under the assumption that the export conditions are in place.

BiH is well positioned to produce healthy and good standard as well as organic food products because of its traditional agricultural practices (use of natural fertilizers and little use of artificial herbicides and pesticides) and some BiH-produced berries, fruits and vegetables have been tested with good results to qualify for organic specialty products in Western Europe.

Unfortunately most farmers and processors do not have the necessary control system installed and the public certification and control system is not yet in full operation making it necessary to pay excessive prices to get certified by accredited institutes in Macedonia, Germany, Switzerland a.o. Only few BiH consulting enterprises are fully qualified to assist the enterprises in building up the control systems leading, in many cases, to payment of high prices for poor quality work.

To achieve top quality and the highest prices a stricter (EU standardised) sorting and grading system would be needed in all but the most advanced enterprises which are already exporting significant quantities to the EU.

The BiH forests and other untilled land's supply of wild berries are insufficient even for the present production level leave alone the potential demand of the EU market if the export support systems were in place.

There are severe structural and organisational issues hindering a rational and competitive cultivation of larger quantities of fruit and vegetables. The small size of private farms (80% average <5 Ha) results in far too small primary production units for efficient, modern fruit and vegetable production. At the root of the problem is the lack of land redistribution and restitution and low productivity.

The low productivity due to less efficient management, inability to buy healthy seedlings, the lack of adequate equipment for efficient production, lack of purchasing power of individual farmers and higher wages results in high production costs compared with neighbouring countries. For the same reasons the yields of fruits, vegetables and (cultivated) berries are low in BiH compared to EU15, Poland, Bulgaria and Romania and other countries in the Balkan region such as Serbia and Croatia. It seems that there is a lack of organisation of the farmers into some form of purchasing units on the supply side and sales units on the output side to strengthen their purchasing and sales powers against bigger processors.

Output from existing plantations could be improved by irrigation systems and it takes anywhere from one to three to five years to increase output of fruit and berries by planting new bushes and trees. Both actions require investment and working capital at prices which the growers can pay from their returns and under reasonable collateral and payback conditions. Particularly the smaller growers have problems obtaining capital, but even the larger ones who can get capital complain of the cost.

#### **Constraints on infrastructure**

The logistics infrastructure such as vehicles and roads to access, in particular, the smaller farms are often of a very poor quality resulting in damage to the produce before it reaches the processing plants. The resulting losses could be quite high.

#### **Constraints on processing**

There are around 15 medium size F&V processing units and a larger number of smaller ones. Many of them are limited by outdated equipment in particular cooling equipment resulting in lower machine productivity compared to their strongest EU competitors. This is compensated by lower wages, but in most cases the resulting production prices are still higher than their strongest EU and Balkan competitors.

To encourage investments there are tax incentives to a varying degree. It is helpful but not sufficient to get processors to invest in adequate machinery and equipment. Consequently the machine park is getting outdated.



The balance of trade in fruits and vegetables is grossly unfavourable and there seem to be a lack of effective product and production strategies to improve raw materials and production in time for the tougher competition from EU enterprises. In-plant quality standards need to be improved by sorting and grading raw materials at plant entry point.

Many factories need professional production management systems and modern computer planning and operations systems.

Variation in supplies due to the seasons and lack of cooling warehouses cause great variations in capacity utilisation and employment over the year. This is costly and interrupts production as well as relations with sales channels.

#### ***5.1.1.1 Conclusions and recommendations – products, production, supplies and infrastructure***

Land redistribution to achieve larger farm sizes is important for the farmers to obtain the necessary productivity gains as wages and salaries grow. Supporting policies, laws and strategies should be made and implemented a.s.a.p. to start this very long process. While waiting for the redistribution it is recommended to introduce a short term strategy to support the farmers in moving to crops which are not so sensitive to land size such as paprika and berries and the use of hot-houses which are less dependent on large scale farming.

The constraints of the small farm size could also to some extent be alleviated by farmer owned and professionally managed collective agricultural co-operatives and extension service centres offering technical expertise, purchasing / sales and production / cultivation co-operation at the farm level. Some co-operation in the form of co-operatives has already been established and some of these are functioning well, but most of them need modernisation of scope, objectives, strategies, organisation and management to make them efficient and worthwhile for the farmer to use. Extensive use of farmer co-operatives would be the ideal organisational form to achieve buyer power on the supply side as well as seller power of the output delivery side. In most EU countries voluntary farmer managed co-operatives have been very successful and very popular for more than 100 years, but due to the recent history of forced, government managed, so-called co-operatives that form for co-operation is likely to be difficult to achieve in BiH.

Awareness campaigns should be run to raise the awareness among enterprises and customers of the importance of quality and safety certifications for access to EU and other markets.

The Quality and safety institutional system including accreditation of the national accreditation institutes and training of staff for these institutions should be finalised.

At least one agro-technological institute should be supported to enable it to carry out research needed for improving the competitiveness of both farmers and processors. It is suggested that the country's extension services be built around this institute which should subsequently train extension service centre staff and act as technological and if capability is build also as marketing back up for these.

To encourage investments there are tax incentives to a varying degree. It would be helpful and further encourage investment in machinery, equipment and in particular cooling facilities if the Tax Authorities would accept extraordinary favourable depreciation schemes. Better conditions should be introduced for plant and machinery funding including favourable interest rates, reasonable collateral requirements and simplified loan applications procedures in combination with effective guarantee funds and insurance schemes. Until investments in cooling systems have been made costly overcapacity due to lack of raw materials out of season would have to be compensated by alternative production or cooling or other preservation capacity or import of raw materials, provided it is feasible.

To alleviate the low quality transport infrastructure possible alternative logistics systems from farm to processor to market should be analysed.

Professional production management capability and IT systems need to be developed and improved to optimise production equipment and achieve higher productivity on upgraded production equipment as it is not sufficient to invest in new production equipment if it is not utilised by good management.

### **5.1.2 Human resources – fruits, berries and vegetables**

There seem to be no shortage of berries collectors as sufficiently many rural families have been collecting berries for generations and are very skilful and knowledgeable of the whereabouts of the best collection areas.

#### **Human resources constraints hampering primary production**

The growers employ mostly unskilled workers and train them on the job. With increasing sophistication of hot house growing technology there may be an increasing need for training.

USAID LAMP has trained 35,000 farmers and growers, but most of the remaining ones are ignorant of best growing practices and modern production methods which seemingly hampers efficient cultivation and yield significantly.

#### **Human resources constraints at processors**

Workers for processing plants are trained on the equipment by their peers and foremen or in case of new equipment by the equipment suppliers. Even though the nature of production is such that during the peak production season, three times the normal work force is required, there is generally no shortage of qualified workers.

Most enterprises are run by technical managers and foremen who are good at agricultural processing technology and acknowledge the need for sales managers and sales staff, but lack a deeper understanding of modern marketing and management. It seems that many of them lack the professional marketing and management overview and vision necessary to develop effective competitive strategies and business and marketing plans which would contribute effectively to enterprise growth in an increasingly competitive EU environment. The medium size enterprises require at least one top manager and in particular a well educated

marketing manager and in larger enterprises a finance manager who can manage in an environment with ever increasing competition in the retail sector. Finance and accounting are not always using modern information systems and pricing is mostly based on a cost plus calculation. When these enterprises calculate their basis for expansion they might therefore base their financial decisions on the wrong data.

The smaller enterprises could not afford to hire a full time marketing / sales person. This requires the owner / manager to carry out this function, but he / she is usually product / production oriented and thus not minded for marketing with the result that the area is not optimally managed.

Many of the top leaders of the enterprises are not familiar with modern management / leadership styles including strategy and marketing planning.

Most of the present managers and nearly all staff over 30 years of age lack the ability of understanding and speaking / writing English and other foreign languages.

#### ***5.1.2.1 Conclusions and recommendations – human resources***

A significant increase of production using more effective production systems such as intensive green house production, use of more sophisticated machinery in production and quality assurance systems should be supported by setting up an education program in food production and processing for farmers and potential foremen and quality inspectors at vocational schools. Extension centres should be able to train farmers in best farming practices and offer continuous training in new technologies.

Presently universities are asked to carry out all kinds of training, but they are not ideally suited for offering effective training of a practical nature needed by marketing staff and young managers with a production /product background. The relief of the lack of marketing skills in SMEs therefore calls for short and medium term training and supportive mentoring over perhaps 6 to 12 months by part time extension training institutions.

To learn at least English at high level is a must for doing business in the EU and world business environment and a special effort should be made to basically teach everyone who need to get in touch with or draw information from outside BiH. It would not be a bad idea to teach them service management in connection with the language courses.

The top leaders of the enterprises need to modernise their management / leadership style and learn to make formal strategy and marketing planning.

#### **5.1.3 Marketing – fruits, berries and vegetables**

BiH is a considerable net importer of agricultural products. The type and variety of most imported products are to a large extent not produced in BiH, but many of them could in a few years be produced competitively within the country to substitute imports provided that the sub-sector change as outlined in section 6.2.2 above.

### **Constraints on effective marketing**

Market access (to EU markets) is in most enterprises hampered by lack of appropriate certification (HACCP, ISO etc.).

Much of the needed market, customer and competitor information can be found in different market data bases on the internet and in business directories, but most enterprises lack a marketing function which could search and analyse market information in a professional way. Even larger enterprises have only one or a few salesmen, but rarely a marketing and language (English) trained person. They usually have no (written) marketing plan with a marketing strategy, spelling out which markets they should attempt to enter with which products, at which prices, distributed through which distribution channels, supported by effective promotional efforts. There is thus no precise information basis for effective market access / expansion although there is of course more or less successful attempts to sell more in present markets and to expand mostly to local, well known Balkan markets.

Some of the larger processors are owned by foreign interests. In most of these enterprises the processors act as subcontractors to the foreign (associate) enterprises which often market their produce on export markets. These enterprises often neglect or are not allowed to get more customers and so have to rely on their affiliate to take all their production forever after. This is, however, not always the case as they partake in an organisation with operations in several countries and thus risk being shut down if production is more profitable elsewhere.

#### ***5.1.3.1 Conclusions and recommendations - marketing***

Given the very low level of marketing trained and experienced staff employed in today's SMEs it would be very helpful, but not enough to set up access points with data base access and make business directories available. Most of the incumbent managers and marketing / sales staff would also need awareness building of the increasing need for marketing.

To enable the BiH F&V processors to advance on (EU) export markets the marketing management and marketing staff of many enterprises need support with production of meaningful and implementable marketing plans.

The marketing departments can be foreseen to be rather weak until an adequate number of managers and staff are educated. Until then extensive support should be given on access to export markets; participation in EU trade fairs; trade promotion tours and development of contacts with EU enterprises; identification and contracting of export / import agents and identification of shipping agents. Support would also be need in filling in export documents.

Once the information collection and analysis has been made the SMEs need to get in contact with the potential customers. To do so it would be helpful to have someone who has market knowledge and carries some weight at the market place making such contacts. In most countries this is done by the SMEs themselves, their export agents and / or by permanent trade missions situated at their

embassies often in co-operation with the national, regional or industry associations. BiH has no trade mission at the embassies. The Foreign Trade Chamber seems to have been trusted with that role, but while some trade missions are made for larger enterprises far too little is done for SMEs. It would therefore increase efficiency if the individual industry associations owned and largely paid for by the users (SMEs) would build capacity to assist such trade missions. It would be even more effective if the different industry associations got together to form a national association of industries which would assume the driving role and facilitate export support efforts at sector specific industry associations. That is, however, probably too ambitious to happen in the near future as the associations often are lead and staffed only by an Association Secretary and perhaps a few administrative staff and the activities are limited to a general assembly and a few meetings a year. In some cases the association has arranged attendance at fairs and exhibitions, but they rarely carry out sustained export support efforts.

### 5.1.4 Standards and certification – Fruits, Berries and Vegetables

Geographic region	Mandatory certifications and standards	Voluntary/B2B-required certifications and standards
<b>BiH</b>	<ul style="list-style-type: none"> <li>• Old YU legislation that includes old (compulsory and not replaced) JUS standards</li> <li>• Certificates required by other national legislation</li> </ul>	<ul style="list-style-type: none"> <li>• JUS standards (non-compulsory ones after 2003)</li> <li>• BAS Standards (based on EN/ISO) until combined with adopted new regulations (esp. BAS/TC 43 on Food)</li> <li>• OK (by Organska Kontrola)</li> <li>• Certificate from local health institute (if not mandatory)</li> </ul>
<b>EU</b>	<ul style="list-style-type: none"> <li>• EU food quality and safety related legal measures implementing e.g. ISO, EN (European Standards) and HACCP</li> <li>• EU agricultural certificates on PDOs, PGIs and TSGs (these are presently voluntary, but will become mandatory at accession to EU. They are defined in EU regulations and it is mandatory for member states to provide the preconditions laid down in the regulations)</li> <li>• EU organic food regulation standard, EU Eco label regulation (to be obtained on a voluntary basis)</li> </ul>	<hr/> <ul style="list-style-type: none"> <li>• HACCP</li> <li>• ISO standards (e.g. ISO 9001:2000/ISO 14001 environmental management standards and especially ISO 22000 for the food sector)</li> <li>• DIN standards</li> <li>• GLOBALGAP (=EUREPGAP)</li> <li>• GMP (Good Manufacturing Practice)</li> <li>• ‘Clean production’ certificate</li> <li>• ‘IP’ (integrated production) certificate</li> <li>• UNECE standards on fresh fruits and vegetables</li> </ul> <p>Organic certificates e.g.:</p> <ul style="list-style-type: none"> <li>• KRAV</li> <li>• IMO</li> <li>• OK</li> <li>• NOP (National Organic Program) for US market</li> <li>• UK soil association certificate</li> <li>• BIO SUISSE</li> <li>• FAIRWILD</li> </ul>

The table above provides a general overview on standards and certifications in the fruit, berries and vegetables sub-sector in BiH and in the EU. The right column includes standards and certifications laid down by a legally binding norm although some of them can be obtained on a voluntary basis. The left column includes voluntary/B2B-required certifications and standards, which are not made compulsory by law. The rows ‘BiH’ and ‘EU’ only show the origin or - with regard to Swiss standards and certificates - the main geographic

application area. But standards and certificates mentioned for example in the second column of the row 'EU' are also already applied in BiH.

The voluntary standards mentioned above constitute the, for the time being most widely used and recognized in BiH, although there are many more on the market.

Often voluntary standards are requested by business partners or by certain external markets (e.g. the organic standard KRAV, which relates to the existing EU organic food regulations, for Sweden).

At the moment no general BiH brand indicating legal compliance for promotion purposes on either domestic or export markets has been found by the team. Even if BiH products become certified under e.g. GLOBALGAP<sup>2</sup>, this certificate is not allowed to be used on the product/label itself except in the B2B sector. Similarly, no widely recognized organic product/label marking indicating legal compliance, exists in BiH.

Even if a product gets internationally certified many BiH consumers lack awareness of the advantages of organic food as it is often just considered more expensive although it is not always correct. This makes enterprises avoid promoting or even mentioning the organic properties of the product. Another constraint is the lack of awareness among enterprises of the competitive advantage of marketing an internationally certified product they often do not mention certificates such as e.g. HACCP on the product label.

#### ***5.1.4.1 Mandatory standards/certifications in BiH (JUS standards and other mandatory certificates)***

##### ***5.1.4.1.1 Processes to obtain standards/certifications***

F&V enterprises are often obliged to provide certificates in accordance with the old outdated ex YU regulations and JUS standards. This leads to double costs for enterprises during many export or import activities. For example on the one hand costly conformity checks according to ISO standards and EU standards are included in the import price of a production machine imported to BiH and afterwards additionally expensive certificates based on YU regulations and JUS standards are officially required (see details in Annex 5).

##### ***5.1.4.1.2 Institutions***

Certification and control of the mandatory standards is performed by the relevant public institutions such as Institute for Standardisation and Institute for Metrology. These institutes do not need to be internationally accredited when it concerns the BiH national standards. The BiH national standards are only valid in the EU if they are accepted by European enterprises and if no European

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<sup>2</sup> GLOBALGAP is a certificate based on a common initiative of many multinational corporations. Therefore it differs from the others. Furthermore it is not an organic certificate, but only indicates basic legal compliance, and it is not allowed to write GLOBALGAP on the product package. It is only allowed to use the word GLOBALGAP from business to business.

standard is legally required. Private institutions are usually not working in this publicly regulated sector creating mandatory standards.

#### **5.1.4.1.3 Support sector**

Public institutions such as Institute for Standardisation and Institute for Metrology as well as their inspectors provide general information on which mandatory standards are required of enterprises at different stages of the value chain. Further information, technical and financial assistance and training in setting up standards and certification systems can be gathered from the public as well as private institutions. Public institutions are for example the Food Safety Agency (FSA), the Plant Health Protection Administration (PHPA), the respective inspectors, the Chamber of Commerce, the Foreign Trade Chamber (FTC including the future Export Promotion Agency - EPA) and the EICC. Private institutions are all the certification institutions internationally accredited themselves for the certification of a certain standard or cooperating with an internationally accredited institution. These private institutions include beside the staff a number of associated consultants certified under a specific standard.

#### **5.1.4.1.4 Quality of support**

The visited enterprises had no complaints of the support services.

#### **5.1.4.2 Mandatory standards/certifications in EU (many ISOs, HACCP, Eco label, PDO, PGI, TSG)**

##### **5.1.4.2.1 Processes to obtain standards/certificates**

Mandatory standards required by EU-law have to be complied with by all stakeholders (F&V enterprises, public labs, inspection bodies etc.) once the legislation is in force. In addition the European legislation on the EMAS environmental management certificate and the EU Eco label (13) has to be implemented. But this legislation – different to the one formerly mentioned - leaves the decision up to the enterprises as to whether or not to enter the procedure to obtain one of these two EU labels. On 1st Jan 2009 a new EU legal framework on organic production and labelling of organic products will enter into force (14). It includes a logo to be used on a voluntary basis by producers whose systems and products have been found on inspection to satisfy EU regulations. A similar legal system exists for Protected Designation of Origin (PDO), Protected Geographical Indication (PGI) and TSG (Traditional Speciality Guaranteed) (see details in Annex 5).

##### **5.1.4.2.2 Institutions**

The EU legislation laying down the preconditions (institutions, procedures etc.) is neither transposed nor in force in BiH. Hence the only way for BiH enterprises to fulfil these requirements is on a voluntary basis (see below). Some of the EU certificates mentioned above can, however, be obtained by applicants from outside the EU as for example from 3 April 2006, applications for registration of PDOs and PGIs by producers in third countries.



It appears that most institutions' certification organisations are understaffed for the desired fast and efficient legal transposition and implementation of international phytosanitary standards.

#### **5.1.4.2.3 Support sector**

In the support sector concerning standards mandatory in the EU mainly private institutions are active. These are all the certification institutions internationally accredited themselves for the certification of a certain standard or cooperating with an internationally accredited institution. These private institutions include a number of associated consultants certified under a specific standard.

#### **5.1.4.2.4 Quality of support**

The quality of assistance differs depending on the duration and organisation of the assistance as well as on the quality of the individual consultant(s) providing the assistance. Concerning one standard also applicable in the F&V sector (HACCP) one dairy enterprise greatly appreciated the quality of a 10 day's training event carried out by an international organisation with international consultants while it complained about the quality of a 3 days training event provided by a national enterprise using a national consultant. In this case the enterprise also complained that private consultants are not able to properly advise and efficiently assist in building up the appropriate measurement and control systems for certification.

The Food Safety Agency (FSA) is responsible for proposing conditions for Good Manufacturing Practice and HACCP in order for it to become binding (see Article 29/4 Law on Food), but still no guidance document is available in BiH for food operators and inspectors. In parallel with ensuring a certain quality of education, the question of high costs is mentioned in most cases as an important issue.

The enterprises complain that accredited certification institutions designated to awarding the different certificates required for access to the EU and other markets are not yet in place.

#### **5.1.4.2.5 Voluntary standards/certificates in BiH and in the EU**

Voluntary standards in BiH and in the EU will be dealt with together as a broad overlap exists.

#### **5.1.4.2.6 Processes to obtain voluntary/certificates standards in BiH (some JUS Standards, BAS Standards, OK..)**

The BAS Standards (esp. BAS/TC 43 on Food) prepared by the Institute of Standardisation have already been applied by the Institute of Accreditation. These standards will become compulsory for all stakeholders (F&V enterprises, public labs, inspection bodies etc.) in accordance with the technical regulations on conformity assessment, once these regulations are in force. HACCP for example will be compulsory from Jan 2009 for all subjects working in the food sector. Hence, until then certain JUS and the BAS standards can be used and certificates from local public institutes such as health institutes may be obtained following the appropriate procedures. The processes are described in more detail on the web pages listed in Annex 5.

#### **5.1.4.2.7 Processes to obtain voluntary standards/certificates in the EU (many ISO, HACCP, GLOBALGAP, KRAV etc.)**

Often specific standards/certificates are requested by national or EU-business partners or by certain external markets, although no legal requirements exist or will only exist in the future when EU legislation enters into force. Hence, even the 'private' organic standard OK (by Organska Kontrola) for example could also be requested by an EU-business partner. This happens regularly with standards such as ISO, HACCP, GLOBALGAP and certain organic standard such as KRAV to the EU-country Sweden or ISO for Switzerland (see details in Annex 5).

#### **5.1.4.2.8 Institutions**

The certificates for internationally requested standards are provided by internationally fully accredited institutions in co-operation with national organisations such as TÜV Thüringen together with TÜV Adria and BIOBASE or Quality Austria and Boscert.

The certificates for the national standards mentioned above are provided by national public institutions or national private organisations. For example one private institution is Organska Kontrola with its standard OK. The OK-certified products gain reputation mainly on the national level unless they are internationally accredited. In this way for example, Organska Kontrola recently became internationally accredited by the international organic umbrella institution IFOAM. Organska Kontrola is presently attempting to become accredited by GLOBALGAP in order to provide this international certification to enterprises. At the moment INCEBO from Macedonia is the only accredited institution able to certify GLOBALGAP in the former YU-area (for more details on the process provided see web pages in Annex 5).

The conformity assessment of the F&V products with regard to these standards and certifications needs are in many cases assisted by laboratories. However, BiH Laboratories, when concerned with residues for example, can not measure down to the values required by GLOBALGAP. Hence, the GLOBALGAP assessment through INCEBO mentioned above is based on testing at internationally accredited laboratories abroad. Similar procedures are applicable for certain values required by ISO or HACCP. Because of the unfinished international accreditation situation of the BATA described above, there is no internationally accredited food laboratory in BiH. The closest one is located in Belgrade, but even this laboratory is not always trusted by European buyers. Dutch buyers for example recently re-tested residues assessments already tested by a Belgrade laboratory at their own costs. Hence, even if there would be an accredited calibration laboratory in the F&V field in BiH, it would take considerable time to establish international trust.

#### **5.1.4.2.9 Support sector and quality of support**

Enterprises complain that BiH institutions are not yet accredited to issue internationally valid certificates necessary for access to the EU and other international markets forcing them to get certified by foreign institutions at a higher cost than national institutions would presumably charge.

Enterprises also complain that (private) consultants are unable to properly advise on, and efficiently assist in building up the appropriate measurement and control systems for certification.

#### ***5.1.4.3 Constraints and Recommendations***

##### **Constraints**

- Many consumers seem to lack awareness of the advantages of organic food.
- Even enterprises with internationally acknowledged certificates find it difficult to get good international business partners
- Lack of financial resources to obtain certificates
- Lack of a general BiH brand name and of a widely recognised organic brand name which would be useable for marking/labelling the products that they comply with international laws and have certification according to international standards for international marketing purposes
- Lack of ability to transpose international phytosanitary standards and its certification system

##### **Recommendations**

The following recommendations respond to the constraints.

- Apart from the general awareness raising issues described in Chapter 11 under general issues, support to consumer awareness raising should be provided to explain health and price issues for organic products. This would have a direct influence on the demand side and would help develop the market.
- In parallel, awareness raising measures should be aimed at enterprises in order to promote and label products with organic certificates as well as ISO and HACCP certificates obtained as a sort of quality signs (provided there are no legal restrictions).
- Capacity building grants, especially to certified enterprises participating in large commercial exhibitions abroad, would contribute to raise export contact opportunities aiming at overcoming the gap between the current focus on the BiH market and a desirable more international business orientation.
- Furthermore, support should be provided to the development of an umbrella certificate (e.g. 'BiHAP' – BiH Agricultural Product) recognized by GLOBALGAP and usable also as a sort of brand labelling on the products itself (not only Business to Business such as GLOBALGAP). Similar action should be taken to strengthen a (new or existing) umbrella certificate for the branding of organic products from BiH complying with EU organic legislation. Both approaches have to be accompanied by support to set up a central institution to certify the new BiH basic umbrella brand as well as the new BiH organic umbrella brand.

Further to the recommendations of the ‘Trade related needs assessment report’ of the EU Developing Trade Policy Capacity and related Capacity in Bosnia and Herzegovina project (TPP) implemented by Maxwell Stamp PLC (2007) and the report of USAID on ‘Trade capacity assessment for Bosnia Herzegovina Exports’ the following recommendations are made for the phytosanitary sector.

- Support should be provided to prepare the sub-laws with WTO SPS requirement (incl. the IPPC - International Convention on Protecting Plants, which is compulsory for BiH as a possible future WTO-SPS member) and the thereon based EU regulatory framework
- Similarly, support should be provided to check the compliance of existing sub-law drafts prepared in 2006 in relation to the ISPM (International Standard for Phytosanitary Measures), which will be compulsory for BiH enterprises when they in the future wish to access the EU market.
- Institutional support should be provided for the transposition of necessary standards through the Institute of Standardisation.
- Furthermore, support should be provided of training of trainers e.g. 5 inspectors and 3 people from other related institutions on phytosanitary certification system as well as e.g. 5 – 10 people from ministries for training on standards for domestic systems.

Annex 5 lists for each of the above mentioned standards a relevant web page where further details are provided on mapping out the process for a company to get each type of certificate/standard.

#### ***5.1.4.4 Factors that limit competitiveness of the value chain***

In BiH, business services are weak with regard to both demand and supply This is valid for all sectors and for F&V in particular. Demand side barriers are even stronger in agricultural sectors than in industrial sectors. Farmers demonstrate resistance to innovation and change in traditional farm practices. Most farmers are not interested in economic and technical advise, training and information, and consider grants, subsidies and/or favourable credits much more important. They are not aware that their products are not price competitive on the EU market nor even, in most cases, on the domestic market.

On the supply side, service providers from the public sector are not motivated to do practical advisory work in the field. In addition, they lack appropriate knowledge and capacities and the number of advisers in the public offices is inadequate for the job at hand. The availability of public advisory services is one of the factors that limit competitiveness of the value chain. To illustrate this situation, in Gradacac, one of the municipalities with relatively good developed agriculture has only one agriculture specialist in the municipality. The situation is more or less the same in other municipalities.

Weak and under-resourced governance structures, information systems, and service structures in support of the sector are also factors that limit sector competitiveness. There is no state level agriculture development strategy and

policy. Decisions on incentives are made at different government levels without coordination, farms are not registered, information on paid incentives are not integrated and centralized. Lack of reliable and comprehensive statistics on agriculture is hampering the development of all aspects of agricultural policy, including structure and capacities of the public advisory system.

There are 6 faculties of agriculture in BiH. They offer some services for farmers, but they generally have weak relations with the producers and processors. The same is valid for state owned institutes (4 in BiH, located in Sarajevo, Banja Luka, Mostar and Bihac) that are supposed to provide advisory services and do research.

Laboratories are another weak point in the value chain. There are not enough public or private laboratories, their equipment is limited so they are unable to perform the required number of tests with mandatory accuracy.

Cooperatives and agricultural associations are weak and can not protect producers' interests in their relations with processors. They lack financial and staff capacities to coordinate and complete the orders, pay producers and deliver products to processors. Also, they do not have capacities in terms of local experts to advise producers.

The private sector is weak, with few providers and a narrow range of services and because of the low demand by primary producers, it is difficult to develop it.

The supply of business services to F&V processors is much better, but still inadequate and fragmented. Training, trade fairs participation, information, promotion and consulting services are provided by different institutions and organizations (development agencies, business support centres, chambers of commerce, some sector associations) and by different donor projects. However, sustainable private providers are only starting to appear on the market, mostly as a result of donors' assistance. The Export Promotion Agency was established within the Foreign Trade Chamber and it will enhance the supply of business services relevant for business and trade development. However, it will hardly reach primary producers or small processors.

USAID LAMP (Linking Agricultural Markets to Producers) project has been an important provider of business services (2003-2008). The project worked through 5 regional offices covering BiH and most services were delivered by local experts through outsourcing. Services provided were: network events, assistance in transaction linkage agreements, training, education of trainers, cluster support, participation in fairs, study tours and round tables. Besides these services, the project provided financial services such as small grants and loans. Business services were provided for free and their sustainability was not built. A similar USAID project targeting agriculture will most probably begin in 2009.

Many other donor funded projects have been implemented, providing advisory services, often focusing on specific sectors / sub sectors, specific services and specific geographical areas. In most cases these services have been provided for free or with high subsidies. In most cases, when projects were finalized, the

services have not been sustained because trained staff usually moved to a new donor project. In other words, except the immediate benefits, other sustained impact has not been accomplished. The projects were rarely coordinated and duplications happened very often. Also, much educational materials and handbooks for producers and SMEs have not been saved and transferred to local institutions.

#### ***5.1.4.5 Assessment of private and public institutions that need to be in place to assist the enterprises***

##### ***5.1.4.5.1 Business support services provided by governments***

Characteristics and structure of pre-war agricultural production and provision of advisory services explain by and large difficulties in developing new structures and inefficiencies of the structures developed so far. In the pre-war BiH (or Yugoslavia) the majority of agricultural land was utilized by large agricultural enterprises. There were four such enterprises in BiH, with clear regional orientation and without substantial competition regarding inputs or sales. These enterprises were engaged in primary production, processing and also had close contractual relations with small producers (individual farmers) through cooperatives (“zadruga”). Based on these contracts, large enterprises supplied small producers with inputs and bought their products. Advice was provided by experts employed in these large enterprises or in cooperatives.

Post-war development of agriculture was initiated mainly by donor projects focused on supply of seeds, fertilizers and livestock. Soon it became clear that technical knowledge of small farmers was insufficient to realize the full potential of inputs supplied to them. This led to new agricultural projects funded by donors which focused on agricultural extension services. Parallel to these, some municipal governments also noticed the need to assist local farmers and the agricultural community at large and employed educated agricultural staff to help people to make a living from agriculture. Soon a large number of local initiatives in agricultural advisory services appeared, but without coordination from higher administrative levels (cantons/regions, entities and state).

In order to streamline the institutional development of agriculture and including agricultural advisory services, in 1998 the EU-Phare I program (spring 1998 – October 2000) started the first large agricultural technical assistance project (“Private Farmers Assistance Project, PFAP) in north-west Bosnia. The project included the promotion of a “pilot agricultural advisory services” in 14 municipalities through training of municipality staff, demonstration plots, extension materials (production and farm management handbooks) as well as basic office equipment for municipalities and Cantonal MoA in Bihac and entity MoA RS. The objective of the second EU-Phare project (2001 – 2003) was to establish an agricultural advisory service structure on entity, cantonal/regional and municipality levels in the entire BiH. The concept was a network consisting of small units attached to the entity MoA, a limited number of specialist employed on cantonal / regional level and a number of general advisers doing field work employed and paid by municipalities. Training was provided to advisers at all levels and material support (including salaries) only to

cantonal/regional and entity level, with the expectation that municipalities would hire and pay needed advisors from their own resources. Most municipalities provided only one additional staff as adviser or tried to accomplish work with already employed advisors. There were only a few municipalities with a larger number of employed advisors.

Public advisory services in agriculture developed into somewhat different formal structures in the two entities and Brčko District (FBiH, RS and BD).

In FBiH, the structure and weaknesses of the agricultural advisory system reflects the structure of governments and their relationships, meaning that the Federal MoA has very limited influence on the cantonal MoA and the cantonal MoA have very little influence on the municipal advisers. In RS, the five regions are not included in the formal institutional structure in the administrative set-up, they do not have any power or budget on their own and are mainly established for pragmatic and logistical reasons. However, in the RS too the entity MoA has no influence on the field advisers at the municipal level. Eventual cooperation between regional and municipality advisers is based on personal relations and not on institutional structure.

In FBiH, the agricultural advisory service is organized at three levels – entity, cantons and municipalities, which are institutionally and formally quite independent from each other.

At entity level, advisory services should be provided by the Federal Agricultural Bureau (Zavod, Sarajevo), financed from the budget. The tasks of the Federal Agricultural Bureau relate to:

- Selection in animal husbandry
- Plant health
- Approval of imported plant varieties and edition of the official “variety list”
- Control of seeds and plant material
- Training and education

The Bureau has three laboratories (for seed control, food control and milk control). These laboratories are not much utilized although they are well equipped. The reason for this is that it is not clear who should finance the costs of the services. The management feels that the bureau has staff, facilities and organizational capacities to play the core role in the agricultural advisory system, but its role is not clearly defined. New tasks recently added are collection and analyses of data collected by meteorological stations and supplied by the Federal MoA to each canton.

At the cantonal level, Ministries of Agriculture, Forestry and Water management are set up in all 10 cantons. Cantons have different set-ups for advisory services:

- In four cantons, this activity is realized by cantonal agricultural bureaus (zavodi) as independent public bodies (Una Sana, Tuzla, West-Herzegovina and Herzegovina-Neretva Cantons)
- In four cantons, there are departments for advisory services attached to the Cantonal MoAs (Posavina, Central Bosnia, Sarajevo and West Bosnia Cantons)

- In two cantons, neither bureaus nor separate departments for advisory services exist (Zenica-Doboj and Bosnia-Podrinje Cantons)

The cantonal bureaus were established and, for several years, financed by an EU-Phare project. They have laboratories for seed testing and soil analyses, but only few employees.

Regardless of the organizational set up, the main efforts of the staff are related to the application and administrative procedures associated with subsidies. The bureaus are responsible for the physical verification of subsidies used by farms. In other words, staff does not have time for advisory services.

Most municipalities in FBiH (except several urban municipalities) employ at least one agricultural specialist. Agriculture is in most cases included within the department of economy, and some municipalities have a separate department of agriculture.

In RS, there is the Agency for the Provision of Advice to Agriculture. This agency was established in 2004, and it has 5 regional offices and 20 employees (7 in the headquarters and 13 in five regional centres; 2 or 3 employees per centre). During winter months, regional centres organize training on technical subjects for farmers. The link between the entity and regional levels is good (the same institution), but the institutional link with the municipality level is missing and depends on personal relations. The Agency mostly works on distribution and administration of subsidies.

In RS too, most municipalities (except the ones in urban areas) have at least one agricultural specialist/administrative staff and some have one or several agricultural advisers. In most municipalities agriculture is included in the department of economy, while some have a separate department of agriculture.

In Brcko District, the advisory service belongs to the agricultural department and employs three advisers (each adviser focuses on one of the following: crops and vegetables, livestock and fruits). The department has a small lab for soil analysis. Advisers mostly work on administrative tasks related to the subsidies.

Regarding the public advisory system, the most pressing problems are the number of staff and their professional/technical competences. In general, staff employed at different levels as advisors spend 80 to 40%<sup>3</sup> of their time on distribution of agricultural subsidies. Low capacity for advisory services is indicated by poor transportation facilities, poor availability of extension materials and, most of all, by a low ratio of advisers to the number of farming households. At the cantonal/regional and municipality levels, the number of advisers is so small that it is hardly possible to cover even the large commercial farmers.

An additional weakness of the public advisory system in agriculture is that the entity level MoA in FBiH has very little influence on the cantonal MoAs. Also,

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<sup>3</sup> The higher percentage reflects internal staff perception of their time allocation, the lower reflects external assessments.



in both entities, there is a break in the line of command between the advisers on the municipal level and the next higher level. The regional variation in the institutional set-up of the agricultural advisory service as such is not a major problem, but within a certain region the advisory system should be made in one single casting, with a stringent line of command and responsibilities.

Theoretically, the advisory system should be an essential link between agricultural research and practice, transferring the results of research from universities to farmers and feed-back from farmers to research sector about the needs for research, usefulness of the performed research and eventual needs for adaptations. However, the role of the agricultural research institutions and universities in the institutional set-up of the advisory system is not defined. There are frequent complaints about the incomplete and missing legislation concerning the advisory system. However, besides the need for better developed laws and regulations, there is also a strong need for changing the mentality and for raising the awareness of the key players that they have to cooperate.

Regarding SMEs operation in the F&V sub-sector, there are no business services provided by the governments. However, they can use support services provided by different agencies and/or business centres to SMEs in general. These services include information on legal framework and available financial sources, basic consulting and training for start ups and SMEs.

#### ***5.1.4.5.2 Business support services provided by regional development agencies (RDAs)***

Regarding business support services, only few of the RDAs implement projects in agriculture and are relevant for F&V sector. However, most RDAs implement projects that provide business services to SMEs meaning that processors can benefit from these services in “competition” with SMEs from other sectors.

REDAH implements/facilitate one project relevant for primary producers from F&V sector. Support to primary producers from F&V sector (and primary producers from other sectors) will be provided by Centre for agriculture and rural development, established at the beginning of 2008 with the task to implement a project financed by Spanish funds. The project will last three years (2008-2010) and it has a budget of 500.000 EUR. Three local agricultural experts have been employed. Four activities will be realized:

- education, workshops and consulting
- coordination of all projects and organizations active in agriculture and rural development in the region
- support to cooperatives and associations
- pilot projects and studies.

Education will be provided for free in the first year, 30% will be paid in the second and 50% in the third year. Education will also be provided to high school professors. The project will include students as volunteers. In order to increase efficiency, the project will use all educational/training materials and databases developed by USAID LAMP project. The centre should build its sustainability

and continue after the project as an agency, with more employees. However, there are no specific plans how to accomplish this objective. The experience from previous similar donor initiatives shows that the lack of planning at the early stages of the projects, often leads to failures upon project's closure due to staff moving to other projects. Therefore, a possibility of losing staff upon implementation is a high risk for this project as well.

The agency REZ has participated in several projects relevant for the F&V sector in this region. REZ had the role of partner or coordinator. One project targeting primary production of vegetables (financed by EC) was completed in 2006. Project outputs were grants for 50 greenhouses and training for producers. Training was delivered by local experts. The other project (financed by USAID) included support for the establishment of an independent association of producers/farmers that is still active and successful. It involves producers from four municipalities. A new project (financed by cantonal government) has just started and the objective is development of fruit sector in Canton Srednja Bosna. REZ is coordinating work of local experts and staff of Federal Agricultural Bureau.

NERDA does not provide direct business services to F&V producers but it provides some support to 5 agribusiness centres in the region (see the next section).

A new project that started in 2007 will be sector specific and the food sector is one of the sectors selected. The enterprises from the sector will get consulting services and/or training financed partly by enterprises and partly by a Development Fund (to be set and managed by the project).

#### ***5.1.4.5.3 Business support services provided by development agencies and business support centres (BSCs)***

Most development agencies and BSCs do not provide services to F&V producers. Processors from this sector can use services for SMEs and start ups, as described in section 5.4.3.

PLOD, a newly established Regional centre for business relations between domestic SMEs and enterprises from EU opened officially in May 2008, but specific activities and services are still not defined. It will focus on several sectors, including agriculture affording the processors from F&V a chance to use its services.

In the northeast region of the country, there are 5 agribusiness centres. The centres were established by a UNDP project, between 2005 and 2007, as independent NGOs. They are financed by municipalities (20%). Centres provide the following services to cooperatives and producers: soil tests by two laboratories, business services to cooperatives (advisory services, links with producers), education in cooperation with LAMP project and links with market and processors. Each centre has one employee, except the centre in Bratunac which has 4 employees (financed by UNDP). These are the only business

support centres focused on agriculture producers, but the number of employees indicates that services can be provided to very low number of producers.

Most business support centres do not focus on specific sectors. However, several business centres managed by SERDA provide services to individual farmers alongside with start-ups. These services are limited to the information on available financial sources and assistance in preparing credit applications.

#### ***5.1.4.5.4 Business support services provided by Chambers of Commerce (CoCs) and associations***

CoCs do not provide any services to primary producers from F&V sector, as individual producers or as members of cooperatives. However, SMEs from the sector can benefit from their services.

Recently, the Export Promotion Agency has been established within FTC. EU EXPRO I project supported the agency in the preparation phase, and new EU EXPRO II is expected to start soon with the focus on institution building but will also work with 22 enterprises. Food and drink production is among the selected priority sectors.

Primary producers are organized through different legal forms such as cooperatives, associations and NGOs. Most existing associations in the agricultural sector in general and in the F&V sector in particular, were initiated and supported (at least in their initial stage) by donors. Donor support has been in the form of raising awareness of producers about the benefits they can get from joint activities, financial support including operational costs of the offices with a small number of professional staff, capacity building of organization management and staff, financial support for services development and delivery.

There are just a few successful associations that continued to be active after donor support ended, with stable membership and financial sustainability. One of these is the Association of Fruit and Vegetable Producers and Processors in BiH. This association was established in 2002 by several strong processors, on the initiative and support by GTZ. Based on USAID LAMP initiative, in 2005 producers organized in cooperatives joined the association.<sup>4</sup> Financial sources are membership fee (approximately 60%), grants by entity ministries for agriculture for specific events, sponsorship by members and donor support for specific services (educational materials, training, study trips abroad). Services provided to members include: training (provided for free, supported by donors), participation at trade fairs (cost sharing approach), business relations with wholesalers, exporters and foreign importers, advocacy and lobbying in cooperation with cantonal Chambers of Commerce.

Another example of a sustainable and successful association is the Independent Association of Farmers (NUP – Nezavisno udruzenje poljoprivrednih proizvođača). This association operates within raspberries sector in Srednja Bosna. Its establishment was initiated by an USAID project involving farmers

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<sup>4</sup> The number of fee paying members is 40, out of which 8 are processors and the rest cooperatives of producers.

from 4 municipalities, while REZ was involved in project implementation (capacity building, relations with municipality). The association has 100 active members and it provides supply and sale services, and technical advice (one expert employed). It is financed by municipalities based on specific projects.

There is a large number of cooperatives. However, most of them are weak, local and specialized by products. The lack of strong cooperatives is thought to be one of the factors causing farmers to sell 90% of their fresh F&V on the green market and/or through retail chains.

The cooperatives play the role of intermediates between producers and processors. The most active and considered the most successful are cooperatives with good relations with processors (such as several cooperatives in berries sector with direct relations with enterprise Klas, the processor). In few cases, these cooperatives are supported by processors with business services. However, both sides are not satisfied with the relationship. Processors complain that delivered quantities are smaller than their needs, that producers very often do not respect their contractual obligations and sell their products to retailers or directly on the green market. On the other side, producers complain that prices paid by processors are too low, payments are not timely and regular.

Some cooperatives have their own equipment and facilities, but in most cases not enough to satisfy the needs of members. In most cases, Extension services are provided by cooperatives only if donors provide funds and capacity building.

#### ***5.1.4.5.5 Business support services provided by private service providers***

In addition to public agricultural advisory services, private providers are becoming more active in recent years. However, this segment of supply is in the initial stage of development and shows large differences by regions and sectors. In general, private service providers are more active in the regions with more intensive agriculture and more processors.

Main private service providers in agriculture are:

- Experts/advisers employed by processors and input supply enterprises
- Advisers linked to the agricultural pharmacies, and
- Individual free-lance advisers.

With the growth of F&V processing enterprises and increased number of foreign investors in the sector, there are more and more examples of their readiness to provide advice to primary producers. These enterprises usually cooperate with primary producers through cooperatives and this enables more effective delivery of advisory services. One example of active approach of processors towards producers is enterprise Unaplod (RS), in the apples and pears sub-sector. The enterprise has contracts with farmers and supplies them with seedlings, seeds, herbicides, pesticides and fertilizers. The enterprise has also engaged a small extension unit, with three agronomists, to provide advice to farmers for a fee. In these cases, farmers get needed advice and inputs, as well as a market for their products. The terms are more favourable when they form a cooperative and negotiate with processors/buyers as a group and not as individual farmers.

Regarding advisors linked to the agricultural pharmacies, there is a risk that their advise in support of their products can result in the use of different and / or higher inputs than needed. The appropriate education of primary producers would decrease or eliminate this risk.

Individual free-lance consultants or consulting enterprises in most cases reach primary producers through projects financed by donors and very rarely have long term relations with the producers. Donors have financed many projects that were supposed to build capacities of local advisers and help them to establish relationships with producers, usually through cooperatives, associations, self-help organizations or producers groups. The services were free with the expectation that before the end of the project producers will become aware of the need of services and will be willing to pay for them. There are very few examples that these services and providers continued these activities. This is probably due to a combination of lack of willingness to pay for services on the part of the potential clients; the services may not match the perceived needs; the recruiting and training of experts do not produce capable experts and donor support stopped short of delivering sustainable consulting businesses.

Regarding business services for processors, that is for SMEs, the situation is somewhat better. Supply is especially strong in general management skills and is increasing in international standards (ISO, HACCP, CE mark) that is in segments where donors have provided, in the previous years, extensive capacity building for local consultants.

#### ***5.1.4.6 Recommendations***

The legal framework supporting development of agriculture has been strengthened with the adoption of state level law on Agriculture, Food and Rural Development. However, the law will not have any substantial impact on the sector development until the implementation regulations are prepared and passed and until different organizational units foreseen by the law are set and staffed. The Agricultural, Food, Forestry and Rural Development Sector of the Ministry of Foreign Trade and Economic Relations has been operational since 2007 supported first by the EC SESMARD project and recently by the WB project Agricultural and Rural Development. The WB project has a budget of US\$ 21 million and a duration of 4 years, 2007-2011. One of the project components is to strengthen agricultural advisory services with a budget of US\$ 5.14 million. Although the major focus will be on the providers of public advisory services, private providers will also be supported. The project budget seems to be far short of the needs to assist both the demand and supply sides of business services for primary producers and processors. The support of EC and other donors will thus be essential and it will be important to coordinate all donor projects in this field and to accept complementary approaches.

Major recommendation for EC projects are:

- Support development and improvement of the legislation concerning the public advisory system.

- Support strengthening of public extension services, by capacity building and enhancing knowledge of staff on modern technologies, new varieties in order to support an increase of primary production and better supply for F&V processors; this initiative would yield good results only if governments at all levels, especially municipalities, employ an appropriate number of agriculture advisers.
- Support co-operation between public business service providers, universities, research centres and other stakeholders supporting enterprises to achieve a co-ordinated assistance.
- Provide capacity building of other (private sector) service providers in accordance with demand by producers and processors and in particular take care to render extensive support to the service provider's until they have built a sustainable business..
- Support the role of development agencies as facilitators of establishment of business service providers in agriculture in general and in the F&V sector in particular as opposed to the role of providers of these services.
- Support capacity building and strengthening of cooperatives and other forms of primary producers organizations in order to increase negotiation power of primary producers and to enable effective dissemination and use of knowledge and information. Support awareness building of farmers as to the benefits they can gain if integrated in cooperatives. Awareness can be improved through seminars, pilot projects and demonstrations.
- Support relations and linkages between processors and producers.
- The number of commercial farmers is increasing and continued exposure to agricultural advisory and training events is necessary to raise the awareness of farmers to the need to update their technical know-how and skills. Although there are signs that farmers' perception of advisory services is changing to the positive side, partly helped by donor projects, it is a very slow process which must be given adequate time. There is therefore still a need for strengthening demand by raising awareness of the benefits of business services, especially in the fields of marketing and basic business skills essential for commercial production.
- Support farmer education on the benefits and urgency to innovate and implement non-traditional farm practices through awareness rising, seminars and demonstrations.
- Promote cooperation among all advisory service providers.
- Support funding of new business services development through joint funds provided by the governments and donors.
- Support development of an integrated market information system available to all beneficiaries.
- Increase availability of existing educational materials.
- Support strong donor coordination and unified approaches, under the leadership and responsibility of domestic governments, in order to avoid duplications; it is important to accept an effective and unified approach towards sustainability of different initiatives in the field of business services, the most critical factor being local initiative, interest and readiness to share costs.

- Support development of the state level framework and institutions for SME support services in line with the European Charter for SMEs in order to create better services to small processors.

## **5.1.5 Finance – fruits, berries and vegetables**

### ***5.1.5.1 Factors that limit competitiveness of the value chain***

After large donor interventions in the field of financial services for agriculture, through grants and heavily subsidized lending, recently only few donors programs include these services<sup>5</sup>. Although access to credit for farmers and for SMEs has improved, there are still weaknesses regarding access to finance that limit the growth of the F&V sector. Those weaknesses exist on the side of demand as well as on the side of supply.

A major obstacle on the demand side is the credit capacity of individual farmers/producers. In the F&V sector, small (subsistence level) farmers have only outdated technology and equipment and the investment rate is very low. Farms and producers are not registered within integrated, unified registers and their assets are insufficient as collateral required by financial organizations. The registration process has started in the RS. In both entities, for the time being, the only incentive for the registration are subsidies, since farmers can not get them if not registered.

On the side of supply, weaknesses are related to the lack of products tailored to the needs of farmers, in sense of grace periods and collateral requested by commercial banks. This weakness is somewhat bridged by the MCOs offer, but interest rates charged by them are in the range of 18-28% and are not acceptable to many farmers or SMEs.

Offers by development banks and special credit lines funded by donors and/or local governments provide additional funds better suited for farmers and SMEs needs, especially regarding interest rates. However, these funds are also limited to farmers operating on registered farms and sometimes to farmers that have contracts with processors or buyers. Also, there are complaints that available special credit lines are not visible enough to farmers and enterprises.

The establishment of a several credit guarantee funds has improved financial services for farmers, start ups and SMEs in all sectors, including the F&V sector.

### ***5.1.5.2 Assessment of private and public institutions that need to be in place to assist the enterprises***

#### ***5.1.5.2.1 Finance provided by development banks***

The Investment-development bank of RS manages 6 credit lines. Out of them, two lines are for enterprises and entrepreneurs (total amount for 2008 is 80,4 million KM); SMEs from the F&V sector can apply for these loans. Two lines are for agriculture and registered farmers (total amount for 2008 is 71,6 million

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<sup>5</sup> These are USAID, IFAD and SIDA.

KM); SMEs from the F&V sector can apply for these loans as well. The implementation of these credit lines is performed by 6 commercial banks and three micro credit organizations. The following terms and conditions are applicable to the key groups:

- For start ups the maximum loan amount is 30.000 KM; repayment period is 5 years, with grace period of 6 months; interest rate 7,13-7,33%, depending on the location; amount for 2008 is 12,9 million KM.
- For entrepreneurs and enterprises, maximum loan amount is 5 million KM; repayment period is 15 years, with grace period of 18 months; maximum interest rate is 6,03% (special incentives for underdeveloped areas (5,83%), processing industries (5,73%), members of clusters (5,73%), exporters (5,03%) and tourism (5,73%)); amount for 2008 is 67,5 million KM.
- For micro business in agriculture (for registered farmers), maximum loan amount is 50.000 KM; repayment period is 10 years, with grace period of 36 months, depending on the type of production; interest rate is 7,33%, for cluster members 7,03%; amount for 2008 is 25,8 million KM.
- For agriculture (legal entities), maximum loan amount is 3 million KM; repayment period is 5 years, with grace period of 36 months; interest rate is 5,73%, for cluster members 5,43%; amount for 2008 is 45,8 million KM.

The Investment bank of FBiH carries out its operations directly and through commercial banks. Four credit lines are in implementation. Farmers can apply for two of them and SMEs from F&V sector for all four. The following terms and conditions are applicable:

- For production and services, interest rate is 5%; maturity max. 7 years, with a grace period up to 1 year.
- For agricultural production, interest rate is 4%; maturity max. 7 years, with a grace period which depends on the type of production.
- For export, revolving credit, interest rate EURIBOR+1%, no grace period.
- For employment terms for agriculture are: interest rate 3%; grace period 1-2 years; maturity max. 7 years
- For employment terms for industry and services: interest rate 4%, grace period 6 months, maturity max. 5 years; maximum amount is 500.000 KM, that is 10.000-25.000 KM per job.

The general impression from interviewing the banks is that these are not sufficiently transparent and that approvals are based on political and economic criteria. Also, approval processes are long. The criticism is much stronger regarding Investment bank of FBiH than regarding Investment-Development bank of RS.

#### **5.1.5.2.2 Credit guarantee funds (CGFs)**

Credit provided by CGF from Brcko District can be used by farmers as well as by SMEs from F&V sector. The new cycle that started in 2008 is based on 1,300.000 KM deposit provided by the government. Credit lines have been increased (deposit multiplied by 3 to 5) and 4 commercial banks are selected as



implementers. Agreed terms are: interest rate of 7.5%, a loan amount up to 100.000 KM and maturity up to 5 years. Clients will be agricultural producers with registered farms, SMEs and workshops.

CGF managed by LINK Mostar provides credit with a short grace period and it is not used by farmers. However, SMEs and start-ups from the F&V sector can use these loans. The total credit line now available is 4,6 million KM. Interest rate is 7%, grace period is 6 months, the maximum loan is 50.000 KM, and maturity is up to 5 years. Most users have been established SMEs (81%) and only 19% start-ups.

Special CGF for youth is available for farmers, start-ups and SMEs from F&V sector. Loan amounts are from 5,000 KM to 30,000 KM (20,000 KM for start-ups), interest rate 6,2%, grace period 6 months (9 months for agricultural producers), maturity 5 years. The fund covers the whole BiH and it is managed by LINK Mostar, SERDA Sarajevo, NERDA Tuzla, NGO TALDI Tuzla, MCO Sinergija Banja Luka and NGO CeBEDA Travnik. These organizations provide assistance in the preparation of business plans and applications and they charge 1% of the loan amount for their services.

SERDA established one regional CGF in 2006, with deposit of 1 million KM and a credit line provided by Zagrebacka Banka in the amount of 3 million (to be increased to 4 million KM soon). 48% of users are farmers.

The success of the first established CGF increased the interest of the governments as well as processors of agricultural products in providing deposits for the guarantee fund and to work through selected commercial banks to issue the loans. Banks are also very satisfied with this instrument and they have started providing larger credit lines with lower interest rates.

New funds have been established in Canton Zenica-Doboj (500.000 KM as deposit, credit line 1,5 million KM), in the municipality of Novi Grad Sarajevo (200.000 KM as deposit, credit line in the amount of 600.000 KM with interest rate of 5% for farmers), the municipality Prijedor (deposit of 600.000 KM, credit line in the amount of 3 million KM for agriculture and SMEs), NERDA, cantonal government and municipality Tuzla (deposit 600.000 KM, credit line 2 million KM, for SMEs and craft, interest rate 6.6%).

None of these CGFs are focused on F&V producers and processors. If the new initiative from the dairy sector<sup>6</sup> proves successful, we can expect larger processor from the F&V sector to initiate similar CGFs with favourable credits for farmers and repayment with the products.

#### **5.1.5.2.3 Commercial banks**

Regarding credit offered to individual farmers and SMEs by commercial banks, there are constraints on both the supply and demand side.

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<sup>6</sup> CGF established by Milkos and SERDA. See section 7.3.9.2.3.

Constraints on the supply side are not related to the lack of offered credits but to the terms and conditions that clients have to satisfy in order to be accepted by banks and to the level of interest rate (about 9%). Major obstacles are related to the requested collateral and the short grace period. Most of the small farmers can not satisfy these conditions, since farms are not registered and therefore can not be used as collateral. Also, the nature of the production cycle is often such that short grace periods are not acceptable. The weakness of the commercial banks, very often pointed out by enterprises is that staff has inadequate knowledge on specific characteristics of agriculture and/or SMEs and that is why banks do not offer loans tailored to the needs of these sectors. An additional barrier is that banks favour larger loans that are above the credit capacities of small producers or small enterprises.

Major demand side constraints are business skills of producers and SMEs that limit their capability to develop and present reliable business plans and business strategies.

Among commercial banks, ProCredit Bank and Volksbank are the most experienced in financing small scale family farming and small enterprises. Comparing these two banks, ProCredit bank offers more favourable conditions regarding collateral, duration and grace period, tailoring loans to the client's situation and charging interest rate between 10,5% and 18%. On the other side, Volksbank charges lower interest rate to borrowers (9,5%) but has tighter conditions on collateral.

One additional constraint for the agricultural producers is that commercial banks do not accept cooperatives or associations as clients.

Local governments give interest rate subsidies targeting mostly agricultural producers and SMEs and providing the difference down to 6% interest rate. Although this subsidy has increased the use of loans offered by commercial banks, the application procedures are complicated.

Most commercial banks are becoming more involved in the micro finance sector, either directly by down scaling their offers or indirectly by financing micro credit organizations. The advantage of banks is related to the interest rates (much lower than rates charged by MCOs) but MCOs have an advantage regarding collateral requirements and other conditions.

#### ***5.1.5.2.4 Special credit lines***

Special credit lines are financed by donors and local governments (different levels) and implemented by commercial banks and/or MCOs. Most of them target agriculture and SMEs. Sometimes commercial banks add their own funds to increase the credit lines.

The EFSE (the European Fund for Southeast Europe) is one of the major providers of long-term funding for local financial institutions for lending to micro and small enterprises and to households. Partnering lending institutions in BiH are 8 banks (including ProCredit bank) and 7 MCOs. IFC and EBRD also

support the financial sector with different credit lines and financing facilities in order to strengthen credits for SMEs and to assist development of other financial instruments (leasing, factoring and mortgage credits).

In many cases these special credit lines increase the banks' offer for small farmers and SMEs, but do not result in changes in procedures and terms. This means that they do not create more favourable conditions for clients.

Special credit lines funded by local governments and implemented by commercial banks and/or MCOs in most cases provide credit under more favourable conditions. Some recently introduced special credit lines are the following:

- The government of the Canton Sarajevo funded a new credit line (to be implemented by Nova banka Banja Luka) in the amount of 7 million KM, with interest rate of 2%. One of the eligibility criteria is that the client has to be located within the Canton.
- The municipality Centar Sarajevo and Raiffeisen Banka Sarajevo funded a special credit line in the amount of 1 million KM, with an interest rate of 6%.
- City Banja Luka and NLB Banja Luka funded a new credit line in the amount of 4,5 million KM with the interest rate of 6,5%.

#### ***5.1.5.2.5 Other providers of financial services***

Among other financial service providers, micro credit organizations are the most active in financing individual farmers, start-ups and SMEs. Leasing and factoring are still not important financial instruments for these market segments.

Individual farmers are among the typical clients of MCOs. Most MCOs offer agricultural loans with very similar conditions, maximum size up to EUR 15.000 (to be increased to EUR 25.000), maturity up to 3 years, grace period up to 9 months, collateral requirements mostly promissory notes. Most of the loans are offered as loans to individuals, allowing lending without official registration of the farming business (this also applies to commercial banks). The collateral requirements and procedures are easier and therefore more acceptable to individual farmers than requirements of the commercial banks. Most MCOs use also solidarity group methodology where a group of lenders act as guarantors for each member's loans. This increases the number of eligible clients.

Thanks to the activities of MCOs, which cover the whole country, access to agricultural loans is not an issue. Also, MCOs are familiar with the financial needs of individual farmers. The major barrier to farmers are interest rates, which are between 18 to 27% . Some MCOs have special credit lines re-financed by donors or development banks, with interest rates of 7-8%, but these loans are accessible only to farmers that have firm sale contracts or an excellent credit history with MCOs.

Leasing is a relatively new financial instrument, with which farmers and SMEs are not familiar. This is fast growing sector in BiH. The request for 10-12% own financing is an obstacle for farmers and SMEs. On the other side, the most

attractive segments for leasing enterprises are individuals and strong enterprises, they are less interested in entering the lower end of the market. Micro-leasing is not used. This could be an opportunity for MCOs to act as agents of leasing enterprises that want to reach the low end of the market.

A new financing provided in May this year by EBRD to Raiffeisen Leasing in the amount of 10 million EUR has to be used for SMEs from all sectors (less than 250 employees and less than 10 million turnover). Defined types of leasing contracts are micro lease (maximum amount of EUR 10.000) and small lease (maximum amount of EUR 125.000). The expected average is EUR 50.000. This will increase credits offered to SMEs, but as the same conditions will apply as for other leasing agreements the number of eligible and acceptable clients will not increase.

Factoring has been introduced in BiH recently. This instrument is still not legally regulated. State owned export credit agency, IGA, provides export credits and specific factoring services, but both services are provided in small amounts and do not play an important role. Recently one Slovenian factoring enterprise, Prvi Faktor, registered as an enterprise in BiH and one bank, FIMA, announced that they will be introducing factoring. Because of the high costs attached to this instrument it is not expected that factoring will be accepted and used by SMEs soon.

### ***5.1.5.3 Recommendations***

Development and implementation of the unified register of farms and beneficiaries in BiH will enable harmonized implementation of the support programs at different government levels across the country. This will also increase credit capacities of farmers. Decision on the creation of such register has been passed by the BiH Council of Ministers.

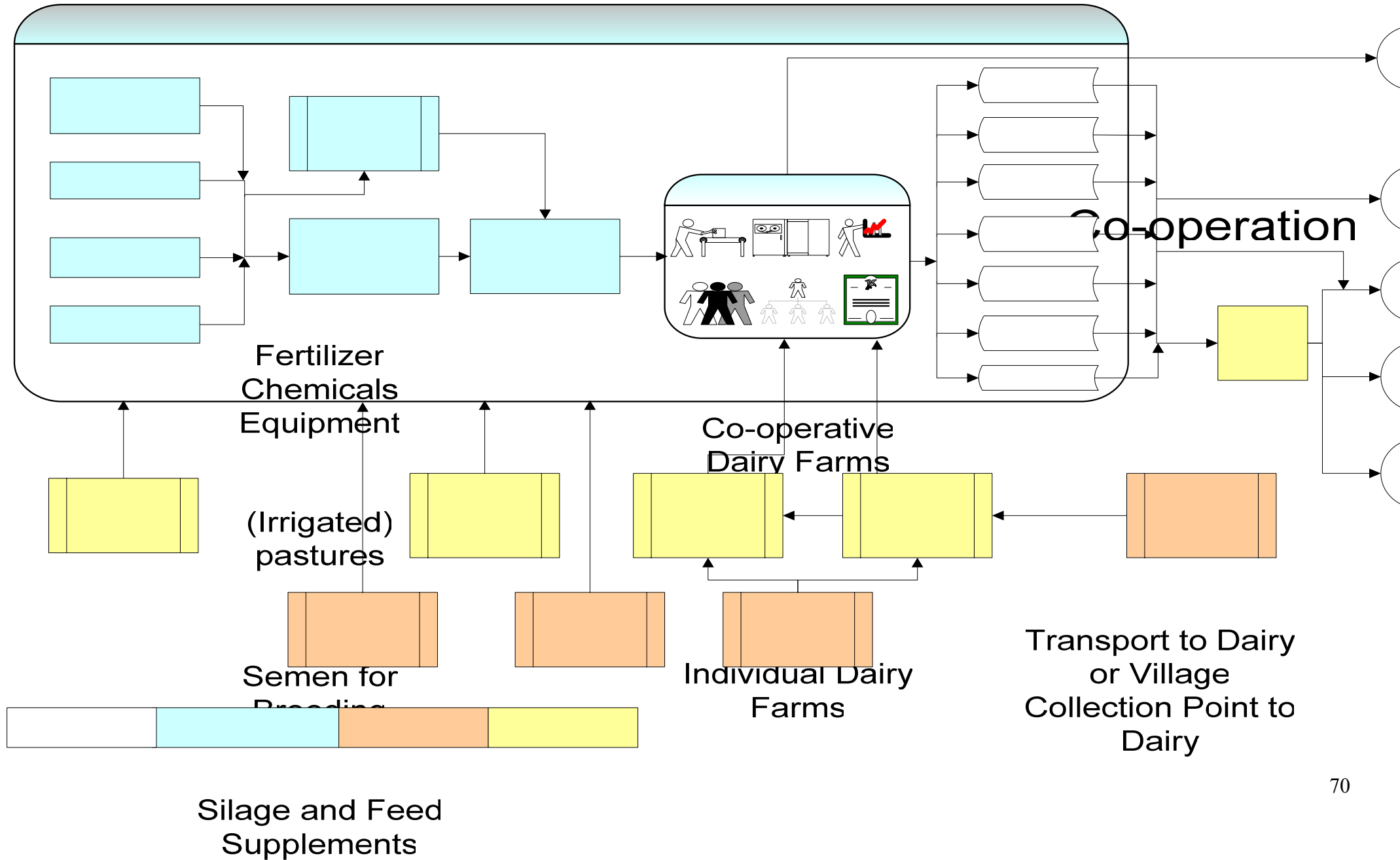
Recommendations for EC in this field are:

- Assist education of managers and staff of commercial banks on needs and characteristics of farmers, cooperatives and SMEs. The objectives of the education should be to simplify procedures for loan application and assessment, improve the risk assessment capabilities of the staff and define an appropriate risk profile for these clients. Further studies are needed to determine ways and means of effecting the required changes.
- Assist development of micro leasing adjusted to the needs of farmers and SMEs;
- Increase basic business skills of farmers and SMEs in order to improve their understanding of commercial farming and to strengthen their skills in business plan development;
- Support introduction of special credit lines, for specific sectors and projects with interest rate subsidies.

## References (reports) for the Berries, Fruits and Vegetable sector

1. Agricultural Sector (IFC)
2. Halal Sector
3. B&H Competitiveness Study – Lund (USAID)
4. Synthesis Report Food & Beverages
5. Export/Import Data Fresh Fruit
6. Export Import Data Dairy, eggs and honey
7. Booklet of certificates for EurepGAP
8. Fruit and Veg Producers (USAID) – brochure
9. Various brochures for fruit and vegetable producers (USAID)
10. Estimate of non-observed economy PNADG958
11. Finding the highest potential clusters and products PNACU835 Market profiles and competitiveness vol 2 LAMP PNADB773
12. Packaging and label report PNACX750

## 6. Value Chain Analysis of the Dairy Products Sub-Sector



## Analysis of the Dairy Sub-Sector Value Chain constraints to competitiveness

### Objectives for taking the sub-sector forward

To support improved quality, increase milk production and a move to develop and produce higher value added production for longer term increase of exports to the EU and regional markets.

### Basic Conditions

There is a shortage of raw milk for processing at BiH dairies resulting in significant imports of particularly higher value added milk products. This presents a great opportunity to increase the milk production by increasing the yield per cow (now 1/3 of a EU15 cow) and increasing the number of cows utilising the many idle pastures. That would, in time, form the basis for utilising the present overcapacity of, in particular, the smaller dairy units affording them an opportunity to increase profitability. It would also better utilise the dairy sector's opportunities to increase its product diversity and value-added businesses, and to expand its overall production to substitute imports and increase exports. In 2006 the main facts on the sector seems to be:

Dairies	Results	Remarks/Growth Rate
Number dairies	5 large and 50 small 2000 – 30,000 L/day	Capacity utilisation of the large dairies is around 50-70% while it is around 35-50% in the smaller ones
Total Employment incl. NOS	2500 + farms	High percentage in rural areas, good potential employment generation
Domestic sales '000 Litres per year	800,000	Medium Growth rate
Export Sales	Quite small	High growth potential for downstream products
Dairy cows 2008	330,000	Producing 2000 Litres/Year/cow – in EU15 average is 6,300 Litres /Year/cow
Milk production	660,000,000 Litres/Year	Only 20-25% is collected by dairies
Competitive advantage	DRC = 0.32	Figures < 1.0 means the product has a comparative advantage
Bacteria and somatic cell count	Too high for export to EU	The support system to assist farmers getting these figures down is quite weak
Potential increase of SME income by production increase	High Potential	

*The information in this table is obtained from the referenced reports and is mostly from 2006, but some are older. They are not very precise and they should therefore be used as indicators only.*

### Strategic Options

The Dairy sub-sector is said to have a comparative advantage with a DRC ratio of 0.32 (<1 means it has a comparative advantage)<sup>7</sup>. The Sub-sector will only be regulated by the EU rules if BiH joins the EU and that will take quite some time. That window of opportunity could be utilised to improve the milk quality and yield per cow and increase or at least uphold its comparative advantage. Presently the dairies produces mostly fresh milk products for local consumption. Only a few smaller enterprises have a tradition for making higher

<sup>7</sup> Competitiveness in the Agricultural Sector of BiH, Livsmedelsekonomiska Institut Lund, ISSN 1650-0105, 2006

value added products in the form of hard cured cheeses or specialty cheeses. For the sector to become a major contributor in BiH exports it should move to such higher value added products. It would, however, be quite difficult to do as there is no tradition or expertise for making such products.

Organic milk, increasingly popular in EU 15 is not produced in BiH. Although there is presently no system to control organic milk production this presents an opportunity for SMEs as well as large producers to establish a range of new organic products for export when the control system is in place.

#### **Overall Value Chain constraints on competitiveness**

The average BiH farm size is 4.3 ha which can barely sustain 5 cows, the minimum for a family to sustain life on a dairy farm with the necessary milking machine and cooling equipment – the average dairy farm size is, however, said to be 10.4 ha which should allow for economic sustainability for some years while the wage levels and cost of living are still reasonably low in BiH.

Experience in all EU countries has shown that the medium to smaller dairies can not compete unless they produce specialty products so there is an urgent need for dairies who presently produce only fresh milk products to diversify and move up the value chain to higher value products.

There are strong forces pulling the sub-sector towards structural change to much fewer dairies – a common development pattern in EU.

### **6.1.1. Product, production, supplies and infrastructure - dairies**

#### **Constraints on supply of milk**

On the supply side there is a shortage of milk. BiH has around 330,000 dairy cows producing on average 2,000 L/year/cow (up from 1400 L/year/cow in 1991) or a total of around 660 Million litres per year. Only 20%-25% is collected by the dairies, the rest is consumed by the farm households, the calves or sold privately or at the green market.

The yield per cow of around 2000 l/year (2,900 in RS and 1,800 in FBiH) is only one third of the EU average – if improved this could materialise in a very sizeable competitive advantage for downstream products such as cheese.

The main reasons for the low yield are that 1) the quality of the dairy herds is too low and there are only few good breeding programs to improve yield (USAID LAMP is one); 2) dairy farmers lack knowledge of efficient feeding and tending of the herd and the fodder is far from optimal for high yields; 3) the few available extension services (5 in RS and 10 in FBiH) are not up to modern standards; 4) only 20% of the raw milk is delivered to dairies, 80% is consumed by the farmer families or sold at double the dairy price at local green markets.

Primary milk production is subsidised and prices are paid only according to fat content, no monetary incentives are given for low bacterial count or protein content resulting in low quality milk. Raw milk prices in the EU are, however,



subsidized as well allowing EU enterprises to export especially high value milk products such as cheese to BiH.

### **Constraints on infrastructure**

The quality of the raw milk is improving, but it still has too high bacteria count for the downstream products to be accepted in the EU. The main reasons are the lack of proper hygienic and cooling conditions at the milking parlour, the collection station and during transport. In addition, the smaller dairies do not have proper laboratories able to test all required aspects of the raw milk.

### **Constraints on products**

Of the five largest dairies only one has plans to start producing higher value added products such as white feta type cheeses for both domestic and export markets, but all will probably want to move in that direction making it increasingly difficult for the smaller dairies to create a niche in which they can compete. Seven of the smaller dairies produce Livno (cured) cheese. Apart from these, all large, medium and small dairies produce standard products for the local markets such as fresh milk, UHT, yoghurts, kefir, cream and sour cream and fresh cottage cheese on automatic (large dairies) half automatic (small dairies) production lines.

Economies of scale are very important, without it the dairy must specialise in higher value products such as special cheeses to prosper. The problem is that BiH dairies do not have a tradition for making specialty high value dairy products except for LIVNO cured yellow, hard cheeses consequently they do not have the necessary expertise nor the trained specialists for expanding that production into other types of cheese. Shortage of working capital funding also prevents most dairies from tying up cash in products with long production / curing time such as yellow cheese and high value specialty cheeses. The result is probably going to be a structural reform where the larger dairies buy up the milk from the farmers delivering to the small dairies thereby taking away their production basis or alternatively the larger dairies buy up the production units of the cheese makers.

### **Constraints on production and quality management**

Five large, five medium size and around 45 smaller dairies (capacities ranging from 2,000 – 160,000 L/day) compete vigorously<sup>8</sup> for the raw milk. The average capacity utilisation of the sub-sector is only around 35% although particularly the larger units run around 50-70% capacity utilisation. Of the raw milk 80% is used for UHT milk while yoghurt, sour cream, fresh cheese and fresh milk stand for 20%.

The five larger dairies of which only one does not have foreign ownership produce mostly on modern fully automatic production and packing lines. One even has the newest and most modern production line in Europe. Due to raw milk shortage they run the production line only 1 ½ shifts.

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<sup>8</sup> according to LAMP 2006

The necessary (HACCP, ISO and organic) certification of farms and dairies is not obtainable from BiH certification institutes resulting in added costs for a dairy to get certified by a foreign institution. The experience of the industry is that consulting assistance to set up the systems is scarce in BiH and not very well qualified.

Although most of the five largest dairies have invested in newer equipment they still need to invest in cheese making equipment and in brand name building and other marketing if they want to move to higher value added products. The many smaller dairies need to invest in getting more milk and in the long term they have to invest in new equipment for special products to be able to compete with the bigger competitors and imports.

#### **Constraints on research**

To start a cheese and other high value added milk products industry is very difficult for any single dairy. They will be up against French, Italian, Dutch, Danish, German and British cheese specialists who have many years experience and defend their market shares vigorously with subsidised products. Unfortunately the enterprises have no effective support from qualified research institutions in BiH.

#### ***6.1.1.1 Conclusions and Recommendations- products, production, supplies and infrastructure***

Ultimately land redistribution is required to achieve larger farm sizes for the farmers to accommodate more cows. Supporting policies, laws and strategies should be made and implemented a.s.a.p. to start the very long process of land redistribution. While waiting for the redistribution it is recommended to relieve the raw milk shortage by introducing a short term strategy to persuade more (especially young) farmers to start dairy farming by financially supporting farmers who want to move into dairy farming. The present farmers should get assistance from Agricultural Technological Institutes and extension services to increase the yield per cow in order to make more profit following the general increase in GDP per capita.

Well planned imports would be required (from EU) of know-how, technology, and extension assistance if BiH chose to produce more higher value products such as cheese.

The constraints on the small farm size could also to some extent be alleviated by farmer owned and professionally managed collective agricultural co-operatives by extension service centres offering commercial and technical expertise. The co-operatives would afford the individual farmers more power. It would enable farmers to purchase supplies at better prices, provide better sales prices from dairies and increase milk production assisted by the experts of the extension service centres.

Some co-operatives have already been established and some of these are functioning well, but most of them need modernisation of scope, objectives, strategies, organisation and management to make them efficient and worthwhile

for the farmer to use. One example is a Milkos / SERDA initiative. To alleviate the shortage of raw milk MILKOS supply (2,000) dairy cows, milking and cooling equipment to the farmers under a Milkos / SERDA funded financing scheme. The farmers will get a 10 – 15 year contract to deliver milk to Milkos during which they will pay off the loans acquired through the scheme.

In most EU countries voluntary farmer managed co-operatives have been very successful and very popular for more than 100 years, but due to the recent, former Yugoslavian history of forced, government managed, so-called co-operatives, that form for co-operation is likely to be difficult to achieve in BiH.

Since the milk quality is far too low for any milk products to be allowed into the EU and the farmers can sell all the milk they can produce there is not much interest in quality and many farmers are not even aware of EU milk health regulations and requirements. If the industry is to move forward and into exports or import substitution it is, however, necessary for the farmers to achieve EU standard quality in time before entry. Campaigns should thus be run to raise the awareness among enterprises and customers of the importance of quality and safety certifications for access to EU and other markets.

The prerequisite quality and safety institutional system including accreditation of the national accreditation institutes and training of staff for these institutions should be finalised.

To encourage farmers to reduce bacteria counts incentives should be introduced based on improving this parameter rather than having a system maximising fat content. The lack of a satisfactory cooling chain and good clean conditions of the milking parlour and the collection points should be alleviated to help achieve the objectives.

As the BiH market for organic milk products apparently has not yet developed significantly it is doubtful if it could be profitable in the short term. To pursue this option would also require BiH to build some organic certification procedure and control from farm to retailer and such a system will take a long time to build.

BiH has an opportunity to use the time before entry into EU with its very strict rules on financial support to milk products production to financially support dairy farming and processing to bring it to a level where it can compete with EU enterprises.

At least one agro-technological institute with the appropriate breeding and dairy farm management research departments should be supported. It is suggested that the country's extension services be build around this institute which should subsequently train the trainers of extension service centre staff and act as centre of technological back-up and, if capability is build, also as marketing back-up for these.

To encourage investments there are tax incentives to a varying degree. It would be helpful and further encourage investment in machinery, equipment and in particular in cooling facilities if the Taxation Authorities would accept extraordinary favourable depreciation schemes. Better conditions should be introduced for plant and machinery funding including favourable interest rates, reasonable collateral requirements and simplified loan applications procedures in combination with effective guarantee funds and insurance schemes.

To alleviate the low quality transport infrastructure possible alternative logistics systems from farm to processor to market should be analysed.

Professional production management capability and IT systems need to be developed and improved to optimise production equipment and achieve higher productivity on upgraded production equipment.

### **6.1.2. Human Resources - dairies**

Lack of technical staff for making higher value added products and marketing staff for accessing export markets is one of the most critical constraints in the dairy sub-sector.

#### **Constraints on human resources**

To increase the amount and quality of the raw milk supply more farmers need to start dairy farms and they and the ones already running farms will need extensive training and continuous monitoring and coaching and advisory service from the extension centres.

The present fresh milk production may be handled efficiently by the technical dairy managers and workers presently employed in the industry. If, however, the industry moves to higher value products both managers and workers would need training and coaching for an extended period of time.

Selling fresh milk products locally is quite different from exporting so export would require most enterprises to hire well trained and experienced marketing, logistics and sales managers and staff. To build up such a resource would probably take three to five years and could probably only be lifted by the most resource strong enterprises. Finance and accounting are not always using modern information systems and pricing is mostly based on a cost plus calculation. When these enterprises calculate their basis for expansion they might therefore base their financial decisions on the wrong data.

Many of the top leaders of the enterprises need to modernise their management / leadership style and learn to make formal strategy and marketing planning.

The ability to communicate in English and other foreign languages is lacking in many enterprises making it very difficult to access foreign markets.

### ***Conclusions and recommendations – human resources***

A significant increase of production of higher value added products using effective production systems and more sophisticated machinery in production and quality assurance systems should be supported by setting up an education program on milk products (particularly cheese) production and processing for dairy managers, staff and quality inspectors at vocational schools or other educational institutions.

Extension centres should be able to train farmers in best farming practices and offer continuous training on new technologies. As the extension centres are far too few and understaffed, new extension centres need to be created and their staff trained. Such training could probably be done in co-operation with EU extension centres to achieve results close to their efficiency.

Given the very low level of marketing trained and experienced staff employed in today's dairies most of the incumbent managers and marketing / sales staff would need awareness building of the increasing need for marketing as the EU competition increases.

Presently universities are asked to carry out all kinds of training, but they are not ideally suited for offering effective training of a practical nature needed by marketing staff and young managers. That calls for short and medium term training and supportive mentoring over perhaps 6 to 12 months.

The top leaders of the enterprises need to modernise their management / leadership style. This would require attending shorter courses in business administration and leadership.

To learn English at high level is a must for doing business in the EU and the world business environment at large and a special effort should be made to teach everyone who needs to get in touch with or draw information from outside BiH. It would not be a bad idea to teach them best practice in service management in connection with the language courses.

#### **6.1.3. Marketing - dairies**

Hardly any milk products are presently exported except Livno cheese 70% of which is exported mainly to Croatia, Serbia and Montenegro. Around 50% of the shelf space at supermarkets is presently occupied by imported products<sup>9</sup>. In 2004 imports were worth 114 million KM while exports were 12 million KM resulting in a negative trade balance in dairy products of 102 million KM. The large negative trade balance in milk products presents a good opportunity for import substitution as milk products, except for cheese, milk powder and perhaps UHT milk, has to be sold locally to keep fresh.

#### **Constraints on effective marketing**

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<sup>9</sup> Phillips 2004

There is insufficient awareness of the increasing competition and the need for professional and aggressive marketing which the dairy sub-sector will face as the accession to EU progresses.

There are no domestic or regional consumer statistical data available due to insufficient statistical data collection by government institutions or industry associations. This makes it difficult to assess the market size in terms of consumer preferences and demand and supply except to measure the latter in terms of raw milk production and imports. There is thus no precise information basis for effective market expansion although there is of course more or less successful attempts to sell more in present markets and to expand mostly to local, well known Balkan markets.

The dairies rarely make professional business and marketing plans spelling out which markets they should attempt to enter with which products, at which prices, distributed through which distribution channels, supported by effective promotional efforts. The reason for this serious shortcoming seems to be that dairies usually do not have competent marketing managers nor do they hire consultants to assist them with getting export market information on specialty product opportunities and competitor's products and plans.

Many enterprises have no staff capable of connecting with distribution channels in the form of export, import and shipping agents. Four of the larger processors owned by foreign interests are, however, in a position to acquire information and some marketing knowledge from their partners. If these enterprises were able to make high value products at competitive prices they could of course also sell into EU markets using the facilities of their investors or their associates.

Fresh milk packaging is up to EU standards, but new, improved product packaging, promotion, advertising and of course sales would be necessary for new products. It is not certain that this design ability is available in BiH.

### ***Conclusions and recommendations - marketing***

To increase the level of export market information it would be very helpful, but not sufficient to set up access points with data base access and make business directories available to the dairies. The national statistics office would need to get reliable data from all stakeholders on which basis they should regularly report reliable market relevant statistics. It would also be necessary to make in particular the SMEs aware of the potential threat from large EU based dairy enterprises.

The marketing departments can be foreseen to be rather weak until an adequate number of managers and staff are educated. Until then extensive support should be given on access to export markets; participation in EU trade fairs; trade promotion tours and development of contacts with EU enterprises; identification and contracting of export / import agents and identification of shipping agents. Support would also be need in filling in export documents.

To enable the BiH dairies to advance on (EU) export markets the marketing management and marketing staff of many enterprises need support with production of meaningful and implement able marketing plans and strategies.

Once the information collection and analysis has been made the dairies need to get in contact with potential customers and distribution channels. To do so it would be helpful to have someone who has market knowledge and carries some weight at the market place making such contacts. In most countries this is done by the dairies themselves, their export agents and / or by permanent trade missions situated at their embassies often in co-operation with the national, regional or industry associations. BiH has no trade mission at the embassies. The Foreign Trade Chamber seems to have been trusted with that role, but while some trade missions are carried out by FTC for larger enterprises more should be done for SMEs. It would probably increase efficiency if the individual industry associations owned and largely paid for by the users (SMEs) would build capacity to assist such trade missions. It would be even more effective if the different industry associations got together to form a national confederation of industries which would assume the driving role and facilitate export support efforts at sector specific industry associations. That is, however, probably too ambitious to happen in the near future as the associations often are lead and staffed only by an Association Secretary and perhaps a few administrative staff and the activities are limited to a general assembly and a few meetings a year. In some cases the association has arranged attendance at fairs and exhibitions, but they rarely carry out sustained export support efforts.

#### 6.1.4. Standards and certifications – Dairies

Geographic region	Mandatory certifications and standards	Voluntary/B2B-required certifications and standards
<b>BiH</b>	<ul style="list-style-type: none"> <li>• Old YU legislation that includes old (compulsory and not replaced) JUS standards</li> <li>• Certificates required by other national legislation</li> </ul>	<ul style="list-style-type: none"> <li>• JUS standards (non-compulsory one's after 2003)</li> <li>• BAS Standards (based on EN/ISO) until combined with adopted new regulations (esp. BAS/TC 43 on Food)</li> <li>• OK (by Organska Kontrola)</li> <li>• Certificate from local health institute (if not mandatory)</li> </ul>
<b>EU</b>	<ul style="list-style-type: none"> <li>• EU food quality and safety related legal measures implementing e.g. ISO, EN (European Standards) and HACCP</li> <li>• EU agricultural certificates on PDOs, PGIs and TSGs (these are presently voluntary, but will become mandatory at accession to EU. They are defined in EU regulations and it is mandatory for member states to provide the preconditions laid down in the regulations)</li> <li>• EU organic food regulation standard, EU Eco label regulation (to be obtained on a voluntary basis)</li> </ul>	<hr/> <ul style="list-style-type: none"> <li>• HACCP</li> <li>• ISO standards (e.g. ISO 9001:2000/ISO 14001 environmental management standards and especially ISO 22000 for the food sector)</li> <li>• DIN standards</li> <li>• GLOBALGAP (=EUREPGAP)</li> <li>• GMP (Good Manufacturing Practice)</li> <li>• 'Clean production' certificate</li> <li>• 'IP' (integrated production) certificate</li> </ul> <p>Organic certificates e.g.:</p> <ul style="list-style-type: none"> <li>• KRAV</li> <li>• IMO</li> <li>• OK</li> <li>• NOP (National Organic Program) for US market</li> <li>• UK soil association certificate</li> <li>• BIO SUISSE</li> <li>• FAIRWILD</li> </ul>

The table above provides a general overview on standards and certifications in the dairies sub-sector in BiH and in the EU. The right column includes standards and certifications laid down by a legally binding norm although some of them can be obtained on a voluntary basis. The left column includes voluntary/B2B-required certifications and standards, which are not made compulsory by law. The rows 'BiH' and 'EU' only show the origin or - with regard to Swiss standards and certificates - the main geographic application area. But standards and certificates mentioned for example in the second column of the row 'EU' can also be applied in BiH.



No information on dairies e.g. organically certified or certified according to GLOBALGAP was found.

At the moment no general BiH brand indicating legal compliance for promotion purposes on either domestic or export markets has been found by the team. Even if BiH products become certified under e.g. GLOBALGAP<sup>10</sup>, this certificate is not allowed to be used on the product/label itself except in the B2B sector. Similarly, no widely recognized organic product/label marking indicating legal compliance, exists in BiH.

Even if a product gets internationally certified many BiH consumers lack awareness of the advantages of organic food as it is often just considered more expensive although it is not always correct. This makes enterprises avoid promoting or even mentioning the organic properties of the product. Another constraint is the lack of awareness among enterprises of the competitive advantage of marketing an internationally certified product they often do not mention certificates such as e.g. HACCP on the product label.

One dairy, already certified for environmental management under ISO 9001:2000, indicated that they will now strive to implement ISO 22.000 rather than ISO 14.001.

HACCP will be compulsory from Jan 2009 for all subjects working in the food industry. However it is already compulsory for animal based raw materials and products, but not fully implemented by the Food Safety Agency (FSA). This is laid down in Article 29 of the Food Law<sup>11</sup>.

A guidance document still does not exist on good hygiene practices (e.g. Good Managing Practicing –GMP Principles in food and feed production) and HACCP in BiH for food operators and inspectors. The FSA is responsible for this.

### ***Mandatory standards/certificates in BiH (JUS standards and mandatory certificates)***

#### ***Processes to obtain certificates***

Dairy enterprises are often obliged to provide certificates in accordance with the old outdated ex YU regulations and JUS standards. This leads to double costs for enterprises during many export or import activities. For example on the one hand costly conformity checks according to ISO standards and EU standards are included in the import price of a dairy production machine imported to BiH and afterwards additionally expensive certificates based on YU regulations and JUS standards are officially required. One dairy enterprise complained that

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<sup>10</sup> GLOBALGAP is a certificate based on a common initiative of many multinational corporations. Therefore it differs from the others. Furthermore it is not an organic certificate, but only indicates basic legal compliance, and it is not allowed to write GLOBALGAP on the product package. It is only allowed to use the word GLOBALGAP from business to business.

<sup>11</sup> from interview at BIOBASE, 25<sup>th</sup> April 2008.

information on required national certifications is not provided in advance allowing the enterprise to fulfil the requirements at the time of import. (see the web-pages listed in Annex 5).

The JUS standards on the acceptable number of bacteria in raw milk are more than three times higher than the EU standards. In preparation for export / accession one large producer has introduced standards higher than the JUS standards for its suppliers including a warning and exclusion system in case of contractual non-compliance with these standards.

### ***Institutions***

Certification and control of the mandatory standards is performed by the relevant public institutions (especially the veterinary offices and its inspectors). As far as it concerns the BiH national standards these institutions do not need to be internationally accredited. Dairy products certification under JUS standards are only valid in the EU if they are accepted by European enterprises and if no European standard is legally required.

Similar to the fruits and vegetable sector, the dairy sector is partly covered by food and food safety standards and by the related institutions (especially the Food Safety Agency).

The dairy sub-sector is exclusively regulated by the complex control system of the Veterinary institutions. This system contains the State Veterinary Office, the regional authorities in the FBiH, RS and BD as well as the local department's inspectors in the 10 cantons and 62 municipalities.

The assessment of the dairy products' conformity to these standards and certification requirements are in many cases, to be carried out using laboratories. Large dairy enterprises have their own laboratories and even their own official veterinary inspector on the production site checking the standards. Private institutions are usually not working in this publicly regulated sector.

### ***Support sector***

Public institutions (such as the Institute for Metrology as well as their inspectors) provide general information on which mandatory standards are required by enterprises at the different stages of the value chain. One dairy enterprise indicated that the information on relevant standards from the Institute of Metrology for the import of a certain machine was received within seven days which is satisfactory for such information. Further information, technical and financial assistance and training in setting up standards and certification systems can be gathered from public as well as from private institutions. Public institutions are for example the Food Safety Agency (FSA), the respective inspectors, the Chamber of Commerce, the Foreign Trade Chamber (FTC including the future Export Promotion Agency - EPA) and the EICC. Private institutions are all the certification enterprises, internationally accredited themselves and for the certification of a certain standard or cooperating with an internationally accredited institution including all their related individual consultants certified under a specific standard

### ***Quality of support***

One dairy enterprise complained about the quality of the veterinary inspectors and indicated the necessity of better training for the inspectors. An example was provided, where milk had a local veterinary certificate when arriving at the factory, but on re-checking the production had to be stopped due to the false data concerning the bacteria level in the local veterinary certificate .

A constraint in the veterinary sector is the lack of control with the number of veterinary inspections. Veterinary inspectors in local small offices often face conflicts of interest between their official tasks to control standards and their private work. For example, the owner of a slaughterhouse pays the full fee for an official control to the private veterinary. Then the veterinary has to refund the payment to the Canton (in the RS to the municipality) in order to get his fee. In other countries (such as Germany) the veterinary is paid directly for such official controls from the state office in order to prevent corruption. The small cantonal veterinary stations are often not able to fulfil all the food safety, animal health and administration tasks regarding veterinary standards, as in many cases one veterinary is trying to cover everything. Also, farmers easily get into a conflict of interest when they on the one hand are obliged to indicate animal diseases and on the other hand fear massive financial losses when doing so.

### ***Mandatory standards/certificates in EU (many ISOs, HACCP, Eco label, PDO, PGI, TSG)***

#### ***Processes to obtain certificates***

Mandatory standards / certificates included within EU-law have to be complied with by all stakeholders (dairy enterprises, public labs, inspection bodies etc.) once the legislation is in force. Also the European legislation on the EMAS environmental management certificate and the EU Eco label (11) has to be implemented. But this legislation – different to the one formerly mentioned - leaves the decision up to the enterprises whether or not to enter the procedure to obtain one of these two EU labels. On 1<sup>st</sup> Jan 2009 a new EU legal framework on organic production and labelling of organic products will enter into force.(12) This regulation lays down a new legal framework for organic products. It also includes a logo to be used on a voluntary basis by producers whose systems and products have been found, on inspection, to satisfy EU regulations. A similar legal system exists with certified logos for Protected Designation of Origin (PDO), Protected Geographical Indication (PGI) and TSG (Traditional Speciality Guaranteed), which could, in the future, be of special interest for processed products such as cheese (see details in Annex 5).

#### ***Institutions***

The EU legislation laying down the preconditions for the dairy sector (institutions, procedures etc.) is neither transposed nor in force in BiH. Hence the only way for BiH enterprises to fulfil these requirements is on a voluntary basis (see below). At least one large milk processor has already introduced higher EU-standards into his supply chain. Some of the EU certificates mentioned above could, however, be obtained by applicants (customers of BiH

enterprises) from outside the EU, e.g from 3 April 2006, applications for registration of PDOs and PGIs could be obtained that way by producers in third countries.

### ***Support sector***

In the support sector concerning standards mandatory in the EU mainly private institutions are active. These are all the certification institutions internationally accredited themselves for the certification of a certain standard or cooperating with an internationally accredited institution. These private institutions include besides their staff a number of associated consultants certified under a specific standard.

### ***Quality of support***

The quality of assistance differs depending on the duration and organisation of the assistance as well as on the quality of the individual consultant(s) providing the assistance. Concerning HACCP one dairy enterprise highly appreciated the quality of a 10 day training event carried out by an international organisation using international consultants while it complained about the quality of a 3 day training event provided by a national enterprise using a national consultant. In this case the enterprise also complained that private consultants are not able to properly advice and efficiently assist in building up the appropriate measurement and control systems for certification. In the same case the advantages of tailor-made training including practical training examples on a production site designed specifically for the dairy sector was emphasized.

The enterprises complain that institutions fully internationally accredited for awarding the different certificates required for access to the EU and other markets are not yet fully operational.

### ***Voluntary standards/certificates in BiH and in the EU***

Voluntary standards in BiH and in the EU will be dealt with together as a broad overlap exists.

### ***Processes to obtain voluntary certificates in BiH according to some JUS, BAS and OK Standards***

The BAS Standards (esp. BAS/TC 43 on Food) prepared by the Institute of Standardisation are already applied by the Institute of Accreditation. These standards will become compulsory for all stakeholders (dairy enterprises, public labs, inspection bodies etc.) in accordance with the technical regulations on conformity assessment, once these regulations are in force. HACCP for example will be compulsory from Jan 2009 for all subjects working in the food sector. Hence, until then certain JUS and the BAS standards can be used and certificates from local public institutes such as veterinary laboratories may be obtained following the appropriate procedures. The processes are described in more detail on the web pages listed in the table in Annex 5.

### ***Processes to obtain voluntary standards/certificates in the EU (many ISO, HACCP, GLOBALGAP, KRAV etc.)***

Certificates might also be requested in the dairy sector by national or EU-business partners or by certain external markets, although no legal requirements exist. Hence, even the 'private' organic standard OK (by Organska Kontrola) for example could be requested by an EU-business partner. But it is rather more likely that this happens with standards such as ISO, HACCP, GLOBALGAP and certain organic standard such as KRAV to the EU-country Sweden or IMO for Switzerland (see details on the web-pages listed in Annex 5).

### ***Institutions***

The certificates for enterprises for these internationally requested standards are provided by international fully accredited institutions in co-operation with national organisations, such as TÜV Thüringen together with TÜV Adria and BIOBASE or Quality Austria and Boscert.

The certificates for enterprises for the national standards mentioned above are provided by national public institutions or national private organisations. For example one private institution is Organska Kontrola with its standard OK. The OK-certified products gain reputation mainly on the national level unless they are combined with an international accreditation. In this way for example Organska Kontrola recently became internationally accredited by the international organic umbrella institution IFOAM. Organska Kontrola is attempting at the moment to become accredited by GLOBALGAP in order to provide this international certification to enterprises, as at the moment INCEBO from Macedonia is the only accredited institution able to certify on GLOBALGAP in the former YU-area.

The conformity assessment of the dairy products with regard to these voluntary standards and certifications needs are in many cases to be carried out with the services of laboratories. Because of the unfinished international accreditation situation of BATA described above, there is no internationally accredited food laboratory in BiH. Thus for example, a large dairy producer, which voluntarily applies higher EU quality standards, started to gather information on certification procedures in a laboratory in Croatia due to the lack of sufficient laboratory infrastructure in BiH.

### ***Support sector and quality of support***

As BiH institutions are not yet accredited to issue internationally valid certificates necessary for access to the EU and other international markets, enterprises are forced to become certified by foreign institutions at a higher cost than national institutions would presumably charge. Enterprises also complain that (private) consultants are unable to properly advice on, and efficiently assist in building up the appropriate measurement and control systems for certification.

## ***Constraints and Recommendations***

### **Constraints**

- Many consumers seem to lack awareness of the advantages of organic dairy products
- Even enterprises with internationally acknowledged certificates find it difficult to get good international business partners
- Lack of a general BiH brand name and of a widely recognised organic brand name which would be useable for marking/labelling the products that they comply with with international laws and have certification according to international standards for international marketing purposes
- Lack of EU-compatible equipment for testing a product according to a certain standard and providing certifications within the laboratories
- Lack of co-operation between similar laboratories in using existing equipment
- Appropriate control would not be possible if all required inspections were carried out due to lack of equipment and shortage of staff
- Faulty collection methods, delayed delivery and faulty samples for testing
- The BiH legislation does not conform to the EU requirements for food quality and safety
- Conflicts of interest of veterinarians in small veterinary offices on the local level between official standards control tasks and private work
- Lack of capacity for controlling food safety and animal health and carrying out administration tasks in the small veterinary offices on the local level
- Lack of compliance with standards in animal health. Animal diseases are not always reported by the farmers due to fear of financial losses

### **Recommendations**

The following recommendations respond to the constraints.

- Apart from the general awareness raising issues described below in chapter 11, support to consumer awareness raising should be provided to explain health and price issues for organic products. This would have a direct influence on the demand side and would help develop the market.
- In parallel, awareness raising measures should be aimed at enterprises in order to promote labelling of products with organic certificates as well as ISO and HACCP certificates obtained as a sort of quality sign (provided there are no legal restrictions).
- Capacity building grants aimed particularly at certified enterprises participating in large commercial exhibitions abroad would contribute to raise export contact opportunities aiming to overcome the gap between the current focus on the BiH market and a desirable more international business orientation.
- An assessment of veterinary laboratories should be carried out to determine the lack of equipment (by location and station) followed by support of acquisition of new equipment (13)

- An assessment should be carried out to determine the possibilities for sharing equipment between similar laboratories. This assessment could be initiated and supervised by a state level co-ordination conference introducing co-ordination bodies for similar laboratories (13)
- Support should be provided to the existing association of laboratories to increase personnel and financial capacities including capacity building. Support would be required in the following areas:
  - increased supervision of veterinary inspectors and enable cross-checking already controlled enterprises
  - training of veterinary inspectors on harmonized methods of test sample collection (14)
- Support a conformity check of veterinary laws on state and entity level with regard to the EC legislation (13)
- Support should be provided for changing the institutional status of the local veterinarians to independent individuals free of conflict of interest and paid exclusively from state offices when working in the public interest.
- An intensive constitutional and legal feasibility study should be supported in order to assess
  - as a priority the introduction of new larger local veterinary units (LVU) in one or 2 pilot regions and – if appropriate –
  - second the introduction of, in total, 16 local veterinary units (LVU) as the 10 cantons and the municipalities in RS are already now split into 6 regions as regards veterinary issues. (13)
- Support should be provided through the (planned) new animal health compensation fund in order to compensate for losses caused by diseases. Preventive measures should be supported and funded by EC, BiH and the Entities on a time-limited basis<sup>12</sup>.

### ***Factors that limit competitiveness of the value chain***

Public as well as private business services in agriculture in general, and in the dairy sector in particular, are weak in BiH with regard to both demand and supply. The demand side barriers are even stronger in all agricultural sectors than in industrial ones. Farmers demonstrate resistance to innovating or changing traditional practices. Most farmers are not interested in economic and technical advice, training and information, and consider grants, subsidies and/or favourable credits much more important. They are not aware that their products are not price competitive on the EU market, and in most cases not even on the domestic market. One of the major weaknesses of raw milk production lies in the quality of raw milk, while farmers are unaware of this issue.

On the supply side, service providers from the public sector are not motivated to do practical advisory work in the field, they lack appropriate knowledge and capacity, and the number of advisers in public offices is inadequate for the job at hand. The inadequate availability of public advisory services to assist with product, productivity and market development is one of the factors that limits the competitiveness of the value chain.

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<sup>12</sup> with prior coordination to the World Bank's Agriculture and Rural Development Project.

Weak and under-resourced governance structures, information systems, and service structures in support of the sector are also factors that limit the sector's competitiveness. There is no state-level agricultural development strategy and policy, decisions on incentives are made at different government levels without coordination, farms are not registered, and the information on paid incentives is not integrated or centralized. The lack of reliable and comprehensive statistics on agriculture is hampering the development of all aspects of agricultural policy, including the structure and capacity of the public advisory system.

There are 4 veterinary faculties in BiH. They do offer some services for farmers, but generally have weak relations with producers and processors.

Laboratories are also a weak point in the value chain. There are not enough public or private laboratories; their equipment is limited, so they are unable to perform the required tests with the required level of accuracy and they can accomplish only a small number of tests.

Cooperatives and agricultural associations are weak and they cannot protect producers' interests in their relations with processors. Also, they do not have the capacity to advise producers using local experts.

Generally, the private business support service sector is weak, with few providers and a narrow range of services offered. Because of the low demand, it is difficult to develop private sector's supply. The situation is similar even in many developed countries.

The supply of business services to milk processors is much better, but still inadequate and fragmented. Training, trade fairs participation, information, promotion, and consulting services are provided by different institutions and organizations (development agencies, business support centres, chambers of commerce, some sector associations) and by different donor projects. Sustainable private providers are only now starting to appear on the market, mostly as a result of donor assistance.

USAID LAMP (Linking Agricultural Markets to Producers) project has been an important provider of business services (2003-2008). The project worked through 5 regional offices covering/across BiH, and most services were delivered by local experts through outsourcing. The following services were provided: network events, assistance in transaction linkage agreements, training, education of trainers, cluster support, participation in fairs, study tours and round tables. Beside these services, the project provided financial services, such as small grants and loans. Business services were provided for free and sustainability was not achieved. A similar USAID project targeting agriculture will most probably be launched in 2009.

Many other donor funded projects have been implemented, providing advisory services and often focusing on a specific sector/sub sector offering specific services to specific geographical areas. In most cases these services have been provided for free or with substantial subsidies. After project finalization, the



services have not been sustained and trained staff usually moved to a new donor project. In other words, save for immediate benefits, no sustained impact has been accomplished. The projects were rarely coordinated and duplications happened very often. Also, many educational materials and handbooks for producers and SMEs have not been preserved or transferred to local institutions.

### ***Assessment of private and public institutions that need to be in place to assist the enterprises***

#### ***Business support services provided by governments***

Characteristics and structure of pre-war agriculture production and provision of advisory services explain by large difficulties in developing new structures and inefficiencies of the structures developed so far. In the pre-war BiH (or Yugoslavia) the majority of agricultural land was utilized by large agricultural enterprises. There were four such enterprises in BiH, with clear regional orientation and without substantial competition regarding inputs or sale. These enterprises were engaged in primary production, processing and also had close contractual relations with small producers (individual farmers) through cooperatives (“zadruga”). Based on these contracts, large enterprises supplied small producers with inputs and bought their raw products. Advice was provided by the experts employed in these large enterprises or in cooperatives.

Post-war development of agriculture was initiated mainly by donor projects focused on input supply (seeds, fertilizers and livestock). Soon it became clear that technical knowledge of small farmers was insufficient to achieve full potential of inputs supplied to them. This led to new agricultural projects funded by donors which focused on agricultural extension services. Parallel to these, some municipal governments also noticed the need to assist local farmers and agricultural community and employed educated agricultural staff to help people to make living from agriculture. Soon, large numbers of local initiatives in agricultural advisory services appeared, but without coordination from higher administrative levels (cantons/regions, entities and state).

In order to streamline the institutional development of agriculture and also agriculture advisory services, in 1998 the EU-Phare I program (spring 1998 – October 2000) started the first large agriculture technical assistance project (“Private Farmers Assistance Project, PFAP) in north-west Bosnia. The project included the promotion of a “pilot agricultural advisory services” in 14 municipalities through training of municipality staff, demonstration plots, extension materials (production and farm management handbooks) as well as basic office equipment for municipalities and Cantonal MoA in Bihac and entity MoA RS. The objective of the second EU-Phare project (2001 – 2003) was to establish an agricultural advisory service structure on entity, cantonal/regional and municipality levels in the entire BiH. The foreseen concept, which does not yet exist, was a network consisting of small units attached to the entity MoA with a limited number of specialists employed on cantonal/regional level and a number of general advisers doing field work, employed and paid by municipalities. Training was provided to advisers at all levels and material support (including salaries) given only to cantonal/regional and entity level, with the expectation that municipalities would hire and pay

needed advisors from their own resources. Most municipalities provided only one additional staff as adviser or tried to accomplish work with an already employed adviser. There are only a few municipalities that have a larger number of employed advisers.

Public advisory services in agriculture developed into somewhat different formal structures in the two entities and Brcko District (FBiH, RS and BD).

In FBiH, the structure and weaknesses of the agricultural advisory system reflects the structure of government and their relationships, meaning that Federal MoA has very limited influence on the cantonal MoA and cantonal MoA have very little influence on the municipality advisers. In RS, five regions are not a formal institutional structure in the administrative set-up, they do not have any power or budget on their own and were mainly established for pragmatic and logistical reasons. However, in the RS too the entity MoA has no influence on the field advisers at the municipal level. Eventual cooperation between regional and municipality advisers is based on personal relations and not on institutional structure.

In FBiH, the agricultural advisory service is organized at three levels – entity, cantons and municipalities, which are institutionally and formally quite independent from each other.

At entity level, advisory services should be provided by the Federal Agricultural Bureau (Zavod, Sarajevo), financed from the budget. The tasks of the Federal Agricultural Bureau relate to:

- Selection in animal husbandry
- Plant health
- Approval of imported plant varieties and edition of the official “variety list”
- Control of seeds and plant material
- Training and education

The bureau has three laboratories (for seed control, food control and milk control). These laboratories are not much utilized although they are well equipped. The reason for this is that it is not clear who should finance the costs of the services. The management feels that the bureau has staff, facilities and organizational capacities to play the core role in the agricultural advisory system, but its role is not clearly defined. New tasks recently added are collection and analyses of data collected by meteorological stations supplied by the Federal MoA to each canton.

At the cantonal level, Ministries of Agriculture, Forestry and Water management are set up in all 10 cantons. Cantons have different set-ups for advisory services:

- In four cantons, this activity is realized by cantonal agricultural bureaus (zavodi) as independent public bodies (Una Sana, Tuzla, West-Herzegovina and Herzegovina-Neretva Cantons)
- In four cantons, there are departments for advisory services attached to the Cantonal MoAs (Posavina, Central Bosnia, Sarajevo and West Bosnia Cantons)

- In two cantons, neither bureaus nor a separate departments for advisory services exist (Zenica-Doboj and Bosnia-Podrinje Cantons)

The cantonal bureaus were established and, for several years, financed by EU-Phare project. They have few employees and laboratories for seed testing and soil analyses.

Regardless of the organizational set up, the main efforts of the staff are related to the application and administrative procedures associated with subsidies. The bureaus are responsible for the physical verification of subsidies used by farms. In other words, staff does not have time for advisory services.

Most municipalities in FBiH (except several urban municipalities) employ at least one agricultural specialist. Agriculture is in most cases included within the department of economy, and some municipalities have a separate department of agriculture.

In RS, there is the Agency for the Provision of Advices to Agriculture. This agency was established in 2004, and it has 5 regional offices and 20 employees (7 in the headquarters and 13 in five regional centres; 2 or 3 employees per centre). During winter months, regional centres organize training on technical subjects for farmers. Links between the entity and their own regional offices are good but the institutional link with the municipality level is missing and co-operation depends on personal relationships. The Agency mostly works on distribution and administration of subsidies.

In RS too, most municipalities (except the ones in urban areas) have at least one agricultural specialist/administrative staff and some have one or several agricultural advisers. In most municipalities agriculture is included in the department of economy, while some have a separate department of agriculture.

In Brcko District, the advisory service belongs to the agricultural department and employs three advisers (each adviser focuses on one of the following: crops and vegetables, livestock and fruits). The department has a small lab for soil analysis. Advisers mostly work on administrative tasks related to the subsidies.

Regarding the public advisory system, the most pressing problems are the number of staff and their professional/technical competences. In general, staff employed at different levels as advisors spend 80 to 40%<sup>13</sup> of their time on distribution of agricultural subsidies. Low capacity for advisory services is indicated by poor transportation facilities, poor availability of extension materials and, most of all, by a low ratio of advisers per farming households. At the cantonal/regional and municipality levels, the number of advisers is so small that it is hardly possible to cover even the majority of the large, commercial farmers.

The additional weakness of the public advisory system in agriculture is that the entity level MoA in FBiH has very little influence on the cantonal MoAs. Also,

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<sup>13</sup> The higher percentage reflects internal staff perception of their time allocation, the lower reflects external assessments.

in both entities, there is a break in the line of command between the advisers on the municipality level and the next higher level. The regional variation in the institutional set-up of the agricultural advisory service as such is not a major problem, but within a certain region the advisory system should be made in one single casting, with the stringent line of command and responsibilities.

Theoretically, the advisory system should be an essential link between agricultural research and practice, transferring the results of research from universities to farmers and feed-back from farmers to the research sector about the needs for research, usefulness of the performed research and eventual needs for adaptations. This link is, however, not yet established nor is the role of the agricultural research institutions and universities in the institutional set-up of the advisory system defined. There are frequent complaints about the incomplete and missing legislation concerning the advisory system. However, besides the need for better developed laws and regulations, there is also a strong need for changing the mentality and for convincing the key players that they have to cooperate.

Regarding SMEs operation in the dairy sector, there are no business services provided by the governments. However, they can use general SME support services provided by different agencies and/or business centres. These services include information on legal framework and available financial sources, basic consulting and training for start ups and SMEs.

### ***Business support services provided by regional development agencies (RDAs)***

Regarding the business support services, only a few RDAs implement projects in agriculture that are relevant for the dairy sector. However, most RDAs implement projects that provide business services to SMEs, which means that processors can benefit from these services in “competition” with SMEs from other sectors.

REDAH implements/facilitates one project relevant for primary producers from the dairy sector. Support to them (and primary producers from other sectors) will be provided by the Centre for Agriculture and Rural Development, established at the beginning of 2008 with a task to implement a project financed from Spanish funds. The project will last three years (2008-2010) and the budget is 500,000 EUR. Three local agricultural experts have been employed. Four activities will be realized:

- education, workshops and consulting,
- coordination of all projects and organizations active in agriculture and rural development in the region,
- support to cooperatives and associations,
- pilot projects and studies.

Education will be provided for free in the first year; 30% will be paid in the second and 50% in the third year. Training will also be provided for secondary school teachers. The project will include students as volunteers. In order to increase efficiency, the project will use all educational/training materials and databases developed by the USAID LAMP project. The Centre is required to

build its sustainability and continue after the project has been completed in the form of an agency, with adequate staff. However, there are no specific plans as to how this objective will be accomplished. Experience with other similar donor initiatives shows that the lack of planning at the early stages of the projects, very often leads to failures as staff move to other projects.

NERDA doesn't provide direct business services to raw milk producers but rather offers some support to 5 agribusiness centres in the region (see the next section).

A new project that started in 2007 will be sector-specific, with the food sector as one of those selected. Processing enterprises from the sector will get consulting services and/or training financed partly by themselves and partly by a Development Fund to be set up and managed by the project.

### ***Business support services provided by development agencies and business support centres (BSCs)***

Most development agencies and business service centres do not provide services to raw milk producers. Processors from the dairy sector can use services for SMEs and start-ups, as described in section 5.4.3. A few agencies and centres that provide services to farmers are described below.

PLOD, a newly established Regional centre for business relations between domestic SMEs and enterprises from EU opened officially in May 2008, but specific activities and services are still not defined. It will focus on several sectors, including agriculture offering the processors from F&V a chance to use its services.

In the region of northeast Bosnia, there are 5 agribusiness centres, established in the period 2005-2007 by a UNDP project as independent NGOs, now financed by municipalities (20%). The services provided to cooperatives and producers include the following: business services to cooperatives (advisory services, links with producers); education/training, in cooperation with the LAMP project; links with the market and processors. Each centre has only one employee, except that in Bratunac, which has 4 employees (financed by UNDP). These are the only business support centres that are focused on agricultural producers, however, the number of employees indicates that services can be provided only to a very small number of producers.

Most business support centres are not focused on specific sectors. However, several business centres managed by SERDA provide services to individual farmers including start-ups. These services are limited to providing information on available sources of finance and assistance in preparing credit/loan applications.

### ***Business support services provided by Chambers of Commerce (CoCs) and associations***

The CoC do not provide any services to primary producers from the dairy sector, neither individual producers nor members of cooperatives. However, SMEs from the sector can benefit from their services. One exception is the Sarajevo Canton CoC that plans to cooperate with the Agricultural Cooperative Nahorevo (Sarajevo) in establishing three model farms for fresh milk production. The objectives are to demonstrate to producers what land scale is needed, how to organize the production, and how to establish relationships with processors.

Recently, the Export Promotion Agency was established within the FTC. EU EXPRO I project supported the Agency in the preparatory phase, while a new EU EXPRO II project is expected to start soon with a focus on institution building, as well as on working with 22 enterprises. Food and drink production is among the selected priority sectors, so there are opportunities for processors from the dairy sector to receive assistance from the project.

Primary producers are organized in different legal forms, such as cooperatives, associations, and even as NGOs. Most of the existing associations in the agricultural sector in general and in the dairy sector in particular, were initiated and supported (at least in their initial stage) by donors. The donor support has been provided in various forms, such as: raising awareness among fresh milk producers on how they can benefit from joint activities, financial support including operational costs of the offices with a small number of professional staff, capacity building of management and staff, as well as financial support for services development and delivery.

There are just a few successful associations that remained active after donor support ended, with stable membership and financial sustainability. There is no state- or even entity-level association in the dairy sector. The association of milk producers and collectors-buyers in Tuzla Canton is considered to be more successful than others<sup>14</sup>. The association has about 120 members. The collectors-buyers have their own coolers and they collect the fresh milk, deliver it to processors, take payments and distribute them to producers. The association also helps producers with government subsidies. There is no membership fee and the work is based on sponsorship and voluntary work of 5-6 collectors. The association provides some education and information on available sources of finance to producers. The strategy of the association is to sell the collected milk to several processors in order to protect producers' interest and prevent dependency on one processor.

There is a large number of cooperatives. Most of them are weak, local and specialized by products. However, several of them have accomplished good results within a short period of time such as helping increase the production of milk, and establishing relationships with processors<sup>15</sup>.

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<sup>14</sup> The opinion expressed by LAMP staff.

<sup>15</sup> Agricultural Cooperative Nahorevo (Sarajevo) helped increase the production and delivery to a daily average of 2,400 litres.

The cooperatives play the role of intermediaries between producers and processors. Those cooperatives that have good relationships with processors (such as several cooperatives in the dairy sector with direct relations to processors) are the most active and considered to be the most successful. In a few cases, these cooperatives are supported by a processor with business services and also with financial services (Credit Guarantee Fund supported by Milkos, Sarajevo).

Some cooperatives have their own equipment and facilities, but in most cases this is not enough to satisfy the members' needs. In most cases, extension services are provided by cooperatives only if donors provide funds and capacity building.

### ***Business support services provided by private service providers***

In addition to public agricultural advisory services, private providers have become more active in recent years. However, this segment of supply is in the initial stage of development and large differences by regions and sectors are evident. In general, in the regions with more intensive agriculture and with more processors, the private service providers are more active.

The main actors in the private sectors are:

- Experts/advisers employed by processors, and
- Individual free-lance advisers.

With the growth of milk-processing enterprises and increased foreign investment in the sector, one can see more and more examples of investor's readiness to provide advice to primary producers. They usually cooperate with primary producers through cooperatives and this enables a more effective delivery of advisory services.

Individual free-lance consultants or consulting enterprises in most cases reach primary producers through projects financed by donors and very seldom have long-term relationships with them. Donors have financed many projects envisaged to build capacities of local advisers, helped them establish relationships with producers - usually through cooperatives, associations, self-help organizations, or groups of producers. The services were provided free of charge in anticipation that, before the end of the project, the producers would become aware of the need for services and be ready to pay for them. There are few examples of these services and providers having stayed on the market. This is probably due to a combination of lack of willingness to pay for services on the part of the potential clients; the services may not match the perceived needs; the recruiting and training of experts do not produce capable experts and donor support stopped short of delivering sustainable consulting businesses.

Regarding business services for processors, that is for SMEs, the situation is somewhat better. Supply is especially strong in general management skills and is increasing in international standards (ISO, HACCP, CE mark), that is in

segments where donors provided, in previous years, extensive capacity building for local consultants.

### ***Recommendations***

The legal framework supporting the development of agriculture has been strengthened with the adoption of the state-level Law on Agriculture, Food and Rural Development. However, the Law will not have any substantial impact on sector development until implementing regulations have been prepared and passed, and different organizational units foreseen by the Law have been set up and staffed.

The Agricultural, Food, Forestry and Rural Development Sector in the Ministry of Foreign Trade and Economic Relations has been operational since 2007 supported firstly by the EC SESMARD project and recently by the WB project Agricultural and Rural Development. The WB project has a budget of US\$ 21 million and a duration of 4 years, 2007-2011. One of the project components is to strengthen agricultural advisory services with a budget of US\$ 5.14 million. Although the major focus will be on the providers of public advisory services, private providers will also be supported. The project budget seems to be far short of the needs to assist both the demand and supply sides of business services for primary producers and processors, therefore additional support by the EC and other donors will be essential. However, it will be important to coordinate all donor projects in this field and to adopt a complementary approach.

The major recommendations for EC projects are the following:

- Support development and improvement of the legislation concerning the public advisory system.
- Support the strengthening of public extension services, by capacity building and enhanced knowledge of staff on modern technologies and new varieties in order to support the increase of primary production and better supply for milk processors; this initiative can produce expected results only if governments at all levels, especially municipalities, employ an appropriate number of agricultural advisers.
- Support co-operation between public business service providers, universities, research centres and other stakeholders supporting enterprises to achieve a co-ordinated assistance
- Provide capacity building for other (private sector) service providers in accordance with the demand by producers and processors and in particular take care to render extensive support to the service provider's until they have build a sustainable business.
- Promote co-operation among all business service providers.
- Support development agencies in playing an appropriate role as facilitators of establishment of business service providers in agriculture in general, and in the dairy sector in particular, and not as providers of the services.
- Support the capacity building and strengthening of cooperatives and other forms of primary producers' organizations in order to increase the



negotiating power of primary producers and to facilitate effective dissemination and use of knowledge and information. Farmers' awareness of the benefits they can gain if integrated in cooperatives should be increased through seminars and pilot projects demonstrating the effects.

- Support stronger relations and linkages between processors and producers.
- Although there are signs that farmers' approach towards advisory services is changing to the positive side, partly helped by donor projects, it is a very slow process which must be given adequate time. The number of commercial farmers is increasing, and there is therefore a continual need for strengthening the demand by raising awareness of the benefits of business services, especially in the fields of marketing and basic business skills essential for commercial production.
- Support farmers' education on the benefits and urgency to innovate and to implement non-traditional practices through awareness raising, seminars demonstrating the effects.
- Support the funding of new business services development, provided jointly by the governments and donors.
- Support the development of an integrated market information system, available to all beneficiaries.
- Increase the availability of all educational materials already developed.
- Support strong donor coordination and a unified/harmonized approach in order to avoid duplications, with the respective domestic governments taking the leadership as well as ownership of this process.
- Support the development of the state-level framework and institutions for SMEs in line with the European Charter for SMEs with a view to ensure better services to small processors.

### **6.1.5. Finance - dairies**

#### ***Factors that limit competitiveness of the value chain***

After large donor interventions in the field of financial services for farmers, through grants and heavily subsidized lending, recently only a few donor programs included these services<sup>16</sup> in their programs. Although farmers' and SMEs' access to credit has improved, there are still weaknesses regarding access to finance that limit the growth of the dairy sector. These weaknesses exist both with regard to demand and supply.

A major obstacle on the demand side is the credit capacity of individual farmers, and SMEs as well. In the dairy sector, farmers in most cases possess very small farms with 2-3 cows and investment rate is very low.

On the supply side, weaknesses are related to the lack of products tailored to the needs of farmers, in the sense of grace period and collateral requested by commercial banks. This weakness is somewhat bridged by the MCOs offer, but

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<sup>16</sup> These are USAID, IFAD and SIDA – see Annex 4.

interest rates charged by them are in the range of 18-28% which is unacceptably high to many farmers and SMEs.

Offers by development banks and special credit lines funded by donors and/or local governments provide additional funds that are better adjusted to farmers' and SMEs' needs, especially regarding interest rates. However, these funds are limited to farmers operating on registered farms and sometimes to farmers that have contracts with processors or buyers. Also, there are complaints that farmers and enterprises are not informed about available special credit lines..

The establishment of quite a number of credit guarantee funds has improved financial services for farmers, start-ups and SMEs in all sectors including the dairy sector.

### ***Assessment of private and public institutions that need to be in place to assist the enterprises***

#### ***Finance provided by development banks***

The Investment-development bank of RS manages 6 credit lines. Out of them, two lines are for enterprises and entrepreneurs (total amount for 2008 is 80,4 million KM); SMEs from the dairy sector can apply for these loans. Two lines are for agriculture (total amount for 2008 is 71,6 million KM) and registered farmers; SMEs from the dairy sector can apply for these loans as well. The implementation of these credit lines is performed by 6 commercial banks and three micro credit organizations. The following terms and conditions are applicable to the key groups:

- For star ups, maximum loan amount is 30.000 KM; repayment period is 5 years, with grace period of 6 months; interest rate 7,13-7,33%, depending on the location; amount for 2008 is 12,9 million KM.
- For entrepreneurs and enterprises, maximum loan amount is 5 million KM; repayment period is 15 years, with grace period of 18 months; maximum interest rate is 6,03% (special incentives for underdeveloped areas (5,83%), processing industries (5,73%), members of clusters (5,73%), exporters (5,03%) and tourism (5,73%)); amount for 2008 is 67,5 million KM.
- For micro business in agriculture (for registered farmers), maximum loan amount is 50.000 KM; repayment period is 10 years, with grace period of 36 months, depending on type of production; interest rate is 7,33%, for cluster members 7,03%; amount for 2008 is 25,8 million KM.
- For agriculture (legal entities), maximum loan amount is 3 million KM; repayment period is 5 years, with grace period of 36 months; interest rate is 5,73%, for cluster members 5,43%; amount for 2008 is 45,8 million KM.

The Investment bank of FBiH carries out its operations directly and through commercial banks. Four credit lines are in implementation. Farmers can apply for two of them and SMEs from the dairy sector for all four. The following terms and conditions are applicable:

- For production and services, interest rate is 5%; maturity max. 7 years, with
- grace period up to 1 year.
- For agriculture production, interest rate is 4%; maturity max. 7 years, with grace period which depends on the type of production.
- For export, revolving credit, interest rate EURIBOR+1%, no grace period.
- For employment:
  - Terms for agriculture are interest rate 3%; grace period 1-2 years; maturity max. 7 years
  - Terms for industry and services: interest rate 4%, grace period 6 months, maturity max. 5 years; maximum amount is 500.000 KM, that is 10.000-25.000 KM per job.

The general impression from interviewing the banks is that their services are not sufficiently transparent and that approvals are based on political and economic criteria. Also, approval processes are long. The critics are much stronger regarding Investment bank of FBiH than regarding Investment-Development bank of RS.

### ***Credit guarantee funds (CGFs)***

Credit provided by CGF from Brcko District can be used by farmers as well as by SMEs from the dairy sector. The new cycle that started in 2008 is based on 1,300.000 KM deposit provided by the government. Credit lines have been increased (deposit multiplied by 3 to 5) and 4 commercial banks are selected as implementers. Agreed terms are: interest rate of 7.5%, the loan amount up to 100.000 KM and maturity up to 5 years. Clients will be agriculture producers with registered farms, SMEs and workshops.

CGF managed by LINK Mostar provides credit with a short grace period and it is not used by farmers. However, SMEs and start-ups from the dairy sector can use these loans. The total credit line now available is 4,6 million KM. Interest rate is 7%, grace period is 6 months, the loan amount is up to 50,000 KM, and maturity is up to 5 years. Most users have been established SMEs (81%) and only 19% start-ups.

Special CGF for youth is available for farmers, start-ups and SMEs from the dairy sector. Loan amounts from 5.000 KM to 30.000 KM (20.000 KM for start-ups), interest rate 6,2%, grace period 6 months (9 months for agriculture producers), maturity 5 years. The fund covers the whole BiH and it is managed by LINK Mostar, SERDA Sarajevo, NERDA Tuzla, NGO TALDI Tuzla, MCO Sinergija Banja Luka and NGO CeBEDA Travnik. These organizations provide assistance in the preparation of business plans and applications and they charge 1% of the loan amount for their services.

SERDA established one regional CGF in 2006, with deposit of 1 million KM and credit line provided by Zagrebacka banka in the amount of 3 million (to be increased to 4 million KM soon). 48% of users are farmers.

Recently one milk processor, enterprise Milkos Sarajevo, has decided to join funds with SERDA and established a small CGF for 80 cooperates (cooperatives or members of a cooperative) in Sokolac (RS). The farmers will get animals instead of money, and will repay the credit through milk delivered to Milkos.

The success of the first established CGF increased interest of the governments as well as processors of agricultural products to provide deposits for the guarantee fund and to work through selected commercial banks to issue the loans. Banks are also very satisfied with this instrument and they start providing larger credit lines with lower interest rates.

New funds have been established in Canton Zenica-Doboj (500.000 KM as deposit, credit line 1,5 million KM), in municipality Novi Grad Sarajevo (200.000 KM as deposit, credit line in the amount of 600.000 KM with interest rate of 5% for farmers), municipality Prijedor (deposit of 600.000 KM, credit line in the amount of 3 million KM for agriculture and SMEs), NERDA, cantonal government and municipality Tuzla (deposit 600.000 KM, credit line 2 million KM, for SMEs and craft, interest rate 6.6%).

### ***Commercial banks***

Regarding credit offered to individual farmers and SMEs by commercial banks, there are constrains on both supply and demand side.

Constraints on the supply side are not related to the lack of available loans but to the terms and conditions that clients have to satisfy in order to be accepted by banks as well as the high interest rate (about 9%). Major obstacles are related to the requested collateral and short grace period. Most small farmers can not satisfy these conditions, since farms are not registered in the farmers registration system and can not be used as collateral. Also, the nature of the production cycle is often such that short grace periods are not conducive to the agricultural production cycles. The weakness of the commercial banks, very often pointed out by enterprises is that staff has inadequate knowledge on specific characteristics of agriculture and/or SMEs and that is why banks do not offer loans tailored to the needs of these sectors. Additional barrier is that banks favour larger loans that are above the credit capacities of small producers or small enterprises.

Major demand side constrains are business skills of producers and SMEs that limit their capability to develop and present reliable business plans and business strategies.

Among commercial banks, ProCredit Bank and Volksbank have the most experience in financing small scale family farming and small enterprises. Comparing these two banks, ProCredit bank offers more favourable conditions regarding collateral, duration and grace period, tailoring them to the client's situation and charging interest rates between 10,5% and 18%. On the other side, Volksbank charges lower interest rate to borrowers (9,5%) but has tighter conditions on collateral.

One additional constrain for agriculture producers is that commercial banks do not accept cooperatives or associations as clients.

Local governments give interest rate subsidies targeting mostly agriculture producers and SMEs and providing the difference down to 6% interest rate. Although this subsidy has increased the use of loans offered by commercial banks, the application procedures are complicated.

Most commercial banks are becoming more involved in the micro finance sector, either directly by down scaling their offers or indirectly by financing micro credit organizations. Banks' advantage is related to the interest rates (much lower than rates charged by MCOs) but MCOs have an advantage regarding collateral requirements and other conditions.

### ***Special credit lines***

Special credit lines are financed by donors and local governments (different levels) and implemented by commercial banks and/or MCOs. Most of them target agriculture and SMEs. Sometimes commercial banks add their own funds to increase the credit lines.

The EFSE (the European Fund for Southeast Europe) is one of the major providers of long-term funding for local financial institutions for lending to micro and small enterprises and to households. Partnering lending institutions in BiH are 8 banks (including ProCredit bank) and 7 MCOs. IFC and EBRD also support the financial sector with different credit lines and financing facilities in order to strengthen credits for SMEs and to assist development of other financial instruments (leasing, factoring and mortgage credits).

In many cases these special credit lines increase the banks' offer for small farmers and SMEs, but do not result with changes in procedures and terms. This means that they do not create more favourable conditions for clients.

Special credit lines funded by local governments and implemented by commercial banks and/or MCOs in most cases provide credits under more favourable conditions. Some recently introduced special credit lines are the following:

- The government of the Canton Sarajevo funded a new credit line (to be implemented by Nova banka Banja Luka) in the amount of 7 million KM, with interest rate of 2%. One of the eligibility criteria is that client has to be located within the Canton.
- The municipality Centar Sarajevo and Raiffeisen banka Sarajevo funded a special credit line in the amount of 1 million KM, with the interest rate of 6%.
- City Banja Luka and NLB Banja Luka funded a new credit line in the amount of 4,5 million KM with the interest rate of 6,5%.

### ***Other providers of financial services***

Among other financial service providers, micro credit organizations are the most active in financing individual farmers, start ups and SMEs. Leasing and factoring are still not important financial instruments for these market segments.

Individual farmers are among the typical clients of MCOs. Most MCOs offer agricultural loans with very similar conditions, maximum size up to EUR 15,000 (to be increase to EUR 25,000), maturity up to 3 years, grace period up to 9 months, collateral requirements mostly promissory notes. Most of the loans are offered as loans to individuals, allowing lending without official registration of the farming business (this also applies for commercial banks). The collateral requirements and procedures are more acceptable to individual farmers than requirements of the commercial banks. Most MCOs use also solidarity group methodology where all members guarantee for the repayment of each loan. This increases the number of eligible clients.

Thanks to the activities of MCOs, which cover the whole country, access to agricultural loans is not an issue. Also, MCOs are familiar with the financial needs of individual farmers. The major barrier to farmers are interest rates, which are between 18 to 27% . Some MCOs have special credit lines re-financed by donors or development banks, with interest rates of 7-8%, but these loans are accessible only to farmers that have firm sale contracts or an excellent credit history with MCOs.

Leasing is a relatively new financial instrument, with which farmers and SMEs are not familiar. This is fast growing sector in BiH. The request for 10-12% of own financing is an obstacle for farmers and SMEs. On the other side, the most attractive segment for leasing enterprises are individuals and strong enterprises, they are less interested in entering the lower end of the market. Micro leasing is not used. This could be an opportunity for MCOs to act as the agents of leasing enterprises that want to reach the low end of the market.

New line-of-credit provided in May this year by EBRD to Raiffeisen Leasing in the amount of 10 million EUR has to be used for SMEs from all sectors (less than 250 employees and less than 10 million turnover). Defined types of leasing contracts are micro leases (maximum amount of EUR 10.000) and small leases (maximum amount of EUR 125.000. The expected average is EUR 50.000. This will increase the offer to SMEs, but the same conditions will be used as for other leasing agreements, meaning that the number of eligible and acceptable clients will not increase.

Factoring has been introduced in BiH recently. This instrument is still not legally regulated. State owned export credit agency, IGA, provides export credits and specific factoring services, but both services are provided in small amount and do not play an important role. Recently one Slovenian factoring enterprise, Prvi Faktor, registered as an enterprise in BiH and one bank, FIMA, announced that they will be introducing factoring. Because of the high costs attached to this instrument it is not expected that factoring will be accepted and used by SMEs soon.

### ***Recommendations***

The development and implementation of an integrated farms and beneficiaries register in BiH will enable the facilitation of support programs at different government levels in a harmonized way across the country. This will also increase the farmers' access to credits. The BiH Council of Ministers has passed a decision to establish such the register.

Recommendations for EC in this field are as follows:

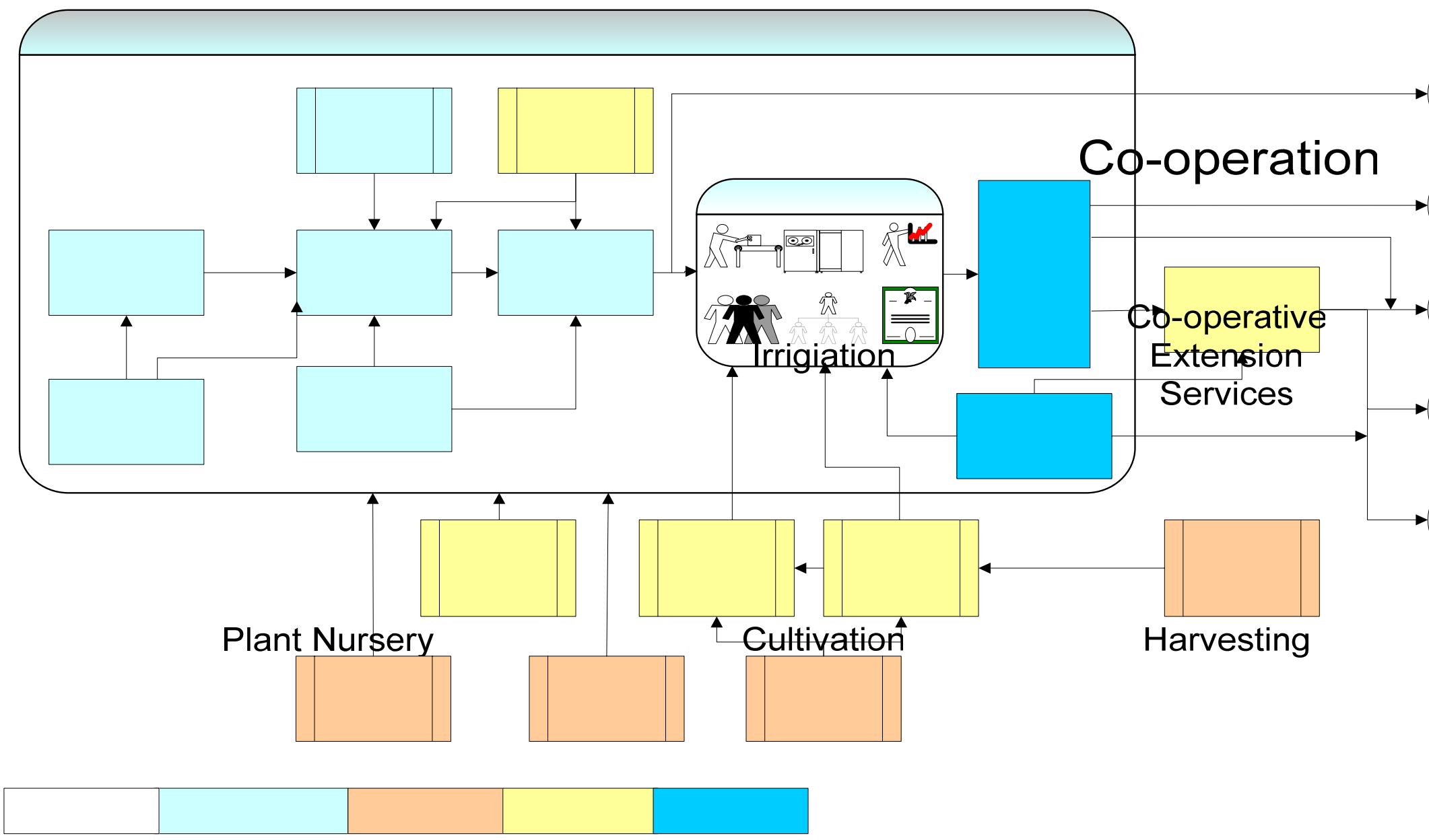
- Assist education of managers and staff of commercial banks' staff on the needs and characteristics of farmers, cooperatives and SMEs. The objectives of the education should be to simplify procedures for loan application and assessment, improve risk assessment capabilities of the staff and define an appropriate risk profile for these clients. Further studies are needed to determine ways and means of effecting the required changes.
- Assist development of micro-leasing adjusted to the needs of farmers and SMEs.
- Increase basic business skills of farmers and SMEs in order to improve their understanding of commercial farming, as well as business plan development skills.
- Support the introduction of special credit lines, for specific sectors and projects with interest rate subsidies.

## References (reports) for the Dairy Sector

1. Agricultural Sector (IFC)
2. Halal Sector
3. B&H Competitiveness Study – Lund (USAID)
4. Synthesis Report Food & Beverages
5. Export/Import Data Fresh Fruit
6. Export Import Data Dairy, eggs and honey
7. Booklet of certificates for EurepGAP
8. Estimate of non-observed economy PNADG958
9. Finding the highest potential clusters and products PNACU835  
Market profiles and competitiveness vol 2 LAMP PNADB773
10. Packaging and label report PNACX750



## **7. Value Chain Analysis of the MAP Sub-Sector**



Seed

Fertilizer  
Chemicals  
Equipment

## **Analysis of MAP Sub-Sector Value Chain constraints to competitiveness**

### **Objectives for taking the sub-sector forward**

To move to higher value products production and increase exports to the EU and regional markets.

### **Basic Conditions**

The main raw materials of the sub-sector are wild medicinal and aromatic plants collected by families as well as some cultivated ones produced by small holders. The MAP sub-sector consisting of small to very small enterprises mostly act as suppliers of dried plant raw materials shipped in bulk to EU enterprises.

### **Strategic Options**

With the proper development, the sector should be able to develop brand name end-user products such as teas, cosmetics, nature medicines and food and drink supplements which are already produced in BiH in limited amounts. Such down stream end-user products represent much higher value than raw materials and first level products such as tinctures, cream base and essential oils. It is not an easy task to develop and support a brand name product as the EU competition is very strong with some very well developed big producers with strong brand names. There are basically two possible strategies 1) build a strong brand name based on the organic and unique qualities and natural properties of the BiH raw materials; 2) become sub-suppliers i.e. producers of foreign brand products using the contractor's formulations and packing. Option 1 is very difficult and very expensive to pursue as it would have to be supported by very heavy promotion, but it is also the most profitable option. Option 2 is easier to manage and less costly to pursue and BiH probably has labour cost advantages although the production would have to be very efficient considering competition from other low production cost countries such as China, India and other Asiatic countries. Considering the technology used there does seem to be productivity gains throughout the Value Chain, from growers to end-user product producers. Over time the BiH producers could develop own brands and a marketing capability to support them if adequately supported by public institutions and private players.

### **Overall Value Chain constraints on competitiveness**

There is a lack of effective plant collection / nature protection policies and a need for creation of a more supportive public environment in areas such as permits, farm registration and support of institution building of certification organisations for sanitary and phyto sanitary regulations, HACCP, ISO etc.

The BiH forests and fields contain many wild plants from which medicinal and aromatic products could be made, but over utilization and thoughtless harvesting threatens many of these plants. Although some domestication and cultivation takes place already many more of the wild plant varieties could probably be cultivated to ease the pressure, preserve the wild plants population and at the same time increase production of down stream products to levels

which would give economies of scale. The climate, the good soil and the relatively cheap labour compared to most EU countries certainly increases the possibilities for profitable cultivation of many plant species as a basis for achieving competitiveness in a number of high value products made from such plants.

It would require relatively large investments for SMEs to increase the level of technology and achieve marketing sophistication to achieve economies of scale at producing end-user products even as a sub-contractor.

The limited size of the present processors limits the potential to lift the sub-sector to a higher level of the value chain and make the units competitive in a world of increasing buyer power. It would probably be necessary with a structural change to fewer, bigger enterprises in order to have enough supplier power to balance the purchasing power of the foreign enterprises and retail chains. To achieve this structure would take considerable time as it would have to be effected by the market forces. In the meantime it would be required to support the increase of productivity of cultivation as well as of processing units.

### **7.1.1. Product, production, supplies and infrastructure - MAP**

#### **Constraints on Suppliers**

Medicinal and aromatic plants are found in forests on mountains and in uncultivated meadows and fields in BiH. Yearly collection of herbs varies between 1.500 and 9.000 tons depending on the weather conditions. Most of the processors produce second level products such as dried, sorted and cut plants for export in bags up to 25 Kg. A number of processors make what we could call third level products such as packed teas, oils and tinctures sold as bases for fourth level products such as finished end-user medicinal products and food supplements. Traditionally these plants have been collected for many years by authorised and trained as well as unauthorised collectors some of which do not take care to collect to preserve the plants. This is particularly sensitive as many plants are in danger of becoming extinct from over collection. Processors of teas and third level products are complaining that many plant species are in short supply partly due to this phenomenon and partly because up to 85% of the plant raw materials are exported in bulk, legally or even illegally.

Although cultivated plants, even if grown organically, do not have quite the same properties as collected wild plants many species are increasingly cultivated in comparatively large quantities in an attempt to meet demand. The larger scale cultivation is encouraged and driven by processors and co-operatives as well as a few individual growers. The growers are not collectors, but individual “farmers” owning small size plots (< 5 ha). A family can survive on this size land – in fact cultivating MAP is probably one of the highest yielding activities for such small farmers. To produce efficiently they lack horticultural extension services to provide training and support their production efficiency and most of them lack simple drying equipment.

### **Constraints on Logistics and Infrastructure**

The transport infrastructure of moving the relatively small amounts of plants dried by the sun and wind and bagged by hand at the collector's / farmer's home is taken care of by the collectors themselves. With increased cultivation much larger amounts of dried plant materials have to be moved and some investment in trucks would need to be made.

### **Constraints on Production**

Domestic processors get only between 5% and 15% of the plant raw material. Some are even forced to import raw plant materials, particularly out of collection / harvest season to meet their customers demand. Only few of them make sophisticated products.

There are a few herbal tea, cosmetics and tincture producers, most of which pack only for the domestic and regional markets, apparently because they lack a strong brand, the required packing equipment and / or the sophisticated packaging required to compete against the much larger and more professional production / marketing organisations in the EU.

Even fewer processors have the knowledge, equipment and size for making more value added and sophisticated products such as medicinal and, cosmetics and food and drink supplements. This seems to be caused by a lack of an export strategy, well supported brand names and of the necessary equipment for specialised sophisticated (mass) production and packing. At the root of these shortcomings lie the lack of competent management.

#### ***7.1.1.1. Conclusions and recommendations – products, production, supplies and infrastructure***

Collectors are families with a tradition for collection. Their mindset is to collect and sell, not to build strong sector associations and sales co-operatives necessary for getting better prices and orderly collection, respecting nature's rules for re-growth. They can not be expected to organise themselves as fragmented as they are. The MAP sub-sector plant supply chain consists mostly of such smaller family units which clearly need to be organised for better utilisation and protection of wild plants and the efforts to organise cultivation ought to be supported much more aggressively to achieve production of larger volumes of raw materials.

The cultivators are still too few to make a major contribution. They do, however, have a large potential for developing into a valuable raw material's source. To flourish they should be supported by horticultural extension services with training and advice on cultivating organic crops and correct methods for drying of plants. To develop their "supplier bargaining power" to a reasonable degree, co-operation of the many small grower units should be supported.

This plant resource should be utilised better by building down stream processing capacity for high value added products.

The processors who want to produce downstream high value products should be supported with product / packaging development, production technology, machinery and equipment and production planning to step up to the next technological level. They should be encouraged to make sub-contractor deals with larger EU brand name producers to produce the final products in BiH. In due time when they have developed the needed skills the best of them should be supported in developing their own brands.

The processors wanting to become suppliers of partly finished level 3 products or package under a foreign brand name need support with investment in machinery and equipment and modern production planning and operation.

A viable alternative to larger enterprises would be to create more product development / processing / sales co-operatives owned by the growers. In praxis such organisations have proven very difficult to manage professionally so extensive support with organisation and management would be needed.

### **7.1.2. Human Resources - MAP**

#### **Human Resources Constraints hampering primary production**

Many rural families have been plant collectors for generations. Some of them are skilful and preserve the plants for next season, but some are not so skilful or do not care for next season thereby depleting the plant resource base. The legal framework for plant protection and collection is not in place nor is the enforcement vehicle.

#### **Human Resources Constraints at processors**

Workers at processing plants are trained on the equipment by their peers and foremen or in case of new equipment by the equipment suppliers. With the introduction of new technologies and equipment for producing down stream products this system might still work well, but basic skills may not be easily obtainable from the present educational system.

The SME processors usually have quite competent production managers and foremen for the present level of technology. Moving the sector into higher value added products would require Production Managers trained in the new technology and Product Development Managers with an academic degree in chemistry or pharmaceutical specialisation. Managers and management training of incumbent managers is needed in other functional areas. Particularly the medium size enterprises require at least one top manager and in particular a well educated marketing manager and in some cases a finance manager who can manage in an environment with ever increasing competition by larger and very professional competitors and buyers with increasing buying power due to the concentration in the retail sector.

Many top leaders need to modernise their management / leadership style. This would require attending shorter courses in business administration and leadership.

The ability to communicate in English and other foreign languages is lacking in many enterprises making it very difficult to access foreign markets.

#### ***7.1.2.1 Conclusions and recommendations – human resources***

A compulsory, effective training and plant collection licensing system needs to be introduced and enforced to preserve the endangered species and the plant population in general. The legal system needs to implement and enforce suitable laws for plant collection.

Vocational education on modern production equipment should be supported as a basis for introduction of new equipment.

Although universities carry out training courses for managers they are not ideally suited for offering effective training of a practical nature needed by marketing staff and young managers with a production /product background. To relieve the lack of marketing skills in SMEs there is a need for short and medium term training and supportive mentoring over perhaps 6 to 12 months by part time extension training institutions.

The top leaders of the enterprises should be offered shorter courses in business administration and leadership in order to modernise their management / leadership style.

Intensive training in English and other foreign languages should be supported.

#### **7.1.3. Marketing - MAP**

The international demand for plant raw materials and products thereof is strong and growing. Currently, 85 – 95% of all plants collected in BiH are sold in bulk in dry, non-processed form mainly to processors in Germany, Italy, Switzerland, France, and Slovenia where high profile brand name end-user products are produced and sold for quite high prices.

There are a few herbal tea products packed for the domestic market and even fewer for export to regional and the EU markets. Very few processors offer more value added and sophisticated products such as final medicinal and cosmetics products and food and drink supplements other than on the domestic and regional markets. Few of them have attempted to market their own brand name products outside the Balkan Region even though the unspoilt nature and relatively unpolluted soils make a good basis for doing so.

#### **Constraints on effective Marketing**

The BiH processors are in most cases too small to tackle the EU markets on their own. Unfortunately there seem to be no particularly well suited export houses and the processors have not organised themselves for some form of collective export which could give them some marketing support. Instead they approach EU importers / producers or wait patiently for an importer to approach them.

Most of the producers are production or product minded and hardly any of them have a marketing / sales function. The Foreign Trade Chamber, Association of Medicinal Plants and Wild Forest Products, supported by USAID LAMP has made a very nice catalogue (also appearing on the internet) listing 26 of the more active enterprises. This would form a good basis for export presentation at fairs, collective trade missions and personal sales visits, but it has to be followed up by persistent marketing efforts including vigorous sales efforts on target markets. There is, however, no precise information basis for choosing target markets for effective market expansion although there is of course more or less successful attempts to sell more in present markets and to expand, mostly on local, well known Balkan markets.

### ***7.1.3.1. Conclusions and recommendations - marketing***

To penetrate the EU markets and protect themselves against imports under an EU free market trade policy the processors, particularly the smaller ones, need assistance with an overall strategy including a marketing strategy and a marketing plan based on a professional market analysis of the opportunities of the EU markets measured against their own strengths and weaknesses. They most probably also need assistance with organising themselves into larger export units to avoid being dominated completely by their would be big EU competitors.

The enterprises need to tap into the readily available information from business directories and the internet in a more systematic way to collect information supporting their choice of markets. They need some in-house or consulting expertise to help them decide how to access EU and other export markets and make achievable marketing plans.

To access the EU and other markets with their own brand or under a foreign brand name packed in BiH, the enterprises need assistance with:

- Building awareness of the increasing competition and need for professional and aggressive marketing as the EU accession progresses.
- Market information on the parameters of new product design and development, in particular modern, refined, higher value added MAP end user products would have to come from marketing research.
- Collection of competitive price and price anticipation information.
- Identify and establish contact with possible distribution channels in the form of export agents, import agents and shipping agents.
- Design the required products, packaging, promotion, advertising and of course sales.

The marketing departments can be foreseen to be rather weak until an adequate number of managers and staff are educated. Until then extensive support should be given on access to export markets; participation in EU trade fairs;



trade promotion tours and development of contacts with EU enterprises; identification and contracting of export / import agents and identification of shipping agents. Support would also be needed in filling in export documents.

#### 7.1.4. Standards and certification – MAP

Geographic region	Mandatory certifications and standards	Voluntary/B2B-required certifications and standards
<b>BiH</b>	<ul style="list-style-type: none"> <li>• Old YU legislation that includes old (compulsory and not replaced) JUS standards</li> <li>• Certificates required by other national legislation (e.g. medical certificate)</li> </ul>	<ul style="list-style-type: none"> <li>• JUS standards (non-compulsory one's after 2003)</li> <li>• BAS Standards (based on EN/ISO) until combined with adopted new regulations (esp. BAS/TC 43 on Medical and Essential Plants and BAS/TC 43 on Food)</li> <li>• OK (by Organska Kontrola)</li> <li>• Certificate from local health institute (if not mandatory)</li> </ul>
<b>EU</b>	<ul style="list-style-type: none"> <li>• EU food quality and safety related legal measures implementing e.g. ISO, EN (European Standards) and HACCP</li> <li>• EU agricultural certificates on PDOs, PGIs and TSGs (these are presently voluntary, but will become mandatory at accession to EU. They are defined in EU regulations and it is mandatory for member states to provide the preconditions laid down in the regulations)</li> <li>• EU organic food regulation standard, EU Eco label regulation (to be obtained on a voluntary basis)</li> </ul>	<hr/> <ul style="list-style-type: none"> <li>• HACCP</li> <li>• ISO standards (e.g. ISO 9001:2000/ISO 14001 environmental management standards and especially ISO 22000 for the food sector)</li> <li>• DIN standards</li> <li>• GLOBALGAP (=EUROPGAP)</li> <li>• GMP (Good Manufacturing Practice)</li> <li>• 'Clean production' certificate</li> <li>• 'IP' (integrated production) certificate</li> <li>• Certificate of origin</li> <li>• HALAL certificate</li> </ul> <p>Organic certificates e.g.:</p> <ul style="list-style-type: none"> <li>• KRAV</li> <li>• IMO</li> <li>• OK</li> <li>• NOP (National Organic Program) for US market</li> <li>• UK soil association certificate</li> <li>• BIO SUISSE</li> <li>• FAIRWILD</li> </ul>

The table above provides a general overview on standards and certifications in the MAP sector in BiH and in the EU. The right column includes standards and certifications laid down by a legally binding norm although some of them can be obtained on a voluntary basis. The left column includes voluntary/B2B-required certifications and standards, which are not made compulsory by law. The rows 'BiH' and 'EU' only show the origin or - with regard to Swiss standards and certificates - the main geographic application area. But standards and certificates mentioned for example in the second column of the row 'EU' are also applied in BiH.

The voluntary standards above mentioned constitute the for the time being most widely used and recognized in BiH, although there are many more on the market.

Often voluntary standards are requested by business partners or by certain external markets (e.g. the organic standard KRAV, which relates to the existing EU organic food regulations, for Sweden).

At the moment no general BiH brand for MAPs indicating legal compliance for promotion purposes on either domestic or export markets has been found by the team. Even if BiH products become certified under e.g. GLOBALGAP<sup>17</sup>, this certificate is not allowed to be used on the product/label itself except in the B2B sector. Similarly, no widely recognized organic product/label marking indicating legal compliance, exists in BiH although most producers do have some more or less internationally recognized organic certificate of those listed in the second column of the table above. .

An organic certificate in the MAP sector expresses that most of the plants have their origin from an unpolluted region. Even if a product gets internationally certified many BiH consumers lack awareness of the advantages of organic food as it is often just considered more expensive although it is not always correct. This makes enterprises avoid promoting or even mentioning the organic properties of the product. Another constraint is the lack of awareness among enterprises of the competitive advantage of marketing an internationally certified product they often do not mention certificates such as e.g. HACCP on the product label.

In one case, an Arabian business partner requested, in addition to the HACCP certificate a certificate for BiH as the country of origin, which was supplied by the Ministry of Health and a HALAL certificate. This certificate requires that processors should not have low paid workers, no debts towards the worker exist and no alcohol and no animal fat are used during the production procedure.

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<sup>17</sup> GLOBALGAP is a certificate based on a common initiative of many multinational corporations. Therefore it differs from the others. Furthermore it is not an organic certificate, but only indicates basic legal compliance, and it is not allowed to write GLOBALGAP on the product package. It is only allowed to use the word GLOBALGAP from business to business.

### **7.1.4.1. Mandatory standards in BiH (JUS standards and other mandatory certificates)**

#### **7.1.4.1.1. Processes to obtain standards/certificates**

MAP enterprises are in most cases obliged to provide certificates in accordance with the old outdated ex YU regulations and JUS standards as the new laws are not in force yet. Tests are often required in advance and carried out by laboratories and/or universities. Crèmes produced from MAP raw materials need a medical certificate as well as a registration as medical products, while most other MAP-products are only registered as supplementary products.

#### **7.1.4.1.2. Institutions**

Certification and control on the mandatory standards is carried out by the relevant public institutions (such as the ministries and institutes responsible for health and the Food Safety Agency as well as the related inspectors and laboratories). As far as it concerns the BiH national standards these institutes do not need to be internationally accredited. The BiH national standards are only valid in the EU if they are accepted by European enterprises and if no European standard is legally required. Private institutions are usually not approved to issue mandatory standards.

#### **7.1.4.1.3. Support sector**

Public institutions provide general information on which mandatory standards are required of enterprises at the different stages of the value chain. Further information, technical and financial assistance and training in setting up standards and certification systems can be gathered from public as well as from private institutions. Public institutions are for example the ministries and institutes responsible for health, the Food Safety Agency (FSA), the Plant Health Protection Administration (PHPA), the respective inspectors & laboratories, the Chamber of Commerce, the Foreign Trade Chamber (FTC including the future Export Promotion Agency - EPA) and the EICC. Private institutions are all the certification enterprises internationally accredited themselves for the certification of a certain standard or co-operating with an internationally accredited institution. These private institutions include, besides their staff a number of associated consultants certified under a specific standard.

#### **7.1.4.1.4. Quality of support**

One MAP enterprise explained that they face problems in the food safety certification of its mixed tea products because there are no capable specialists available in the administration to control the, by the certification system required separation/classification of the different plants. The same enterprise complained that for the microbiological assessment of its MAP products sufficient laboratory facilities are not available in BiH. The tests necessary for the medical certification face similar obstacles.

#### **7.1.4.2. Mandatory standards/certificates in EU (many ISOs, HACCP, Eco label, PDO, PGI, TSG)**

##### **7.1.4.2.1. Processes to obtain standards/certificates**

Mandatory standards required by EU-law have to be complied with by all stakeholders (MAP enterprises, public labs, inspection bodies etc.) once the legislation is in force. In addition the European legislation on the EMAS environmental management certificate and the EU Eco label (1) has to be implemented. But this legislation – different to the one formerly mentioned - leaves the decision up to the enterprises as to whether or not to enter the procedure to obtain one of these two EU labels. On 1<sup>st</sup> Jan 2009 a new EU legal framework on organic production and labelling of organic products will enter into force.(2) This regulation lays down a new legal framework for organic products. It includes a logo to be used on a voluntary basis by producers whose systems and products have been found on inspection to satisfy EU regulations. A similar legal system exists for Protected Designation of Origin (PDO), Protected Geographical Indication (PGI) and TSG (Traditional Speciality Guaranteed) (see details in Annex 5).

##### **7.1.4.2.2. Institutions**

The EU legislation laying down the preconditions (institutions, procedures etc.) is neither transposed nor in force in BiH. Hence the only way for BiH enterprises to fulfil these requirements is on a voluntary basis (see below). Some of the EU certificates mentioned above can, however, be obtained by applicants from outside of the EU e.g. from 3 April 2006, applications for registration of PDOs and PGIs by producers in third countries. The implementation of international phytosanitary standards including their certification systems are hampered by delayed legal transposition and lack of sufficiently qualified institutional staff.

##### **7.1.4.2.3. Support sector**

In the support sector concerning standards mandatory in the EU mainly private institutions are active. These are all the certification enterprises internationally accredited themselves for the certification of a certain standard or cooperating with an internationally accredited institution. These private institutions include besides their staff a number of associated consultants certified under a specific standard.

##### **7.1.4.2.4. Quality of support**

The quality of assistance differs depending on the duration and organisation of the assistance as well as on the quality of the individual consultant(s) providing the assistance. One MAP enterprise stated that programs such as USAID LAMP working directly with the sector contributed best to their economic progress.

The Food Safety Agency (FSA) is responsible for proposing conditions for Good Manufacturing Practice and HACCP in order for it to become binding (see Article 29/4 Law on Food). But still no such guidance document is available in BiH for food operators and inspectors.

Enterprises complain that accredited institutions for awarding the different certificates required for access to the EU and other markets are not yet in place. Nationally accredited laboratories or universities can not implement the test needed due to poor equipment and poorly qualified people.

#### **7.1.4.2.5. Voluntary standards in BiH and in the EU**

Voluntary standards in BiH and in the EU will be dealt with together as a broad overlap exists.

#### **7.1.4.2.6. Processes to obtain voluntary standards/certificates in BiH (some JUS Standards, BAS Standards, OK..)**

The BAS Standards (esp. BAS/TC 23 on Medical and Essential Plants) prepared by the Institute of Standardisation are already applied by the Institute of Accreditation. These standards will become compulsory for all stakeholders (MAP enterprises, public labs, inspection bodies etc.) in accordance with the technical regulations on conformity assessment, once these regulations are in force. HACCP for example will be compulsory from Jan 2009 for all subjects working in the food sector. Hence, until then certain JUS and the BAS standards can be used and certificates from local public institutes such as health institutes may be obtained according to the respective procedures.

At one MAP enterprise with less than 10 full time employees, the organic certification procedure under OK and the HACCP certifications lasted about 3 months respectively – seemingly a lengthy and thus costly process. The processes are described in more detail on the web pages listed in the table in Annex 5.

#### **7.1.4.2.7. Processes to obtain voluntary standards/certificates in the EU (many ISO, HACCP, GLOBALGAP, KRAV etc.)**

Often standards/certificates are requested by national or EU-business partners or by certain external markets, although no legal requirements exist or will only exist in the future when EU legislation enters into force. Hence, even the ‘private’ organic standard OK (by Organska Kontrola) for example could also be requested by an EU-business partner. This happens regularly with standards such as ISO, HACCP, GLOBALGAP and certain organic standards such as KRAV to the EU-country Sweden or IMO for Switzerland.

In one case a MAP enterprise considered a local organic certificate (OK) to be insufficient for the EU market, although the certification institute (OK) is internationally accredited for organic certification by IFOAM. Nevertheless, the enterprise decided, due to the lower price, to go forward with OK instead of the Swiss IMO certificate which is more readily recognised within the EU. (see details in Annex 5).

#### **7.1.4.2.8. Institutions**

The certificates for MAP enterprises for these internationally requested standards are provided by internationally fully accredited institutions in co-

operation with national organisations such as TÜV Thüringen together with TÜV Adria or Quality Austria together with TQNet.

The certificates for enterprises for the national standards mentioned above are provided by national public institutions or national private organisations. For example one private institution is Organska Kontrola with its standard OK. The OK-certified products increase their reputation mainly at the national level unless they are internationally accredited. In this way for example, Organska Kontrola recently became internationally accredited by the international organic umbrella institution IFOAM. Organska Kontrola is presently attempting to become accredited by GLOBALGAP in order to provide this international certification to enterprises. One MAP enterprise emphasized the added value of an accreditation of OK under GLOBALGAP for its export chances into the EU.

The conformity assessment of the MAP products with regard to these standards and certifications needs are in many cases to be carried out with the help of laboratories.

#### ***7.1.4.2.9. Support sector and quality of support***

Enterprises complain that BiH institutions are not yet accredited to issue internationally valid certificates necessary for access to the EU and other international markets forcing them to become certified by foreign institutions at a higher cost than national institutions would presumably charge.

BiH Laboratories can, for example, not measure down to the values required by GLOBALGAP when concerning residues. Furthermore, even if tests regarding MAPs could be implemented in a national laboratory, they are not internationally recognized due to the unfinished international accreditation situation of the BATA.

#### ***7.1.4.3. Constraints and recommendations***

##### **Constraints**

- Many consumers seem to lack awareness of the advantages of organic certificates
- Lack of awareness among enterprises of the competitive advantages a HACCP might give them.
- Even MAP enterprises with internationally acknowledged certificates find it difficult to find good international business partners.
- Lack of a general BiH brand name and of a widely recognised organic brand name which would be useable for marking/labelling the products that they comply with with international laws and have certification according to international standards for international marketing purposes
- Lack of sufficient technical and personnel to undertake testing in laboratories

## **Recommendations:**

- Apart from the general awareness raising issues described below under general issues, support to consumer awareness raising should be provided to explain health and price issues of organic products. This would have a direct influence on the demand side and would help develop the market.
- In parallel, awareness raising measures should be aimed at enterprises in order to promote and label products with organic certificates as well as HACCP certificates obtained as a sort of quality sign (provided there are no legal restrictions).
- Capacity building grants especially to certified enterprises participating in large commercial exhibitions abroad would contribute to raise export contact opportunities aiming to overcome the gap between the current focus on the BiH market and a more desirable international business orientation.
- Support should be provided to the improvement of technical and personal capacities in laboratories and universities nationally accredited for testing MAPs.
- Furthermore, support should be provided to the development of an umbrella certificate (e.g. 'BiHAP' – BiH Agricultural Product) recognized by GLOBALGAP and usable also as a sort of brand on the products themselves (not only Business to Business such as GLOBALGAP). Similar action should be taken to strengthen a (new or existing) umbrella certificate for the branding of organic products from BiH complying with EU organic legislation. Both approaches have to be accompanied by support to setting up a central institution to certify the new BiH basic umbrella brand as well as the new BiH organic umbrella brand.

### ***7.1.4.4. Factors that limit competitiveness of the value chain***

Business support services for MAP sector are even weaker than for most agricultural sectors. The demand is very low by all participants in the value chain (collectors, growers and processors) although knowledge and skills needed for modern collection and processing methods are lacking.

By now, the majority of the supply of business services has been generated by donors' projects. Major support was provided by USAID LAMP, Pfd (Partners For Development), GTZ, SIPPO and also by the IFC-SEED project. Support included initiatives for the establishment of associations and/or cooperatives, training and educational materials for collectors and growers, support for organic certification for producers and processors, business-to-business meetings, small grants and micro loans. The scale of the support has been far below the needs of the sector.

Services described in the section 5.4. are available to SMEs and start ups from the sector.

**7.1.4.5. Assessment of private and public institutions that need to be in place to assist the enterprises**

**7.1.4.5.1. Business support services provided by governments**

There are no business services provided by governments to the MAP sector.

**7.1.4.5.2. Business support services provided by regional development agencies (RDAs)**

RDAs do not have services targeting specifically the MAP sector. Especially collectors do not get any support. Growers and processors operating as enterprises can use services provided for SMEs and start ups, as described in section 5.4. 2.

In 2006, SERDA completed a study relevant for the MAP sector, Exploitation of Wild MAPs and Mushrooms in the Region of Sarajevo. However, no specific activities or services followed the study.

**7.1.4.5.3. Business support services provide by development agencies and business support centres (BSCs)**

Development agencies and business support centres are also inactive in the MAP sector. Thanks to the RS Agency for SMEs support to cluster development in 2007, one small local cluster was established in Trebinje.

**7.1.4.5.4. Business support services provided by Chambers of Commerce (CoCs) and associations**

Among CoCs, only FTC directly supports MAP sector. The involvement of this organization was initiated and financially supported by USAID LAMP project. Services are provided to SMEs (growers and processors) and include visits to trade fairs, logistics for meetings, connections with EURO Info Centre, information on foreign demand and connections with foreign buyers. Several seminars on HACCP were organized as well. The catalogue of 26 enterprises and cooperatives active in the MAP sector was prepared in 2006 and used for promotion at trade fairs. Services are provided for free or for a low fee. Financial contributions by the LAMP project were essential for all provided services, but after the project's closure the offer will most probably be much smaller.

There are several small, local associations of collectors and growers. These associations were established and initially supported by donors. Many associations did not survive after the projects closed or they survived with minimal activities. Their staff and financial capacities are too weak to create any substantial impact on sector development. Some associations are also involved in buy-off and basic processing of MAPs (Kozara Bilje Gradiska, the



Independent Association of Farmers from Srednja Bosna, Zlatica Bihac). They have their own buy-off stations and drying facilities and provide basic information to collectors on sustainable collecting methods.

In some regions the agriculture cooperatives are also active in the MAP sector and provide some basic information to collectors. Their business activities include buy-off and basic processing of MAPs.

The USAID LAMP project initiated establishment of a country wide cluster in the MAP sector but no major success was accomplished. As mentioned, one cluster was established in Trebinje (east Herzegovina) in 2007 and it is only in the initial stage of development.

#### **7.1.4.5.5. *Business support services provided by private service providers***

The largest individual buyer and processor in this sector is the enterprise Klas Sarajevo. Klas provides some business services to collectors and growers through the associations or cooperatives,.

In general, the processors play the role of integrator in the sector, providing basic instructions and education to collectors and growers. They operate buy-off stations and drying chambers.

#### **7.1.4.6. *Recommendations***

Recommendations for EC are:

- Unsustainable harvesting and endangered biodiversity indicate urgent need for educational programs and institutional support for collectors. Their education can not be financially sustainable for service providers since they mostly belong to low income rural families who would have difficulty paying for such services.
- Growers and processors lack basic business skills, marketing skills and information on markets, standards and certificates requested by the EU market.
- Cooperatives or associations are needed to strengthen collector's selling price bargaining power for them to get a higher share of the retail price than the approximately 6% they get today, and to organize cost effective education for collectors.
- Support education and training courses for MAP specialists in order to increase supply of business services needed for sector development.

## **7.1.5. Finance - MAP**

### ***7.1.5.1. Factors that limit competitiveness of the value chain***

In the previous period donors provided financial support to the sector, mainly through small grants to cooperatives, associations, growers and processors. SMEs from the sector also benefited from highly subsidized credit lines funded by donors. Major contribution in this field was provided by USAID LAMP project.

Weaknesses related to access to finance limit the growth of the sector. Major weakness is on the side of demand, since almost all enterprises operating in this sector are very small with low credit capacities. The shortage of working capital needed for expansion of production and export is more emphasised in this sector than in most other sectors.

The major obstacles on the supply side are interest rates, collaterals and other terms. Even loans provided by development banks and special credit lines funded by local governments and donors are above the credit capacities of SMEs from the sector.

### ***7.1.5.2. Assessment of private and public institutions that need to be in place to assist the enterprises***

#### ***7.1.5.2.1. Finance provided by development banks***

Cooperatives, growers, processors and start ups can apply for four credit lines funded by The Investment-Development Bank of RS and implemented by six commercial banks and three MCOs. The following terms and conditions are applicable to the key groups:

- For star ups, maximum loan amount is 30.000 KM; repayment period is 5 years, with grace period of 6 months; interest rate 7,13-7,33%, depending on the location; amount for 2008 is 12,9 million KM.
- For entrepreneurs and enterprises, maximum loan amount is 5 million KM; repayment period is 15 years, with grace period of 18 months; maximum interest rate is 6,03% (special incentives for underdeveloped areas (5,83%), processing industries (5,73%), members of clusters (5,73%), exporters (5,03%) and tourism (5,73%)); amount for 2008 is 67,5 million KM.
- For micro business in agriculture (for registered farmers), maximum loan amount is 50.000 KM; repayment period is 10 years, with grace period of 36 months, depending on type of production; interest rate is 7,33%, for cluster members 7,03%; amount for 2008 is 25,8 million KM.
- For agriculture (legal entities), maximum loan amount is 3 million KM; repayment period is 5 years, with grace period of 36 months; interest rate is 5,73%, for cluster members 5,43%; amount for 2008 is 45,8 million KM.

Four credit lines implemented by the Investment Bank of FBiH are also available to growers, SMEs and start ups from MAP sector. The following terms and conditions are applicable:

- For production and services, interest rate is 5%; maturity max. 7 years,
- with grace period up to 1 year.
- For agriculture production, interest rate is 4%; maturity max. 7 years, with grace period which depends on the type of production.
- For export, revolving credit, interest rate EURIBOR+1%, no grace period.
- For employment
  - Terms for agriculture: interest rate 3%, grace period 1-2 years, maturity max. 7 years.
  - Terms for industry and services: interest rate 4%, grace period 6 months, maturity max. 5 years. Maximum amount is 500,000 KM, that is 10,000-25,000 KM per job.

#### **7.1.5.2.2. *Credit guarantee funds (CGFs)***

Credit provided by CGF from Brcko District can be used by growers/farmers and SMEs from MAP sector. The new cycle that started in 2008 is based on 1,300.000 KM deposit provided by the government. Credit lines have been increased (deposit multiplied by 3 to 5) and 4 commercial banks are selected as implementers. Agreed terms are: interest rate of 7.5%, the loan amount up to 100.000 KM and maturity up to 5 years.

CGF managed by LINK Mostar provides credit with a short grace period and it is not used by farmers or cooperatives. However, SMEs and start-ups from MAP sector can use these loans. The total credit line now available is 4,6 million KM. Interest rate is 7%, grace period is 6 months, the loan amount is up to 50.000 KM, and maturity is up to 5 years.

Special CGF for youth is available for farmers, start-ups and SMEs. Loan amounts from 5.000 KM to 30.000 KM (20.000 KM for start-ups), interest rate 6,2%, grace period 6 months (9 months for agriculture producers), maturity 5 years. The fund covers the whole BiH and it is managed by LINK Mostar, SERDA Sarajevo, NERDA Tuzla, NGO TALDI Tuzla, MCO Sinergija Banja Luka and NGO CeBEDA Travnik. These organizations provide assistance in the preparation of business plans and applications and they charge 1% of the loan amount for their services.

SERDA established one regional CGF in 2006, with deposit of 1 million KM and credit line provided by Zagrebacka banka in the amount of 3 million (to be increased to 4 million KM soon). 48% of users are farmers.

The success of the first established CGF increased interest of the governments to provide deposits for the guarantee fund and to work through selected commercial banks to issue the loans. Banks are also very satisfied with this instrument and they start providing larger credit lines with lower interest rates.

New funds have been established in Canton Zenica-Doboj (500.000 KM as deposit, credit line 1,5 million KM), in municipality Novi Grad Sarajevo

(200.000 KM as deposit, credit line in the amount of 600.000 KM with interest rate of 5% for farmers), municipality Prijedor (deposit of 600.000 KM, credit line in the amount of 3 million KM for agriculture and SMEs), NERDA, cantonal government and municipality Tuzla (deposit 600.000 KM, credit line 2 million KM, for SMEs and craft, interest rate 6.6%).

#### **7.1.5.2.3. Commercial banks**

The offer of commercial banks to SMEs is described in section 5.5.3. Although their credits are available to SMEs from MAP sector, the terms are above the credit capacities of most SMEs from the sector. This is related to all terms – charged interest rates, maximum grace period, and requested collaterals.

#### **7.1.5.2.4. Special credit lines**

Special credit lines that are available to SMEs in general are described in section 5.5. Because of the low credit capacities, SMEs from MAP sector very rarely use these loans. Only special credit lines funded by local governments and implemented by commercial banks and/or MCOs are more acceptable to MAP sector. These credit lines in most cases provide credits under more favourable conditions. Some of recently introduced special credit lines are the following:

- The government of the Canton Sarajevo funded a new credit line (to be implemented by Nova banka Banja Luka) in the amount of 7 million KM, with interest rate of 2%. One of the eligibility criteria is that client has to be located within the Canton.
- The municipality Centar Sarajevo and Raiffeisen banka Sarajevo funded a special credit line in the amount of 1 million KM, with the interest rate of 6%.
- City Banja Luka and NLB Banja Luka funded a new credit line in the amount of 4,5 million KM with the interest rate of 6,5%.

#### **7.1.5.2.5. Other providers of financial services**

Among other financial service providers, micro credit organizations are the most active in financing individual farmers, start ups and SMEs. Leasing and factoring are still not important financial instruments for these market segments.

Most MCOs offer agricultural loans with very similar conditions, maximum size up to EUR 15.000 (to be increase to EUR 25.000), maturity up to 3 years, grace period up to 9 months, collateral requirements mostly promissory notes. The collateral requirements and procedures are more acceptable to individual farmers than requirements of the commercial banks. Most MCOs use also solidarity group methodology where all members guarantee for the repayment of each loan. This increases the number of eligible clients.

The major barrier to SMEs and star ups from MAP sector are interest rates, which are between 18 to 27%. Some MCOs have special credit lines re-

financed by donors or development banks, with interest rates of 7-8%, but these loans are accessible only to farmers that have firm sale contracts or an excellent credit history with MCOs.

Leasing is a relatively new financial instrument, with which farmers and SMEs are not familiar. The major barrier to SMEs is the request for 10-12% of own financing as well as the costs of this financial instrument. Micro leasing is not used. This could be an opportunity for MCOs to act as the agents of leasing enterprises that want to reach the low end of the market.

A new financing provided in May this year by EBRD to Raiffeisen Leasing in the amount of 10 million EUR has to be used for SMEs from all sectors (less than 250 employees and less than 10 million turnover). Defined types of leasing contracts are micro lease (maximum amount of EUR 10.000) and small lease (maximum amount of EUR 125.000. The expected average is EUR 50.000. This will increase loans offered to SMEs, but the same conditions will be used as for other leasing agreements, meaning that the number of eligible and acceptable clients will not increase.

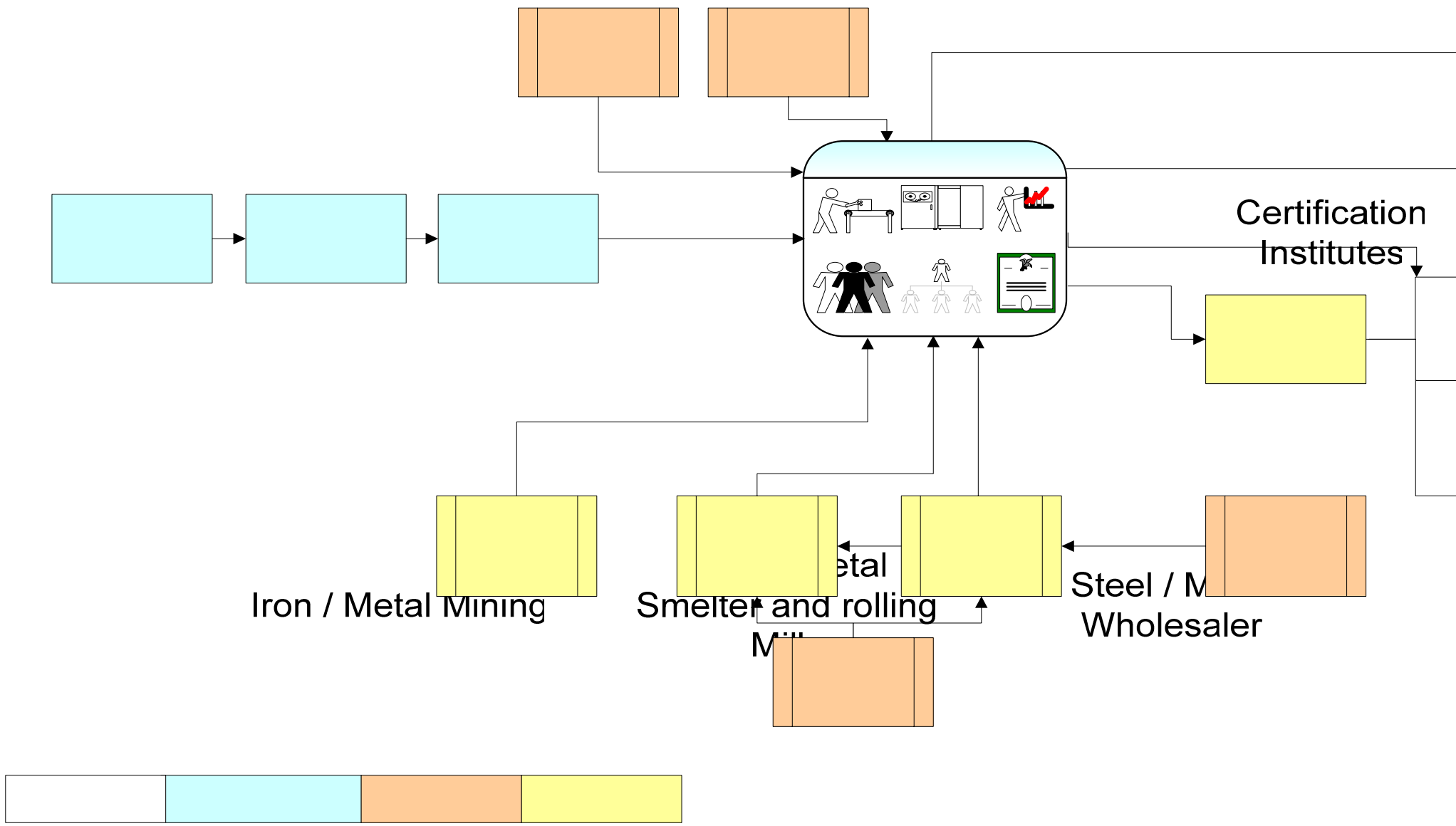
Factoring has been introduced in BiH recently. This instrument is still not legally regulated. State owned export credit agency, IGA, provides export credits and specific factoring services, but both services are provided in small amount and do not play an important role. Recently one Slovenian factoring enterprise, Prvi Faktor, registered as an enterprise in BiH and one bank, FIMA, announced that they will be introducing factoring. Because of the high costs attached to this instrument it is not expected that factoring will be accepted and used by SMEs soon.

### **7.1.5.3. Recommendations**

Recommendations for EC in this field are:

- Assist education of managers and staff of commercial banks on needs and characteristics of farmers, cooperatives and SMEs. The objectives of the education should be to simplify procedures for loan application and assessment, improve the risk assessment capabilities of the staff and define an appropriate risk profile for these clients. Further studies are needed to determine ways and means of effecting the required changes.
- Assist development of micro leasing adjusted to the needs of cooperatives and SMEs;
- Increase basic business skills of SMEs in order to improve their skills in business plan development;
- Support introduction of special credit lines with subsidized interest rates for the MAP sector

## **8. Value Chain Analysis of the Fabricated Metal Products Sub-Sector**



## Analysis of the Fabricated Metal Products Sub-Sector Value Chain constraints to competitiveness

<b>Metal</b>	<b>Results</b>	<b>Remarks/Growth Rate</b>
Number of enterprises	133	High potential growth rate
Total Employment inc. NOS	28.396	Low employment generation
Rural	284	
Domestic sales '000 KM	1,578,000	High growth rate (28%)
Export Sales '000 KM	1,537,000	High growth rate, 18.5% in 2007
Total sales '000 KM	3.115,000	High Growth Rate
Share of GDP	9%	
Competitiveness	Medium	
Potential increase of MSME income by production increase	Low	

*The information in this table is obtained from the referenced reports and is mostly from 2006, but some are older. They are not very precise and they should therefore be used as indicators only.*

<b>Automotive</b>	<b>Results</b>	<b>Remarks/Growth Rate</b>
Number of enterprises	56	High potential growth rate
Total Employment	6,000	
Rural	300	
Domestic sales '000 KM	273,000	High growth rate (83%)
Export Sales '000 KM	416,000	High growth rate, 18% in 2007
Total sales '000 KM	689,000	High Growth Rate
Share of GDP	2%	
Competitiveness	High	
Potential increase of MSME income by production increase	Medium	

*The information in this table is obtained from the referenced reports and is mostly from 2006, but some are older. They are not very precise and they should therefore be used as indicators only.*

### Objectives for taking the sub-sector forward

To support increased productivity, move to higher value production and increase exports to the EU and regional markets.

### Basic Conditions - Fabricated Metal Processing Sub-Sector

BiH has significant coal, iron ore and aluminium production, but contrary to the belief of many this does not in itself give the country competitive advantages in products manufactured from these raw materials. One of the major reasons for this is that they are traded ex works at world prices in larger quantities than most BiH enterprises would need for their production. Another reason is that the BiH mills do not necessarily produce the type of raw materials required by these processors.

The sector (Fabricated Metal Products, NACE Code 28) has a fairly large Revealed Comparative Advantage (RCA) of 55 which should form a very good basis for exports. The automotive sub-set of the sub-sector (NACE Code 34) has an RCA of around 6, enough to keep it competitive for now, but modernisation and upgrading should take place soon to sustain this advantage.

For our purpose we prefer to divide the sector which contains both non-ferrous and ferrous metal products into the more advanced automotive sub-sector and all others. The Automotive Sub-sector employs around 6000 and exports most



of its output. In total the sector has at least 200 enterprises employing around 35,000 of which perhaps 15-20% are redundant as a consequence of the privatisation guarantees for workers. It is one of eight sectors identified as a priority sector in the Mid Term Development Strategy 2007.

The Automotive Manufacturing sub-set of the sub-sector contains only around 56 enterprises of which 28 (20 in the Fabricated Metal Products Sub Sector and 8 in plastics etc.) co-operates in an automotive cluster acting as a platform for technological innovations and co-operation on marketing. Total employment is 6,000. The auto-sector is strongly export oriented. Being at the forefront of the worlds' Good Manufacturing Practices the Automotive Sub-Sector could act as a good example and an engine for the rest of the sub-sector. It proves that the Fabricated Metal Product's Sub-Sector as a whole can move up the value chain provided it has world class products, a well trained and updated technical, sales, financial and general management and well trained labour as well as trained first level management on the production floor.

### **Strategic Options**

There are basically two product / production strategies which could be applied to this sector: 1) to become sub-contractor or joint-venture partner to a foreign (EU) enterprise or 2) to develop own products of world quality, utility and design. The second strategy is by far the most difficult and capital intensive to pursue as it requires good modern machinery and equipment, top designers, engineers, production managers and staff, marketing and finance managers and a very good general manager who can lead the team to success. It also requires modern computerised management information and control systems and a certified quality assurance system. Very little of all this is available in most of the enterprises of the Metals Sub-Sector. The first strategy, to become a sub-contractor would require a lot less and it would be a very good learning experience for both management and staff preparing them for moving to strategy 1 in due time. In the production area it would first of all require investment in staff training, in machinery and equipment and in quality assurance systems.

### **Overall Value Chain Constraints on competitiveness**

The sector has large potential to contribute to the BiH economic development provided new competitive manufacturing facilities for higher value-added products are created and/or existing facilities restructured and modernized. There are, however, several obstacles to such development starting with the shortage of engineers and managers who are able to create world class products, and lack of adequate modern production equipment the replacement of which would require massive investments. Consequently, there are relatively few high value (end-user) products produced in BiH. Future development of the sector depends not only on the enterprises themselves, but to a large extent on state support in terms of effective policy instruments and major improvements in legal, administrative and tax treatment of the private sector and its SMEs. The major constraints are related to unfavourable trade and customs policies; low capacities of relevant ministries; lack of consistent public support to the sector; the issue of surplus workers in enterprises that have not undergone

restructuring; and lack of more effective and favourable investment promotion policies and treatment of foreign investors than that of competing countries.

The sector can not have immediate major impact on the employment since many enterprises still have surplus labour. The impact on rural employment will never be substantial mainly because manufacturing capacities in this sector requires highly skilled workers, high quality and very sophisticated business and consulting services as well as support by R&D centres, all of which are mainly situated in the cities. However, given the low wages compared to EU25, on par with Serbia and Macedonia and a positive state support in terms of the creation of a favourable investment climate and active technology and educational institution building it can be developed into a major sub-sector creating many new jobs.

### **8.1.1. Product, production, supplies and infrastructure - metals**

#### **Constraints on the Automotive Manufacturing Sub-Sector**

Presently even the machinery and equipment in the 20 automotive enterprises in Metals are fast becoming outdated in relation to increasing wages. There are possibilities for growth within the sector, but present and new BiH enterprises need to upgrade themselves to meet the very high standards of the auto-sector. This would require heavy investments and lots of training and it would take a long time to have a significant direct impact on employment and only little of it would be in rural areas. The average age of the workforce is, however, 40 years which is fine for now, but new workers need to be educated and trained to sustain the competitive advantage.

The products turned out by the Automotive Sub-Sector are made according to the contractors' designs, standards and specifications. Used in modern automobiles they represent the worlds' highest standard, mass manufactured according to Good Manufacturing Practices on relatively good equipment with an average age of 15 year. Margins in the automotive sub-sector are, however, quite low and most enterprises find it increasingly difficult to set aside the 5% per year required for investment in new equipment. Consequently, even this relatively advanced sub-sector is in dire need of new and more modern equipment to improve productivity corresponding to the rising wages.

#### **Constraints on the Non-Automotive Sub-Sector**

Some enterprises, notably those with foreign investments, follow modern production practices and have introduced international standards. Most other enterprises are not that advanced and many of the products produced by the rest of the enterprises in the Metals Sub-Sector are not up to world competitive standards nor are their products designed for the EU or any other sophisticated market and their quality is not always managed according to modern practices and standards. The enterprises which are producing competitive products are usually the ones exporting (mostly as subcontractors) or competing directly with imported products.

The major reasons for the need for improvement of competitiveness seem to be lack of product development of aesthetic as well as functional design; low productivity relative to wage levels which are slightly higher than some of the Rumanian and Bulgarian competitor's and lack of production development and strict quality management. The machinery and equipment of many enterprises are also outdated and in need of immediate replacement for the enterprises to produce competitive products.

Enterprises exporting to the EU and other heavily industrialised countries follow the required standards and are certified according to ISO, but most enterprises are not certified. See Section 9.2.4 for a complete account of certification.

#### ***8.1.1.1. Conclusions and recommendations – products, production, supplies and infrastructure***

Public institutional support in terms of effective policy instruments and major improvements in legal, administrative and tax treatment of the private sector and its SMEs should be improved to assist the sub-sector growth.

Support for investments in machinery and equipment is required in the form of loans, loan guarantee schemes and favourable tax depreciation rules.

The upgrade of the managers and workers would require appropriate support services from public and private schools and Business Support Service organisations. In the past the automotive sub-sector has benefited from such services from their EU co-operation partners, without that they would not have been able to compete with other low cost manufacturing sites.

Access to market, product and production methods information should be improved by providing access points from which data bases can be accessed.

Formal written strategic plans which are almost non-existent should be supported to make sure that the enterprises have considered carefully all their options and communicated the common goals and strategies to all concerned.

For export targeting Northern Europe (EU) or other advanced markets it would be necessary to design the products according to the taste and specifications of the potential customers of those markets. Such efforts should be supported by technological institutes which in turn should be supported in their efforts to introduce new product and production technologies.

The finalisation of the standardisation and ISO certification system should be supported as a matter of very high priority.

### **8.1.2. Human resources - metals**

#### **Constraints on Human Resources**

Generally, skilled labourers are readily available as many factories are overstaffed. There are, however, pockets with lack of skilled labourers notably

lock smiths and certain types of welders. Our analysis is based on a very small number of enterprises and we thus do not have enough information to ascertain the situation so there may be other shortages as well.

When factories invest in new machinery workers are normally trained on the machines by the suppliers. Training for new production methods, for quality assurance systems and for computerisation of production equipment or management information and control systems would require specialised training which is presently not offered in BiH.

The enterprises of the sub-sector usually have quite competent production managers and foremen for small series production. Moving the sector into higher value added, own or sub-contracted products, or into a joint-venture with an EU Enterprise, would usually require well educated and experienced production managers with an academic degree in production management or engineers with specialisation in production management. Some of the larger enterprises already have well qualified production managers, but most SMEs do not.

New managers and or management training of incumbent managers are needed in other than the production area. Particularly the medium size enterprises usually lack at least one top manager and in particular a well educated marketing manager and a finance manager who can manage in an environment with ever increasing competition by larger and very professional competitors in low wage countries.

Many of the top leaders of the enterprises are not familiar with modern management / leadership styles including strategy and marketing planning.

Most of the present managers and nearly all staff over 30 years of age lack the ability of understanding and speaking / writing English and other foreign languages.

#### ***8.1.2.1. Conclusions and recommendations – human resources***

Top leaders should be given the opportunity to modernise their management / leadership style and learn to make formal strategy and marketing planning. This would require attending shorter courses in business administration and leadership at MBA Schools or the like.

Training courses for particularly engineering designers and marketing managers are of the utmost importance for export and should be supported both financially and technically.

Support is needed for training of Production Managers in modern production management and quality assurance. Finance Managers need training in modern financial accounting and financial management.

Even though there seem to be an adequate number of workers available the new technologies require extension education and probably new skills. There is thus a need for support to define the need for new skills and design curricula.

The ability to communicate in English and other foreign languages should get top priority as it is crucial for the designers and marketing staff in order to access foreign markets and follow the furniture fashion trends.

### **8.1.3. Marketing - metals**

The raw materials- and automotive sub-sectors are highly export oriented while the rest of the fabricated metals sub-sector hardly exports outside Balkan. The trade balance for the sector as a whole is, however, positive due to raw materials and automotive parts export. In 2005, the sector's share of total BiH export was 22% and the share of total import only 6%. The trade surplus was mainly due to exports from the aluminium industry.

The domestic / regional markets offer import substitution opportunities for enterprises able to produce and market customer targeted products. The EU (and the US) producers of brand name end user products find it increasingly difficult to manufacture in the EU (or the US) due to high wage levels. They have thus for the past several years looked to lower wage markets such as China and Eastern Europe to have parts, sub-assemblies and even finished products produced at a cost which would make the finished products price competitive. Proven by the BiH automotive sub-sector it is possible for the BiH fabricated metal sub-sector to compete against other low wage countries as sub-contractors to EU enterprises due to the overall positive Revealed Comparative Advantage (RCA 55) and the proximity in geographical and cultural terms. There thus seem to be good opportunities to increase exports.

#### **Constraints on effective marketing**

Lack of modern production equipment and efficient factories able to turn out ISO certified and CE marked products according to EU standards is a significant constraint to exports to EU and other markets.

The lack of public and private institutional support for export also prevents particularly the smaller enterprises from exporting.

The marketing departments can be foreseen to be rather weak until an adequate number of managers and staff are educated. Until then, extensive support should be given on access to export markets; participation in EU trade fairs; trade promotion tours and development of contacts with EU enterprises; identification and contracting of export / import agents and identification of shipping agents. Support would also be needed in filling in export documents.

The failure to use available and easily accessible market information to create powerful strategic plans including a marketing plan is mostly due to lack of competent marketing staff. The enterprises lack of confidence in their own ability to export certainly also contributes to the failure to get export orders.

Precise and imaginative written marketing plans are lacking in most enterprises. Lacking such planning there is no precise information basis for effective market access although there is of course more or less successful attempts to sell more in present markets and to expand mostly to local, well known Balkan markets.

#### ***8.1.3.1. Conclusions and recommendations - marketing***

The marketing departments of most enterprises should be given extensive support with access to export markets; participation in EU trade fairs; trade promotion tours and development of contacts with EU enterprises; identification and contracting of export / import agents and identification of shipping agents. Support would also be needed in filling in export documents.

In most enterprises there is a need for strategic and marketing planning. The marketing plan and strategy should spell out which markets the enterprises of the sub-sector should attempt to enter with which products, at which prices, distributed through which distribution channels, supported by effective promotional efforts.

Institutional and private consulting support and training of marketing managers is needed as few of the sub-sector's enterprises are able to carry out this work on their own, at least not for the first time.

Public and private institutional support for export could play a role in getting export market information, particularly for the smaller enterprises and assist them with production of good marketing plans. The plan does not have to be a fancy document, but the marketing people must have thought through and documented what they want to do and how they want to do it.

With regard to market information collection, marketing planning and plan implementation the automotive sub-sector could assist with information and contacts, but as they are at a different position in the customer relationship lifecycle the fabricated metals sub-sector enterprises would have to rely on their own marketing staff, FTC, their own industry association and private consultants. They should be looking to alleviate the constraints in the following areas:

- Making sure that their enterprise would be able to make competitive products which are ISO certified and CE marked and in accordance with EU and other specific industry standards.
- Getting market information on EU enterprises already using or looking for sub-contractors.
- Be able to price competitively enabling them to make realistic bids for sub-contractor production.
- Identify possible distribution channels and shipping agents.

- Product delivery modes, packaging, promotion, advertising and of course sales and longer term customer relationship managers.

The automotive sub-sector which has been sub-contractors to EU enterprises for 25 years have learnt the lessons a long time ago. The rest of the metal sub-sectors' marketing functions need to look to this sub-sector for advice particularly with regard to its customer relations management in terms of negotiation and handling systems and its just in time delivery capabilities. It might be worthwhile to support the creation of a model for subcontracting based on the Automotive Sub-Sector – using the managers of that sub-sector as mentors.

#### 8.1.4. Standards and certification - Metals

<b>Geographic region</b>	<b>Mandatory certifications and standards</b>	<b>Voluntary/B2B-required certifications and standards</b>
<b>BiH</b>	<ul style="list-style-type: none"> <li>• Old YU legislation that includes old (compulsory and not replaced) JUS standards</li> <li>• Certificates required by national legislation</li> </ul>	<ul style="list-style-type: none"> <li>• JUS standards (non-compulsory one's after 2003)</li> <li>• BAS Standards (based on EN/ISO) until combined with adopted new regulations (esp. BAS/TC 4 on Steels and Steel Products)</li> </ul>
<b>EU</b>	<ul style="list-style-type: none"> <li>• EU product quality and safety related legal measures (implementing e.g. ISO and EN European Standards)</li> <li>• CE Marking</li> <li>• EU EMAS environmental management regulation (but EMAS certificate is voluntarily to obtain)</li> </ul>	<ul style="list-style-type: none"> <li>• ISO standards (e.g. ISO 9001:2000/ISO 14001 environmental management standards)</li> <li>• DIN standards</li> <li>• 'Clean production' certificate</li> <li>• Additional standards developed and used in industries e.g. VDA in the Automotive used by VW in BiH</li> </ul>

The table above provides a general overview on standards and certifications in the fabricated metal products sub-sector in BiH and in the EU. The right column includes standards and certifications laid down by a legally binding norm although some of them can be obtained on a voluntary basis. The left column includes voluntary/B2B-required certifications and standards, which are not made compulsory by law. The rows 'BiH' and 'EU' only show the origin. Thus, standards and certificates mentioned for example in the second column of the row 'EU' are also already applied in BiH.

The voluntary standards mentioned above constitute, for the time being, the most widely used and recognized in BiH, although there are many more on the

market. Theoretically each industry in the fabricated metal sector can introduce standards based on which market participants can become certified. Examples are the VDA standards in the German automotive industry.

Such voluntary standards can be also requested by business partners in external markets (e.g. VW Germany could request VDA automotive standards from BiH enterprises)..

Many enterprises lack awareness of the competitive advantages of internationally certified products. As a consequence they might even omit the certification mark in their product promotion

EMAS an environmental management system could not be found while some of the assessed enterprises have an ISO 9001:2000 environmental management system already implemented and are even thinking about up-grading it towards ISO 14.001.

#### ***8.1.4.1. Mandatory standards/certificates in BiH (JUS standards and other mandatory certificates)***

##### ***8.1.4.1.1. Processes to obtain standards/certifications***

The fabricated metal processing enterprises are often obliged to provide certificates in accordance with the old outdated ex YU regulations and JUS standards. This is in some cases the only standard these enterprises work with. One enterprise mentioned that for one recent order to the EU the Croatian National Institute (IGH) tested tensile strength and hardness of the products, but the customer did not trust the results so they had it tested by an EU institute (see details on the web-pages listed in Annex 5).

##### ***8.1.4.1.2. Institutions***

Certification and control of the mandatory standards is performed by the relevant public institutions (such as the Institute for Metrology as well as the related inspectors). These institutes do not need to be internationally accredited when it concerns the BiH national standards. The BiH national standards are only valid in the EU if they are accepted by European enterprises and if no European standard is legally required. Furthermore, the enterprises co-operate with the civil engineering department of University of Sarajevo and the Metallurgical Institute in Zenica. Besides these public institutions involved it appears that private institutions are sometimes working in this publicly regulated sector. Thus, one enterprise indicated that some annual tests on their production of wires are carried out by the world renown (insurance and testing) company LLOYDS.

##### ***8.1.4.1.3. Support sector***

Public institutions (such as the Institute for Metrology as well as the inspectors) provide general information on which mandatory standards are required of enterprises at the different stages of the value chain. No complaints from enterprises on a lack of support concerning these mandatory standards have been received. Further information, technical and financial assistance and training in setting up standards and certification systems can be gathered from



public as well as private institutions. Public institutions are for example the Chamber of Commerce, the Foreign Trade Chamber (FTC including the future Export Promotion Agency - EPA) and the EICC. Private institutions are all the certification enterprises internationally accredited themselves for the certification of a certain standard or co-operating with an internationally accredited institution. These private institutions include, in addition to their fulltime employees, a number of associated consultants certified under a specific standard.

#### ***8.1.4.1.4. Quality of support***

One enterprise co-operated in terms of mandatory certificates with the civil engineering department of University of Sarajevo and the Metallurgical Institute in Zenica, but did not find them particularly helpful.

#### ***8.1.4.2. Mandatory standards/certifications in EU (many ISOs, CE-marking)***

##### ***8.1.4.2.1. Processes to obtain standards***

Mandatory standards required by EU-law such as the CE-marking or ISO standards included in certain directives have to be complied with by all stakeholders (fabricated metal processing enterprises, public labs, inspection bodies etc.) once the legislation is in force. One BiH enterprise processing metal from Austria emphasised that their raw materials, because it originated from the Austrian (EU) enterprise are automatically CE-marked (approved). The European legislation on the EMAS environmental management certificate and the EU Eco label (5) also have to be implemented. But this legislation – different to the one formerly mentioned - leaves the decision up to the enterprises as to whether or not to enter the procedure to obtain one of these two EU labels (see details on the web pages listed in Annex 5).

##### ***8.1.4.2.2. Institutions***

The EU legislation laying down the preconditions (institutions, procedures etc.) is neither transposed nor in force in BiH. Hence the only way for BiH enterprises to fulfil these requirements is on a voluntary basis (see below).

Strongly EU-export oriented enterprises in the fabricated metal processing sector do already need CE-marking. There are, however, no BiH institutions that are able to give the CE Marking. One institute in Slovenia could carry out parts of the analyses at a cheaper price than Northern European institutes, but in at least one case the German institute AFT in Rosenheim well known in the EU market was chosen to make sure that the products would be accepted by the buyer.

##### ***8.1.4.2.3. Support sector***

In the support sector concerning standards mandatory in the EU, private institutions are active. These are all the certification institutions internationally accredited themselves for the certification of a certain standard or co-operating with an internationally accredited institution. These private institutions include,

besides their staff a number of associated consultants certified under a specific standard.

In the metal cluster of the Municipality Prijedor the education on certification has been provided by TÜV for free and all cluster members receive, based on a contract with TÜV, a discount (20%) when introducing international standards. The IFC has also been supporting the cost of e.g. the CE Marking process.

#### ***8.1.4.2.4. Quality of support***

No complaints have been received from enterprises on support concerning the standards mandatory in the EU. In connection with the CE-marking certification enterprises do, however, claim that they lack information supporting the initial certification process. This leads to an increasing number of cases where export products are stopped at the EU borders due to strict controls with mandatory CE-marking.

#### ***8.1.4.2.5. Voluntary standards/certifications in BiH and EU***

Voluntary standards in BiH and in EU will be dealt with together as a broad overlap exists.

#### ***8.1.4.2.6. Processes to obtain voluntary standards/certificates in BiH (some JUS Standards, BAS Standards..)***

The BAS Standards (esp. BAS/TC 4 on Steels and Steel Products) prepared by the Institute of Standardisation will become compulsory for all stakeholders (enterprises in the fabricated metal sub-sector, public labs, inspection bodies etc.) in accordance with the technical regulations on conformity assessment, once these regulations are in force. The preparation of two directives closely related to the fabricated metal sub-sector, the Low Voltage Directive and the Machinery Directive, is already in the state of draft Regulatory Impact Assessments. The processes are described in more detail on the web pages listed in the table in Annex 5.

#### ***8.1.4.2.7. Processes to obtain voluntary standards/certificates in the EU (many ISO certificates, etc.)***

Often standards are requested by national or EU-business partners or by certain external markets, although no legal requirements exist or will only exist in the future when EU legislation enters into force. This is especially valid for ISO and one enterprise clearly indicated that it was a competitive disadvantage if they did not fulfil this standard (see details on the web pages listed in Annex 5).

#### ***8.1.4.2.8. Institutions***

The certificates for enterprises for these nationally and internationally requested standards are mostly provided by internationally fully accredited institutions in co-operation with (BiH) national enterprises/institutes such as TÜV Thüringen together with TÜV Adria and BIOBASE or Quality Austria and Boscert.

#### ***8.1.4.2.9. Support sector and quality of support***

Many enterprises in the Fabricated Metal Processing sub-sector are not fully aware of voluntary standards (e.g. ISO 9001) or they lack knowledge of the possibilities for up-grading an existing certificate e.g. ISO 9001 to a newer version e.g. ISO 14001.

#### ***8.1.4.3. Constraints and recommendations***

##### **Constraints**

- Lack of knowledge within sector about the obligation to have CE Marking in advance of export into the EU
- Lack of knowledge within sector about voluntary certification opportunities and advantages
- Lack of institutional support for CE marketing issues

##### **Recommendations:**

- Support should be provided to awareness raising on the necessity of the certification and CE marking when exporting into the EU as well as to the production of a guidance document on mandatory CE marking
- Support capacity building on available voluntary standards on environmental management systems (ISO, EMAS) and the production of a guidance document on voluntary standards.
- Support should be directed to the establishment of a publicly or privately owned support institution.

#### ***8.1.4.4. Factors that limit competitiveness of the value chain***

There are three groups of enterprises in the metal sector with different demand for business services. These groups are:

- Large state-owned enterprises which have not been privatized and restructured. These enterprises are not active or they utilise their capacities at a very low level. Their urgent needs are for financial resources and they do not express a demand for business services.
- Small enterprises which were established after the war, most of them with a very narrow product range. These enterprises lack management, marketing and other skills but, in general, they express very low if any demand for business services and usually are not ready to pay for them.
- Small or medium size enterprises with foreign owners, established through privatization or direct foreign investment. These enterprises have modern management practices, use modern technologies and export a large part of their production. They express demand for business services and they are ready to pay for them.

Supply of business services by governments, development agencies, BSCs and CoCs is not tailored to the needs of the metal sector. Supply by the private sector is also not developed and is limited to providing services to the

successful medium size enterprises, that is to the ones expressing demand and readiness to pay.

One of the major weaknesses is that local service providers do not provide training for workers. This training is expensive and usually takes a few months. For example, training for welders costs 5,000 – 6,000 KM and takes three months. Because of the lack of local supply, enterprises usually train their employees in one of the neighbouring countries.

Successful establishment of an automotive cluster, with 28 enterprises (70% in the metal sector) raised the awareness of other enterprises in the metal sector of the benefits they could gain if included into this cluster or if they were to establish other clusters. Several small local clusters have been established in the past two years but the main issue for them is to define a joint vision based on their interests. More support is needed before these clusters can have a substantial impact on sector development.

#### **8.1.4.5. *Assessment of private and public institutions that need to be in place to assist the enterprises***

##### **8.1.4.5.1. *Business support services provided by governments***

There are no business services provided by the governments specifically aimed at the SMEs in the metal sector,. However, they can use support services provided by different agencies and/or business centres to SMEs in general. These services include information on legal framework and available financial sources, basic consulting and training for start ups and SMEs.

##### **8.1.4.5.2. *Business support services provided by regional development agencies (RDAs)***

Regarding business support services, only one of the RDAs implemented a project relevant for the metal sector. However, most RDAs implement projects that provide business services to SMEs meaning that processors can benefit from these services in “competition” with SMEs from other sectors.

NERDA started a new project in 2007 (CREDO) which will be sector specific and the metal sector is one of the sectors selected. The enterprises from the sector will get consulting services and/or training financed partly by enterprises and partly by a Development Fund (to be set up and managed by the project). The project will also support cooperation between Universities/Research Centres and enterprises from the metal sector.

##### **8.1.4.5.3. *Business support services provide by development agencies and business support centres (BSCs)***

Most development agencies and BSCs don't provide specific services to the metal sector. SMEs and start-ups can use services provided for SMEs and start ups, as described in section 5.4.3.

Thanks to the support that RS Agency for SMEs provided to cluster development in 2007, several small local clusters in the metal sector were established or strengthened.

PREDA, local development agency for municipality Prijedor, is the exception in this field. It provides direct support to the local metal association.

#### **8.1.4.5.4. *Business support services provided by Chambers of Commerce (CoCs) and associations***

Most CoCs do not provide any specific services to enterprises from the metal sector. SMEs from the sector can benefit from the services offered to SMEs in general, as described in section 5.4.5.

Recently, the Export Promotion Agency was established within FTC. The EU EXPRO I project supported the agency in the preparation phase, and a new EU EXPRO II is expected to start soon with the focus on institution building, but will also work with 22 enterprises. Metal products are among the selected priority sectors.

There are local associations and clusters in the metal industry. Most of them provide services to members only if they get support by donors. The association supported by PREDA, Metal-PD is active. The association was established in 2006, has 24 members (out of 32 metal sector enterprises in the municipality) and 22 of them are small enterprises. PREDA's support includes visits to trade fairs, training (including training on ISO standards), and promotion. GTZ financed training courses, promotion materials and web page development.

#### **8.1.4.5.5. *Business support services provided by private service providers***

There are several private consulting enterprises specialized in the metal sector, located mostly in Zenica region and in other larger towns and university centres. Their clients are mostly successful medium or large enterprises. Most of the individual consultants are university professors. Individual consultants are also focused on successful enterprises that understand the need and benefits of consulting services and are ready to pay for them.

Individual free-lance consultants or consulting enterprises in most cases reach SMEs through projects financed by donors and very rarely have long term relationships with them.. The services are free with the expectation that before the end of the project producers will become aware of the need of services and be ready to pay for them. There are very few examples that these services and providers stayed on the market. This is probably due to a combination of lack of willingness to pay for services on the part of the potential clients; the services may not match the perceived needs; the recruiting and training of experts do not produce capable experts and donor support stopped short of delivering sustainable consulting businesses.

A number of good advisory services have been built in general management skills training and training and advisory service is slowly building up in international standards (ISO, HACCP, CE mark), that is in segments where donors have provided, in the previous years, extensive capacity building for local consultants.

#### **8.1.4.6. Recommendations**

Recommendations for EC are:

- Promotion of the idea of cluster organisation, cooperation and associations among enterprises in the metal sector.
- Support to the establishment and development of clusters around leading enterprises or leading sub-sectors, such as the automotive industry. The organisation of clusters can provide a better future for the sector, but only if enterprises are ready to participate in the development of the cluster and its funding.
- Support should be given to the development of cluster services such as training, market research, export organisation and promotion, and consultancy.
- Support relationships between clusters or associations and business service providers, public and private.
- Support development of training centres for the professions relevant for the metal sector.

#### **8.1.5. Finance - metals**

##### ***8.1.5.1. Factors that limit competitiveness of the value chain***

Access to finance represents major obstacle for small enterprises and for start-ups in the metal sector. These enterprises have low credit worthiness due to lack of assets to be used as collateral. The shortage of working capital needed for expansion of production and for export is also a weakness of the sector.

The major obstacles on the supply side are interest rates, collateral requirements and other terms required by the credit institutions. Even loans provided by development banks and special credit lines funded by local governments and donors are above the credit capacities of many SMEs and most start-ups in the sector.

##### ***8.1.5.2. Assessment of private and public institutions that need to be in place to assist the enterprises***

###### ***8.1.5.2.1. Finance provided by development banks***

The Investment-development bank of RS manages 6 credit lines. Out of them, two lines are for enterprises and entrepreneurs (total amount for 2008 is 80,4 million KM) and SMEs from the metal sector can apply for these loans. The implementation of these credit lines is performed by 6 commercial banks and

three micro credit organizations. The following terms and conditions are applicable:

- For start ups, maximum loan amount is 30.000 KM; repayment period is 5 years, with grace period of 6 months; interest rate 7,13-7,33%, depending on the location; amount for 2008 is 12,9 million KM.
- For entrepreneurs and enterprises, maximum loan amount is 5 million KM; repayment period is 15 years, with grace period of 18 months; maximum interest rate is 6,03% (special incentives for underdeveloped areas (5,83%), processing industries (5,73%), members of clusters (5,73%), exporters (5,03%) and tourism (5,73%)); amount for 2008 is 67,5 million KM.

The Investment bank of FBiH carries out its operations directly and through commercial banks. Four credit lines are in implementation and enterprises from the metal sector can apply for three of them. The following terms and conditions are applicable:

- For production and services, interest rate is 5%, maturity max. 7 years, with grace period up to 1 year.
- For export, revolving credit, interest rate EURIBOR+1%, no grace period.
- For employment
  - Terms for industry and services: interest rate 4%, grace period 6 months, maturity max. 5 years; maximum amount is 500.000 KM, that is 10.000-25.000 KM per job.

The general impression from interviewing these two banks are that they are not sufficiently transparent and that approvals are based on political and economic criteria. Also, approval processes are long. The critics are much stronger regarding the Investment bank of FBiH than regarding the Investment-Development bank of RS.

#### **8.1.5.2.2. *Credit guarantee funds (CGFs)***

Credit provided by CGF from Brcko District can be used by SMEs from the metal sector. The new cycle that started in 2008 is based on 1,300.000 KM deposit provided by the government. Credit lines have been increased (deposit multiplied by 3 to 5) and 4 commercial banks are selected as implementers. Agreed terms are: interest rate of 7.5%, the loan amount up to 100.000 KM and maturity up to 5 years.

CGF managed by LINK Mostar provides credit which can be used by SMEs and start-ups from the metal sector. The total credit line now available is 4,6 million KM. Interest rate is 7%, grace period is 6 months, the loan amounts up to 50.000 KM, and maturity is up to 5 years. In the previous period most users have been established SMEs (81%) and only 19% start-ups.

Special CGF for youth is available for start-ups and SMEs. The loan amounts from 5.000 KM to 30.000 KM (20.000 KM for start-ups), interest rate 6,2%, grace period 6 months, maturity 5 years. The fund covers the whole BiH and it is managed by LINK Mostar, SERDA Sarajevo, NERDA Tuzla, NGO TALDI

Tuzla, MCO Sinergija Banja Luka and NGO CeBEDA Travnik. These organizations provide assistance in the preparation of business plans and applications and they charge 1% of the loan amount for their services.

SERDA established one regional CGF in 2006, with deposit of 1 million KM and credit line provided by Zagrebacka banka in the amount of 3 million (to be increased to 4 million KM soon).

The success of the first established CGF increased interest of the governments to provide deposits for the guarantee fund and to work through selected commercial banks to issue the loans. Banks are also very satisfied with this instrument and they start providing larger credit lines with lower interest rates.

New funds have been established in Canton Zenica-Doboj (500.000 KM as deposit, credit line 1,5 million KM), municipality Prijedor (deposit of 600.000 KM, credit line in the amount of 3 million KM for agriculture and SMEs), NERDA, cantonal government and municipality Tuzla (deposit 600.000 KM, credit line 2 million KM, for SMEs and craft, interest rate 6.6%).

#### **8.1.5.2.3. Commercial banks**

Regarding credit offered to SMEs and start-ups by commercial banks, there are constraints on both supply and demand side. However, commercial banks are major source of finance for successful medium size enterprises from the metal sector.

Constraints on the supply side are not related to the lack of available loans but to the terms and conditions that clients have to satisfied in order to be accepted by banks as well as the high interest rate (about 9%). Major obstacles are related to the requested collateral and short grace period. The weakness of the commercial banks, very often pointed out by enterprises is that staff has inadequate knowledge on specific characteristics of SMEs and that is why banks do not offer loans tailored to their needs. Additional barrier is that banks favour larger loans that are above the credit capacities of small enterprises.

Major demand side constraints are business skills of SMEs that limit their capability to develop and present reliable business plans and business strategies.

Among commercial banks, ProCredit Bank and Volksbank have the most experience in financing small enterprises. Comparing these two banks, ProCredit bank offers more favourable conditions regarding collateral, duration and grace period, tailoring them to the client's situation and charging interest rates between 10,5% and 18%. On the other side, Volksbank charges lower interest rate to borrowers (9,5%) but has tighter conditions on collateral.

Local governments give interest rate subsidies targeting mostly SMEs and providing the difference down to 6% interest rate. Although this subsidy has increased the use of loans offered by commercial banks, the application procedures are complicated.



Most commercial banks are becoming more involved in the micro finance sector, either directly by down scaling their offers or indirectly by financing micro credit organizations. Banks' advantage is related to the interest rates (much lower than rates charged by MCOs) but MCOs have an advantage in collateral requirements and other conditions.

#### **8.1.5.2.4. *Special credit lines***

Special credit lines are financed by donors and local governments (different levels) and implemented by commercial banks and/or MCOs. Most of them target SMEs. Sometimes commercial banks add their own funds to increase the credit lines.

The EFSE (the European Fund for Southeast Europe) is one of the major providers of long-term funding for local financial institutions for lending to micro and small enterprises. Partnering lending institutions in BiH are 8 banks (including ProCredit bank) and 7 MCOs. IFC and EBRD also support the financial sector with different credit lines and financing facilities in order to strengthen credits for SMEs and to assist development of other financial instruments (leasing, factoring and mortgage credits).

In many cases these special credit lines increase the banks' offer for SMEs, but do not result with changes in procedures and terms. This means that they do not create more favourable conditions for clients.

Special credit lines funded by local governments and implemented by commercial banks and/or MCOs in most cases provide credits under more favourable conditions. Some recently introduced special credit lines are the following:

- The government of the Canton Sarajevo funded a new credit line (to be implemented by Nova banka Banja Luka) in the amount of 7 million KM, with interest rate of 2%. One of the eligibility criteria is that client has to be located within the Canton.
- The municipality Centar Sarajevo and Raiffeisen banka Sarajevo funded a special credit line in the amount of 1 million KM, with the interest rate of 6%.
- City Banja Luka and NLB Banja Luka funded a new credit line in the amount of 4,5 million KM with the interest rate of 6,5%.

#### **8.1.5.2.5. *Other providers of financial services***

Among other financial service providers, micro credit organizations are the most active in financing start-ups and SMEs. Leasing and factoring are still not important financial instruments for these market segments. However, successful medium size enterprises from the metal sector do use leasing as the source of financing.

Start-ups are among the typical clients of MCOs. Most MCOs offer loans with very similar conditions, maximum size up to EUR 15.000 (to be increase to EUR 25.000), maturity up to 3 years, grace period up to 9 months, collateral

requirements mostly promissory notes. The collateral requirements and procedures are more acceptable to start-ups and small enterprises than requirements of the commercial banks.

Thanks to the activities of MCOs, which cover the whole country, the access to loans is not an issue for start-ups and small enterprises. The major barrier to them are interest rates, which are between 18 to 27% .

Leasing is a relatively new financial instrument, with which SMEs are not familiar. This is fast growing sector in BiH. The request for 10-12% of own financing is an obstacle for SMEs. On the other side, the most attractive segment for leasing enterprises are individuals and strong enterprises. They are less interested in entering the lower end of the market. Micro leasing is not used. This could be an opportunity for MCOs to act as the agents of leasing enterprises that want to reach the low end of the market.

A new financing provided in May this year by EBRD to Raiffeisen Leasing in the amount of 10 million EUR has to be used for SMEs from all sectors (less than 250 employees and less than 10 million turnover). Defined types of leasing contracts are micro lease (maximum amount of EUR 10.000) and small lease (maximum amount of EUR 125.000. The expected average is EUR 50.000. This will increase offer to SMEs, but the same conditions will be used as for other leasing agreements, meaning that the number of eligible and acceptable clients will not change.

Factoring has been introduced in BiH recently. This instrument is still not legally regulated. State owned export credit agency, IGA, provides export credits and specific factoring services, but both services are provided in small amount and do not play an important role. Recently one Slovenian factoring enterprise, Prvi Faktor, registered as an enterprise in BiH and one bank, FIMA, announced that they will be introducing factoring. Because of the high costs attached to this instrument it is not expected that factoring will be accepted and used by SMEs soon.

### **8.1.5.3.                                      *Recommendations***

Recommendations for EC in this field are:

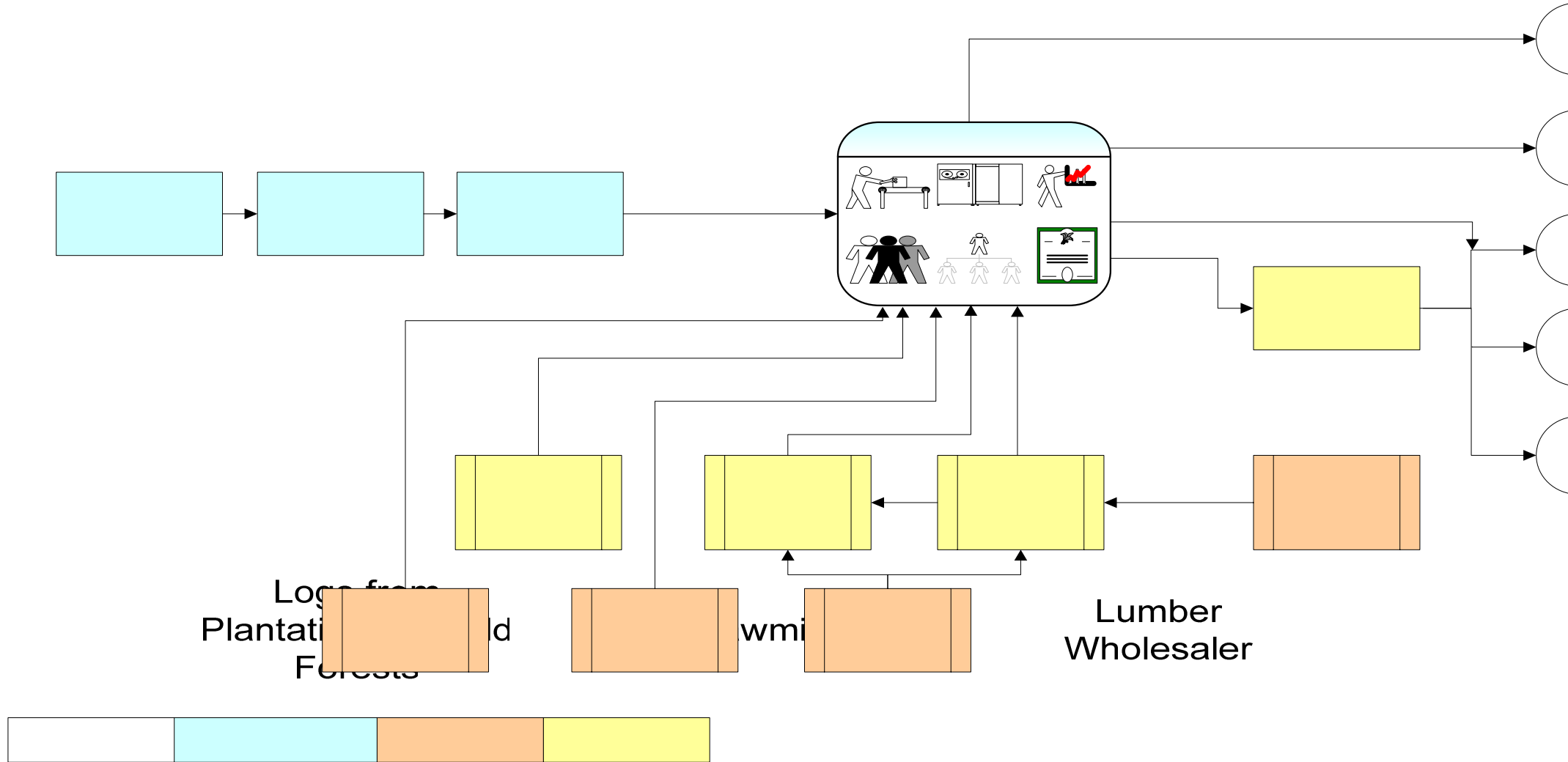
- Assist education and training of managers and staff of commercial banks on needs and characteristics of farmers, cooperatives and SMEs. The objectives of the education should be to simplify procedures for loan application and assessment, improve the risk assessment capabilities of the staff and define an appropriate risk profile for these clients. Further studies are needed to determine ways and means of effecting the required changes.
- Assist development of micro leasing adjusted to the needs of SMEs and start-ups.

- Improve basic business skills of SMEs, especially in the area of business plan development.
- Support introduction of special credit lines for exporters.

### **References (reports) metal sub-sector**

1. Auto Component Survey 2005 (JICA)
2. Production of components and Motor vehicles Camber of Foreign Trade – Booklet
3. EPPU studies

## 9. Value Chain Analysis of the Furniture Sub-sector



## Analysis of the Furniture Value Chain constraints to competitiveness

Below table represents the whole Forestry and Wood Sector. Much of the employment and most of the export is generated by the sale of products quite low on the value chain. The furniture industry accounts for an estimated ¼ of the domestic sales and 1/3 of the exports (mainly to Eastern Balkan, but also to the EU).

Forestry & Wood	Results	Remarks/Growth Rate
Number of enterprises	1,500 (1200 sawmills of which only 300 are registered); 300 processing enterprises)	High potential growth rate
Total Employment	40,850	80% in rural areas, high potential employment generation
Rural	32,680	
Domestic sales '000 KM	398,000	High Growth rate 13% in 2006
Export Sales '000 KM	808,000	High growth rate, 12% in 2007
Total sales '000 KM	1,244,000	High Growth Rate
Share of GDP	10% + 12% NOS	
Competitiveness	High	
Potential increase of MSME income by production increase	High	

*The information in this table is obtained from the referenced report and is mostly from 2006, but some are older. They are not very precise and they should therefore be used as indicators only.*

### Objectives for taking the sub-sector forward

To support increased productivity, move to higher value production and increase exports to the EU and regional markets.

### Basic conditions

The Furniture sub-sector value chain of the Forestry and Wood sector has good growth prospects and high potential for utilizing the abundance of wood in BiH (50% of the country is covered with forest) to expand into downstream higher value furniture products. BiH has a long tradition for producing good wood raw materials and furniture which would satisfy local and regional demand. The relatively low cost, skilled labour, gives the furniture industry a competitive advantage (Revealed Comparative Advantage of 108 - NACE Code 36) which it has not yet been able to fully realize, mainly due to lack of export market orientation and in particular design capabilities. In the furniture sub-sector, the existence of good-quality materials, right quality furniture, low cost labour, and market oriented design are critical factors. The presence of the first three and the possibility to acquire the design capability through purchase, joint-ventures or sub-contracting gives the team confidence that the sector has a strong base for producing competitive export products.

### Strategic options

There are at least three possible main strategies which could be applied to this sector: 1) to become sub-contractor or joint-venture partner to a foreign (EU) enterprise; 2) to develop own products of world quality, utility high value and, particularly market oriented design; 3) bid on domestic and international tenders for large construction works requiring standard, as well as made to measure furniture and joinery. For an enterprise which has not already significant exports the second is by far the most difficult and capital intensive to pursue as it requires

good modern machinery and equipment, top designers, engineers, top qualified production, marketing and finance managers and skilled workers and a very good general manager who can lead the team to success. It also requires modern computerised management information and control systems and a certified quality assurance system. Most of the non-production staff and management would need to be upgraded in most of the enterprises of the furniture sub-sector to pursue this strategy even in those who already have exports to sophisticated markets. Most enterprises would need extensive support in all areas.

The first strategy, to become a sub-contractor would require a lot less and it would be a very good learning experience for both management and staff preparing them for moving to strategy 2 and 3 in due time. The product design would be given by the co-operation partner. In the production area it would first of all require investment in staff training, machinery and equipment, modern computerised management information and control systems and quality assurance systems. The finance manager would need to know modern contribution costing and cash flow management. The marketing area would need to be able to expand the customer base and use distribution channels to a level where the loss of one or two customers does not kill the enterprise.

The third strategy would require the same as strategy 1 and additionally a marketing and sales force which could ensure enough customers and work out and win bids. It would also require an implementation team travelling the world installing the furniture. It should be noted that very often these bids also contain joinery work which may require extra equipment or co-operation with a joinery enterprise. A good cash flow would be needed for such contracts as they are putting extra strain on working capital management and funding. Again, most enterprises would need support in all areas.

#### **Overall Value Chain constraints to competitiveness**

At the beginning of the supply chain the newly created Cantonal forest management enterprises in charge of the management of the forests of each Canton basically consist of resources taken over from the old SOEs and not all of the old large wood processing factories have been privatised. In these enterprises no real restructuring process has been completed, which means that the basic problems of old traditions and culture of work, overstaffing, lack of adequate equipment, lack of scale of operations, etc. remain to be solved. The overstaffing of the past has resulted in a situation where most incomes have had to be used for salaries, and too little have been left over for investments in efficient machinery and forest management. Such organisations have serious constraints to competitiveness and even survival and they could negatively affect the supply of wood for the furniture sub-sector.

#### **9.1.1. Product, production, supplies and infrastructure - furniture**

The sector has large potential to contribute to the BiH economic development if the product designs are modernized and targeted EU and other export markets. For mass production of higher value-added products the enterprises need to invest

in new competitive manufacturing facilities or refurbish the existing facilities. Other obstacles are related to unfavourable trade and customs policies on imported equipment, parts and subassemblies for re-export; low capacities of relevant ministries; lack of consistent public support to the sector and lack of effective and favourable investment promotion policies.

### **Constraints on Raw Materials and Parts Supply**

BiH has sufficient reserves of high quality raw materials for semi-final and final products produced in the wood/furniture industry. If bought locally wood is competitive on quality (depending on the products produced) and price because of the savings on transport. "Bosnian beech" is recognized as being of high quality and could be developed as a brand name for final products carrying a premium price tag. Generally international (EU) customers are interested in BiH wood, but not in BiH production and designs indicating quality and design problem in the processing enterprises.

Standard solid wood boards are produced in sufficient quantities. Of composite materials there is only plywood and associated veneer production in BiH. There is one MDF mill, Mediapan (Busovaca), but due to its obsolete technology and subsequently poor cost competitiveness the facility is not in operation. Consequently, the local furniture industry is obliged to import particleboard and MDF.

### **Constraints on Infrastructure**

The transportation systems for wood raw materials are deficient. The railway system hardly functions, there are no highways, and there are too few forest access roads. Forest management and infrastructure thus needs to be improved by increasing the forest road grid which is currently at approximately 15% of the level of EU countries. Access to forests is also decreased due to mines and their removal will take a long time. Finished goods transportation on large trucks is the only realistic option, but the conditions of the access roads to the major European highway system via Brcko makes it very slow and relatively costly for enterprises far from Brcko to bring their product to EU markets.

### **Constraints on Products**

Most of the enterprises produce furniture of a reasonably good quality with a design targeted at domestic and regional markets or markets with the same taste. For those who want to export own products the main constraint is market information on which to base product design.

The major market access constraint of the furniture sub-sector is that the products produced by most of the industry are of a design which can probably only be sold on regional and a few EU regional markets. It seems as though the factories do not bother to hire modern designers and follow the furniture fashion trends of the times.

### **Constraints on Production**

Production to EU standards require sustainable wood production certificates and quality management which are introduced only in the few enterprises exporting to EU. Those who are certified have usually had foreign consultants assisting them



with setting up the systems and getting certification from foreign institutes because these services were, and still are not available in BiH.

Setting up production cells for larger series necessary for export to large markets is rather capital intensive and it would need support by competent technological institutes to make the cells flexible enough to tackle the variations in production.

Given the present level of production and technology the condition of the machinery is acceptable on average and better in modernised furniture enterprises. Only a smaller number of the enterprises are thinking of investment in new technology possibly because they do not think of, and plan for expansion into EU markets.

With increasing wage levels, new furniture designs and increasing export efforts the need for investment in more modern machinery will increase significantly. When at the same time the production is not efficiently managed compared to Best Manufacturing Practices due to lack of modern production systems the result is that the production costs are higher than they should be considering the relatively low wages.

Enterprises exporting to the EU and other heavily industrialised countries follow the required standards and are certified according to ISO. See Section 10.2.4 for a complete account of certification.

#### ***9.1.1.1. Conclusions and recommendations – products, production, supplies and infrastructure***

Public institutional support in terms of effective policy instruments and major improvements in legal, administrative and tax treatment of the private sector and its SMEs should be improved as the future development of the sector depends on it.

The remaining state owned forest enterprises need to be privatised, rationalised and restructured to secure sufficient wood supplies to the future increase in production of furniture at reasonable prices.

Provided feasibility studies are positive financial support is recommended for a chip board and an MDF plant. The crucial point is if the volume of sales can sustain a plant with sufficient economies of scale to turn a satisfactory profit.

To ensure sufficient wood deliveries on time the forest road grid ought to be expanded significantly.

Access to market information should be improved by providing access points with data bases and assistance in their use.

Formal written strategic plans which are almost non-existent should be supported to make sure that the enterprises have considered carefully all their options and communicated the common goals and strategies to all concerned.

For export targeting Northern Europe (EU) or other advanced markets it would be necessary to design the products according to the taste of the potential customers of those markets. If the enterprises are sub-contractors to EU enterprises the product design is given and they can concentrate on producing to the required specifications and search for new customers.

A cluster of 10 enterprises assisted by USAID CCA has accepted to use BiH designers from the Sarajevo School of Fine Arts. Exhibition products of their designs have been produced and were exhibited at an exhibition in Sarajevo in the spring of 2008. This type of furniture seems quite close to what is wanted in EU. It proves that the BiH factories are able to create and produce modern furniture and the furniture factories should be encouraged to continue this course and at the same time seek co-operation with EU designers. Of course, to make such production profitable at prices at which it can be sold requires modern production technology and effective production systems and it requires a minimum volume, the size of which would depend on the level of technology.

To support the move to more modern market targeted furniture wood technological institute building should be supported financially and technically through co-operation with EU institutions.

### **9.1.2. Human Resources - furniture**

Forest education and research in both the FBiH and the RS is placed under the two respective Ministries of Education. Training is conducted on three levels: vocational training, forest technicians and higher forest education. The vocational training program educates Forest Workers during a three year program. After one additional year a Forest Worker may become a Forest Technician. Higher forestry education (Forest Engineer, Master of Forestry) is provided through the Forest Faculties in Sarajevo and Banja Luka. The wood raw materials supply chain should thus be adequately served.

#### **Constraints on Human Resources**

The wood sector's long isolation from the international markets has resulted in drainage of management capacity, and limited capacity to develop new products. Production Foremen and Production Engineers are well trained in traditional technologies, but when it comes to modern production cell technology and in particular scheduling and machine loading they may need additional training.

Design managers and designers and marketing managers educated in modern methods are mostly not present in BiH enterprises. In large enterprises there are salesmen who of course take care of sales, but rarely do any strategic or operational marketing planning and implementation of plans. Finance and accounting are not always using modern information systems and pricing is mostly based on a cost plus calculation. When these enterprises calculate their basis for expansion they might therefore base their financial decisions on the wrong data.

There are plenty of good skilled (3 years of vocational school) labourers available. The technical skills exist thanks to a long tradition in the sector, but

additional investment in continuing education/modernization is sorely needed (e.g. design, modern cabinet making, hand-carving, modern technology etc.).

Many of the top leaders of the enterprises need to modernise their management / leadership style and learn to make formal strategy and marketing planning.

The ability to communicate in English and other foreign languages is lacking in many enterprises making it very difficult to access foreign markets.

Finally there is an urgent need for well educated and trained salesmen with excellent language capabilities to take care of the so important customer relations.

#### **9.1.2.1. Conclusions and recommendations – human resources**

Many top leaders should be given the opportunity to modernise their management / leadership style. This would require attending shorter courses in business administration and leadership.

Training courses for particularly designers and marketing managers are of the utmost importance for export and should be supported both financially and technically.

Even though there seems to be an adequate number of workers available the new technologies require extension education and probably new skills. There is thus a need for support to define the need for new skills and design curricula as well as coverage of operating costs.

The ability to communicate in English and other foreign languages should get top priority as it is crucial for the designers and marketing staff in order to access foreign markets and follow the furniture fashion trends.

#### **9.1.3. Marketing - furniture**

Sales and exports of the BiH wood sector have increased quite well over the past five years, albeit from a very low base. Some 60% of the Forestry and Wood sector production is exported and in 2005 wood industry exports reached € 350 million. Export of primary and semi-finished products accounted for 69 percent of total exports while final products accounted for the remaining 31 percent. The furniture industry has grown in the past three years and some enterprises made inroads into the EU, but the largest export markets are Croatia, Serbia, Montenegro, Austria, Germany, Italy and the UK.

Although the EU furniture market is difficult and demanding, there are some positive trends supporting BiH wood-processing firm's competitiveness:

- EU outsourcing for furniture parts production has been increasing for the past several years due to higher pressure on furniture prices in the EU.
- Many firms in Eastern Europe have moved up the value chain, starting from supplying elements and parts and moving up to producing finished furniture as their expertise and wages have grown making room for BiH enterprises.
- Although transport on BiH roads is cumbersome the country is geographically located very close to the EU market giving it substantial

advantages in terms of transport costs and logistics management over Chinese and other Asian competitors.

- BiH has an abundant amount of high quality forests, especially beech and plenty of skilled craftsmen able to produce all types of traditional furniture although they are not trained in modern furniture production.

Generally, furniture export seems to have good growth potential. The EU market seems to be ready for BiH furniture enterprises who have the expertise and initiative to attempt to access it. There are pockets of enterprises making good progress such as the Wood Products & Furniture Cluster (USAID CCA) consisting of manufacturing enterprises and service support organizations such as Business Service Support Centres, educational institutions, national and local govt. institutions and even 12 BiH wood products Export Agents Network offices in EU and the US. Within the cluster the SMEs have an impressive growth. For 2004 in a sample of 31 SMEs the approximate results were:

- Sales Growth 28%
- Exports Growth 39%
- Employment Growth 23%

The figures are a bit old, but this example serves only to illustrate that it is possible to improve sales given the right support.

#### **Constraints on Market Access**

The major market access constraint of the furniture sub-sector is that the products produced by most of the industry are of a design which can not be sold on the EU markets. It may be possible for them to sell on the regional and some Eastern European and former USSR markets for some time, but even they are gradually modernising.

In order to pursue any of the three strategies outlined above most enterprises lack market information and a realistic marketing plan. They seem to be unable to use available and easily accessible market information to create powerful marketing plans and strategies due mostly to lack of competent marketing staff.

The marketing plan and strategy should spell out which markets the enterprise should attempt to enter with which products, at which prices, distributed through which distribution channels, supported by effective promotional efforts. Most enterprises lack precise information and action plans for effective market access are not made although there is of course more or less successful attempts to sell more in present markets and to expand mostly on local, well known Balkan markets.

The marketing functions or the marketing advisers in the case of smaller enterprises lack effective customer relations and handling systems required for just in time delivery capabilities.

#### ***9.1.3.1. Conclusions and recommendations - marketing***

Public and private institutional support for export could play a role in getting export market information, particularly for the smaller enterprises and assist them with production of good marketing plans. The plan does not have to be a fancy

document, but the marketing people must have thought through and documented what they want to do and how they want to do it.

The marketing functions or the marketing advisers in the case of smaller enterprises should receive some support with effective customer relations and handling systems required for just in time delivery capabilities.

The marketing departments can be foreseen to be rather weak until an adequate number of managers and staff are educated. Until then extensive support should be given on access to export markets; participation in EU trade fairs; trade promotion tours and development of contacts with EU enterprises; identification and contracting of export / import agents and identification of shipping agents. Support would also be need in filling in export documents.

With regard to market information collection, marketing planning and plan implementation of e.g. the strategy to become sub-contractor or joint-venture partner to a foreign (EU) enterprise or the strategy to bid on domestic and international tenders for large construction work; the internal marketing function should be supported in their efforts to alleviate the constraints in the following areas:

- Making sure that their enterprise would be able to make competitive products which are ISO certified and CE marked and in accordance with EU and other specific industry standards particularly rules on sustainable forestry.
- Getting market information on EU enterprises already using or looking for sub-contractors.
- Getting market information on competitor's products, prices distribution and promotion and strategies.
- Getting export market information on potential customer group's design and quality preferences.
- Being able to price competitively enabling them to make realistic bids for sub-contractor production.
- Identifying possible distribution channels and shipping agents and use more than one distribution channel.
- Product delivery modes, packaging, promotion, advertising and of course sales and longer term customer relationship.

### 9.1.4. Standards and certification - Furniture

Geographic region	Mandatory certifications and standards	Voluntary/B2B-required certifications and standards
<b>BiH</b>	<ul style="list-style-type: none"> <li>• Old YU legislation that includes old (compulsory and not replaced) JUS standards</li> <li>• Certificates required by national legislation</li> </ul>	<ul style="list-style-type: none"> <li>• JUS standards (non-compulsory one's after 2003)</li> <li>• BAS Standards (based on EN/ISO) until combined with adopted new regulations (esp. BAS/TC 33 on Plywood, Wood based panels, Wood refuse, Cork and Prodac Wood and BAS/TC 34 on Doors, Windows and Furniture)</li> </ul>
<b>EU</b>	<ul style="list-style-type: none"> <li>• EU product quality and safety related legal measures (implementing e.g. ISO and EN European Standards)</li> <li>• CE Marking</li> <li>• EU EMAS environmental management regulation (but EMAS certificate is voluntarily to obtain)</li> </ul>	<hr style="border-top: 1px dashed black;"/> <ul style="list-style-type: none"> <li>• HACCP</li> <li>• ISO standards (e.g. ISO 9001:2000/ISO 14001 environmental management standards)</li> <li>• DIN standards</li> <li>Sustainable forestry standards such as e.g.:               <ul style="list-style-type: none"> <li>• FSC certificate</li> <li>• PEFC certificate</li> </ul> </li> </ul>

The table above provides a general overview on standards and certifications in the furniture sub-sector in BiH and EU. The right column includes standards and certifications laid down by a legally binding norm although some of them can be obtained on a voluntary basis. The left column includes voluntary/B2B-required certifications and standards, which are not made compulsory by law. The rows 'BiH' and 'EU' only show the origin. Hence, standards and certificates mentioned for example in second column of the row 'EU' are also applied in BiH.

From the voluntary standards mentioned above ISO appears to be the most common one, sometimes in combination with DIN standards. EMAS as an environmental management system could not be found while some of the assessed enterprises have an ISO 9001:2000 environmental management system already implemented and are even contemplating up-grading it to ISO 14.001.

FSC standards or PEFC standards for sustainable wood harvesting are so far not widely introduced in BiH. The USAID CCA project does, however, indicate that forest certification such as the chain of custody certification (CofC) which is a certification product of FSC or PEFC is being introduced.

These forests standard certifications could of course be requested by business partners in external markets (e.g. FSC or PEFC in the European Market).

### ***9.1.4.1. Mandatory standards/certificates in BiH (JUS standards and other mandatory certificates)***

#### ***9.1.4.1.1. Processes to obtain standards/certificates***

Enterprises in the Furniture Sub-sector are often obliged to provide certificates in accordance with the old outdated ex YU regulations and JUS standards. This is in some cases the only standard these enterprises work with (see details on the web-pages listed in Annex 5).

#### ***9.1.4.1.2. Institutions***

Certification and control of the mandatory standards and certifications is performed by the relevant public institutions such as the Institute for Metrology. These institutes do not need to be internationally accredited when it concerns the BiH national standards. The BiH national standards are only valid in the EU if they are accepted by European enterprises and if no European standard is legally required. Private institutions are usually not working in this publicly regulated sector.

#### ***9.1.4.1.3. Support sector***

Public institutions (such as the Institute for Metrology as well as the inspectors) provide general information on which mandatory standards/certificates are required by enterprises at the different stages of the value chain. Further information, technical and financial assistance and training in setting up standards and certification systems can be gathered from public as well as from private institutions. Public institutions are for example the Chamber of Commerce, the Foreign Trade Chamber (FTC including the future Export Promotion Agency - EPA) and the EICC. Private institutions are all the certification bodies internationally accredited themselves for the certification of a certain standard or co-operating with an internationally accredited institution. These private institutions include, in addition to their fulltime employees, a number of associated consultants certified under a specific standard.

#### ***9.1.4.1.4. Quality of support***

According to the USAID CCA, support is generally lacking in the wood sector. The main issue is a lack of laboratories for testing and for certification which is a precondition for export to the EU. Nobody is interested in investing in these facilities since the relevant regulations have been passed but not implemented and demand is very low. Universities do not have laboratories and are not interested in building capacities in this field; there are no centres for excellence except in Zenica, within the REZ (regional development agency).

According to USAID CCA the product safety – law has been passed but not implemented since there are no trained inspectors. The training has just started and once the law is implemented it will probably generate demand for laboratory services and private investment in laboratories. Few enterprises have their own facilities for testing products during the development phase.

#### **9.1.4.2. Mandatory standards/certificates in EU (many ISOs, CE-marking)**

##### **9.1.4.2.1. Processes to obtain standards/certificates**

Mandatory standards/certificates required by EU-law have to be complied with by all stakeholders (furniture enterprises, public labs, inspection bodies etc.) once the legislation is in force. One BiH furniture enterprise processing imported wood from Germany stated that in their case certification is done by the German exporter. In addition the European legislation on the EMAS environmental management certificate and the EU Eco label (26) has to be implemented. But this legislation – different to the one formerly mentioned - leaves the decision up to the enterprises as to whether or not to enter the procedure to obtain one of these two EU labels (see details on the web pages in Annex 5).

##### **9.1.4.2.2. Institutions**

The EU legislation laying down the preconditions (institutions, procedures etc.) is neither transposed nor in force in BiH. Hence the only way for BiH enterprises to fulfil these requirements is to obtain the certificates through foreign institutions. At least one furniture enterprise has acquired DIN EN ISO 9001:2000 certification this way because it was necessary for subcontract export to EU customers.

##### **9.1.4.2.3. Support sector**

In the support sector concerning standards mandatory in the EU mainly private institutions are active. These are all the certification enterprises internationally accredited themselves for the certification of a certain standard or co-operating with an internationally accredited institution. These private institutions include besides their staff a number of associated consultants certified under a specific standard.

One furniture enterprise with German business contacts was assisted by BH Certification, a BiH consulting enterprise in Sarajevo which is affiliated DQS a member of IQNET, Germany. They were certified by Deutscher Akkreditierungsrat (DAR). Another furniture enterprise was certified by SGS Switzerland SA according to ISO 9001:2000.

One enterprise situated in the town Odzak indicated that its DIN EN ISO 9001:2000 certification was subsidized by the Canton.

The USAID CCA project has already implemented seminars on CE certification especially for the wood sector.

##### **9.1.4.2.4. Quality of support**

According to USAID CC there is no accredited laboratory providing sufficient support to product certification such as CE marking. As most BiH furniture enterprises export to Croatia, 80% of exporters use a laboratory in Slavonski Brod (privatized, ex-state owned) for the certification.



According to the USAID CCA foreign buyers usually provide the needed certificates for BiH exporters but costs are higher.

#### ***9.1.4.2.5. Voluntary standards in BiH and in the EU***

Voluntary standards in BiH and in the EU will be dealt with together as a broad overlap exists.

#### ***9.1.4.2.6. Processes to obtain voluntary standards/certificates in BiH (some JUS Standards, BAS Standards..)***

The BAS Standards (esp. BAS/TC 33 on Plywood, Wood based panels, Wood refuse, Cork and Prodac Wood and BAS/TC 34 on Doors, Windows and Furniture) are prepared by the Institute of Standardisation. They will become compulsory for all stakeholders (enterprises in the furniture sub-sector, public labs, inspection bodies etc.) in accordance with the technical regulations on conformity assessment, once these regulations are in force i.e. when the BiH legislative procedures are implemented.

#### ***9.1.4.2.7. Processes to obtain voluntary standards/certificates in the EU (many ISO, etc.)***

The mandatory certification processes with regard to ISO standards in the furniture sub-sector already mentioned above, can also be requested by national or EU-business partners or by certain external markets and only then can these standards be fulfilled although no legal requirements exist or will only exist in the future when EU legislation enters into force. This is especially valid for ISO and one enterprise clearly indicated its competitive disadvantage in not fulfilling this standard. According to USAID CCA forest certification is e.g. carried out by chain of custody certification (CofC). This is provided mainly by two foreign worldwide institutions, FSC and PEFC (see details on the web pages in Annex 5).

#### ***9.1.4.2.8. Institutions***

The certificates for enterprises for these nationally and internationally requested standards/certificates are mostly provided by internationally fully accredited institutions and the enterprises they cooperate with nationally, such as TÜV Thüringen together with TÜV Adria and DQS and BH Certification, a BiH consulting enterprise.

#### ***9.1.4.2.9. Support sector and quality of support***

Enterprises in the Furniture sub-sector are not fully aware of voluntary standards (e.g. ISO 9001) and they lack knowledge of the possibilities and procedures for up-grading their existing certificates to a newer version.

#### ***9.1.4.3. Constraints and recommendations***

##### **Constraints**

- Lack of knowledge within the sector about the obligation to have products CE Marked as a precondition for export into the EU
- Lack of laboratory staff and of sufficient technical testing capacities
- The sector lacks knowledge about voluntary certification possibilities and advantages

**Recommendations:**

- Support should be provided to awareness building of the necessity of the certification and CE marking when exporting into the EU as well as to the production of a guidance document on mandatory CE marking<sup>18</sup>
- Support should be provided to improve technical and staff capacities in laboratories nationally accredited for testing products related to the Furniture Sub-sector.
- Seminars on CE Marking should be provided complementary to the seminars run by USAID CCA and to the IFC provided at seminars which are based on a more general and theoretical document named ‘International Standards and Technical Regulations’
- Support should be provided to capacity building on available voluntary standards on environmental management systems (ISO, EMAS) and the production of a guidance document on voluntary standards.

**9.1.5. Finance - furniture****9.1.5.1. *Factors that limit competitiveness of the value chain***

Weaknesses on the demand side are different for medium size and large enterprises than for small private furniture producers. Many large enterprises are still not privatized, have accumulated enormous debt, have unresolved ownership issues and almost no credit capacity. Only after privatization they can have credit capacities needed for restructuring and modernization.

Successful medium size enterprises do not have major obstacles in accessing credit market and getting investment loans with favourable terms.

Most small enterprises from the furniture sector face the same obstacles as SMEs from other sectors.

The major obstacles on the supply side are interest rates, collaterals and other terms. Even loans provided by development banks and special credit lines funded by local governments and donors are above credit capacities of many SMEs and most start-ups in the sector.

**9.1.5.2. *Assessment of private and public institutions that need to be in place to assist the enterprises*****9.1.5.2.1. *Finance provided by development banks***

The Investment-development bank of RS manages 6 credit lines. Out of them, two lines are for enterprises and entrepreneurs (total amount for 2008 is 80,4

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<sup>18</sup> IFC has provided a general and theoretical document named ‘International Standards and Technical Regulations. This is a brochure on internal market and conformity assessment principles. It does not constitute a practical guidance for every directive, but rather a documentation on how to get started.

million KM) and SMEs from the furniture sector can apply for these loans. The implementation of these credit lines is performed by 6 commercial banks and three micro credit organizations. The following terms and conditions are applicable:

- For start ups, maximum loan amount is 30.000 KM,; repayment period is 5 years, with grace period of 6 months; interest rate 7,13-7,33%, depending on the location; amount for 2008 is 12,9 million KM.
- For entrepreneurs and enterprises, maximum loan amount is 5 million KM; repayment period is 15 years, with grace period of 18 months; maximum interest rate is 6,03% (special incentives for underdeveloped areas (5,83%), processing industries (5,73%), members of clusters (5,73%), exporters (5,03%) and tourism (5,73%)); amount for 2008 is 67,5 million KM.

The Investment bank of FBiH carries out its operations directly and through commercial banks. Four credit lines are in implementation and enterprises from the furniture sector can apply for three of them. The following terms and conditions are applicable:

- For production and services, interest rate is 5%, maturity max. 7 years, and grace period up to 1 year.
- For export, revolving credit, interest rate EURIBOR+1%, no grace period.
- For employment
  - Terms for industry and services: interest rate 4%, grace period 6 months, maturity max. 5 years; maximum amount is 500.000 KM, that is 10.000-25.000 KM per job.

The general impression from interviewing these two banks is that they are not sufficiently transparent and that approvals are based on political and economic criteria. Also, approval processes are long. The critics are much stronger regarding the Investment bank of FBiH than regarding the Investment-Development bank of RS.

#### **9.1.5.2.2. *Credit guarantee funds (CGFs)***

Credit provided by CGF from Brcko District can be used by SMEs from the furniture sector. The new cycle that started in 2008 is based on 1,300.000 KM deposit provided by the government. Credit lines have been increased (deposit multiplied by 3 to 5) and 4 commercial banks are selected as implementers. Agreed terms are: interest rate of 7.5%, the loan amount up to 100.000 KM and maturity up to 5 years.

CGF managed by LINK Mostar provides credits which can be used by SMEs and start-ups from the furniture sector. The total credit line now available is 4,6 million KM. Interest rate is 7%, grace period is 6 months, the loan amounts up to 50.000 KM, and maturity is up to 5 years. In the previous period most users have been established SMEs (81%) and only 19% start-ups.

Special CGF for youth is available for start-ups and SMEs. The loan amounts from 5.000 KM to 30.000 KM (20.000 KM for start-ups), interest rate 6,2%, grace period 6 months, maturity 5 years. The fund covers the whole BiH and it is

managed by LINK Mostar, SERDA Sarajevo, NERDA Tuzla, NGO TALDI Tuzla, MCO Sinergija Banja Luka and NGO CeBEDA Travnik. These organizations provide assistance in the preparation of business plans and applications and they charge 1% of the loan amount for their services.

SERDA established one regional CGF in 2006, with deposit of 1 million KM and credit line provided by Zagrebacka banka in the amount of 3 million (to be increased to 4 million KM soon).

The success of the first established CGF increased interest of the governments to provide deposits for the guarantee fund and to work through selected commercial banks to issue the loans. Banks are also very satisfied with this instrument and they start providing larger credit lines with lower interest rates.

New funds have been established in Canton Zenica-Doboj (500.000 KM as deposit, credit line 1,5 million KM), municipality Prijedor (deposit of 600.000 KM, credit line in the amount of 3 million KM for agriculture and SMEs), NERDA, cantonal government and municipality Tuzla (deposit 600.000 KM, credit line 2 million KM, for SMEs and craft, interest rate 6.6%).

#### **9.1.5.2.3. Commercial banks**

Regarding credit offered to SMEs and start-ups by commercial banks, there are constraints on both supply and demand side. However, commercial banks are major source of finance for successful medium size enterprises from the wood sector.

Constraints on the supply side are not related to the lack of available loans but to the terms and conditions that clients have to satisfied in order to be accepted by banks as well as the high interest rate (about 9%). Major obstacles are related to the requested collaterals and short grace period. The weakness of the commercial banks, very often pointed out by enterprises is that staff has inadequate knowledge on specific characteristics of SMEs and that is why banks do not offer loans tailored to their needs. Additional barrier is that banks favour larger loans that are above the credit capacities of small enterprises.

Major demand side constraints are business skills of SMEs that limit their capability to develop and present reliable business plans and business strategies.

Among commercial banks, ProCredit Bank and Volksbank have the most experience in financing small enterprises. Comparing these two banks, ProCredit bank offers more favourable conditions regarding collateral, duration and grace period, tailoring them to the client's situation and charging interest rates between 10,5% and 18%. On the other side, Volksbank charges lower interest rate to borrowers (9,5%) but has tighter conditions on collateral.

Local governments provide interest rate subsidies to SMEs resulting in an interest rate of 6%. Although this subsidy has increased use of credits offered by commercial banks, the application procedures are complicated.

Most commercial banks are becoming more involved in the micro finance sector, either directly by down scaling their offers or indirectly by financing micro credit organizations. Banks' advantage is related to the interest rates (much lower than rates charged by MCOs) but MCOs have an advantage in collateral requirements and other conditions.

#### **9.1.5.2.4. *Special credit lines***

Special credit lines are financed by donors and local governments (different levels) and implemented by commercial banks and/or MCOs. Most of them target SMEs. Sometimes commercial banks add their own funds to increase the credit lines.

The EFSE (the European Fund for Southeast Europe) is one of the major providers of long-term funding for local financial institutions for lending to micro and small enterprises. Partnering lending institutions in BiH are 8 banks (including ProCredit bank) and 7 MCOs. IFC and EBRD also support the financial sector with different credit lines and financing facilities in order to strengthen credits for SMEs and to assist development of other financial instruments (leasing, factoring and mortgage credits).

In many cases these special credit lines increase the banks' offer for SMEs, but do not result with changes in procedures and terms. This means that they do not create more favourable conditions for clients.

Special credit lines funded by local governments and implemented by commercial banks and/or MCOs in most cases provide credits under more favourable conditions. Some recently introduced special credit lines are the following:

- The government of the Canton Sarajevo funded a new credit line (to be implemented by Nova banka Banja Luka) in the amount of 7 million KM, with interest rate of 2%. One of the eligibility criteria is that client has to be located within the Canton.
- The municipality Centar Sarajevo and Raiffeisen banka Sarajevo funded a special credit line in the amount of 1 million KM, with the interest rate of 6%.
- City Banja Luka and NLB Banja Luka funded a new credit line in the amount of 4,5 million KM with the interest rate of 6,5%.

#### **9.1.5.2.5. *Other providers of financial services***

Among other financial service providers, micro credit organizations are the most active in financing start-ups and SMEs. Leasing and factoring are still not important financial instruments for these market segments. However, successful medium size enterprises from the furniture sector do use leasing as the source of financing.

Start-ups are among the typical clients of MCOs. Most MCO offer loans with very similar conditions, maximum size up to EUR 15.000 (to be increase to EUR 25.000), maturity up to 3 years, grace period up to 9 months, collateral requirements mostly promissory notes. The collateral requirements and

procedures are more acceptable to start-ups and small enterprises than requirements of the commercial banks.

Thanks to the activities of MCOs, which are covering the whole country, the access to loans is not an issue for start-ups and small enterprises. The major barrier to them are interest rates, which are between 18 to 27% .

Leasing is a relatively new financial instrument, with which SMEs are not familiar. This is fast growing sector in BiH. The request for 10-12% of own financing is an obstacle for SMEs. On the other side, the most attractive segment for leasing enterprises are individuals and strong enterprises. They are less interested in entering the lower end of the market. Micro leasing is not used. This could be an opportunity for MCOs to act as the agents of leasing enterprises that want to reach the low end of the market.

A new financing provided in May this year by EBRD to Raiffeisen Leasing in the amount of 10 million EUR has to be used for SMEs from all sectors (less than 250 employees and less than 10 million turnover). Defined types of leasing contracts are micro lease (maximum amount of EUR 10.000) and small lease (maximum amount of EUR 125.000). The expected average is EUR 50.000. This will increase credits offered to SMEs, but as the same conditions will be used as for other leasing agreements it means that the number of eligible and acceptable clients will not increase.

Factoring has been introduced in BiH recently. This instrument is still not legally regulated. State owned export credit agency, IGA, provides export credits and specific factoring services, but both services are provided in small amount and do not play an important role. Recently one Slovenian factoring enterprise, Prvi Faktor, registered as an enterprise in BiH and one bank, FIMA, announced that they will be introducing factoring. Because of the high costs attached to this instrument it is not expected that factoring will be accepted and used by SMEs soon.

### **9.1.5.3. Recommendations**

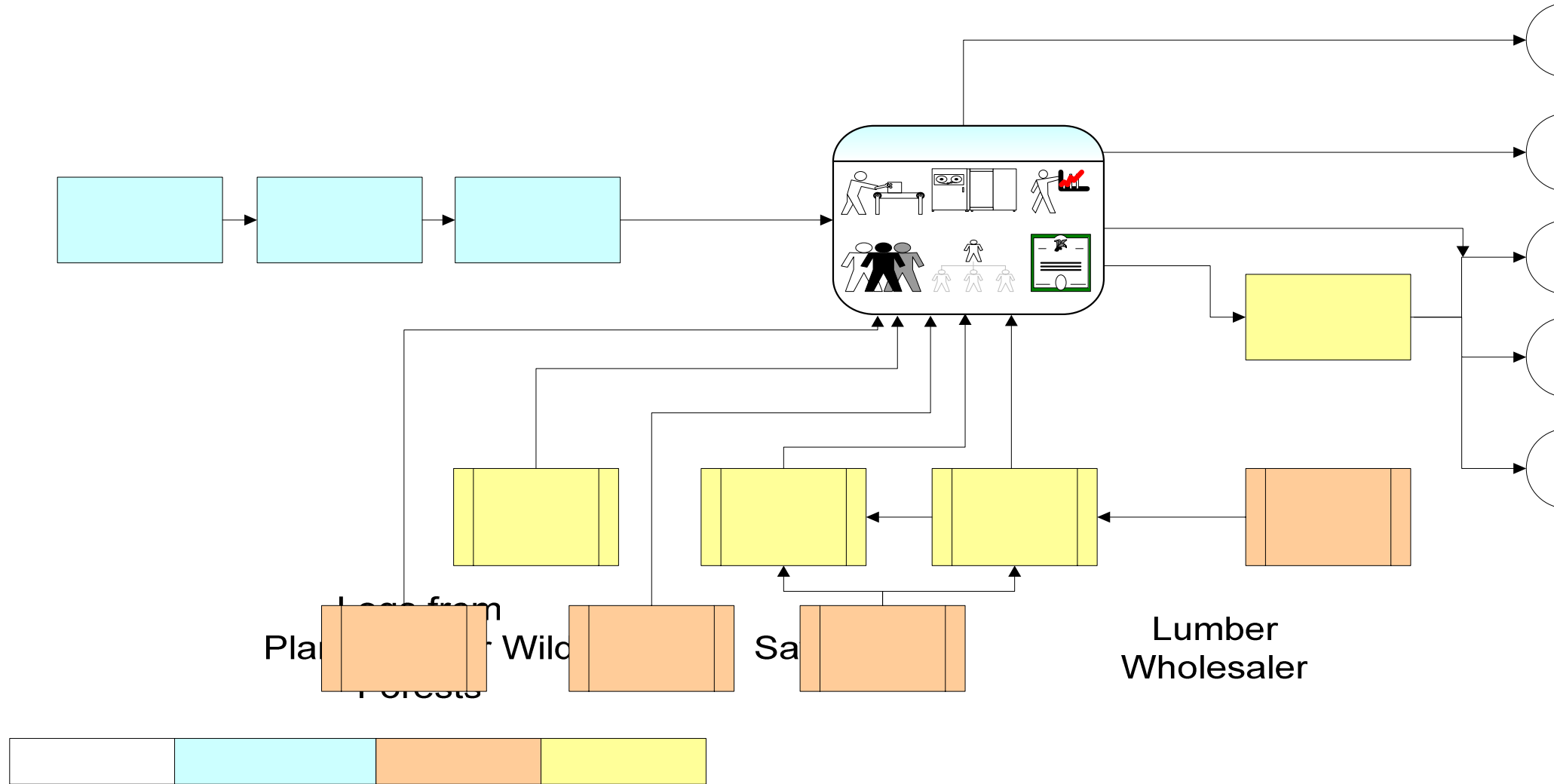
Recommendations for EC in this field are:

- Assist education and training of managers and staff of commercial banks on needs and characteristics of SMEs; the objectives of the education should be to simplify procedures for loan application and assessment, improve the risk assessment capabilities of the staff and define an appropriate risk profile for these clients. Further studies are needed to determine ways and means of effecting the required changes...
- Assist development of micro leasing adjusted to the needs of SMEs and start-ups.
- Improve basic business skills of SMEs, including business plan development skills.
- Support introduction of special credit lines for exporters.

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## 10. Value Chain Analysis of the Joinery Sub-Sector





## Analysis of the Joinery Value Chain constraints to competitiveness

Below table represents the whole Forestry and Wood Sector. Much of the employment and most of the export is generated by the sale of products quite low on the value chain. The joinery sub-sector closely associated with the construction sector is doing quite well because of that sectors progress. We do not know the employment or turnover figures for joinery nor do we know the export.

Forestry & Wood	Results	Remarks/Growth Rate
Number of enterprises	1,500 (1200 sawmills of which only 300 are registered); 300 processing enterprises)	High potential growth rate
Total Employment Rural	40,850 32,680	80% in rural areas, high potential employment generation
Domestic sales '000 KM	398,000	High Growth rate 13% in 2006
Export Sales '000 KM	808,000	High growth rate, 12% in 2007
Total sales '000 KM	1,244,000	High Growth Rate
Share of GDP	10% + 12% NOS	
Competitiveness	High	
Potential increase of MSME income by production increase	High	

*The information in this table is obtained from the referenced report and is mostly from 2006, but some are older. They are not very precise and they should therefore be used as indicators only.*

### Objectives for taking the sub-sector forward

To support increased productivity, move to higher value production and increase exports to the EU and regional markets.

### Basic Conditions

The joinery sub-sector value chain of the forestry and wood sector is a sub-sector with good growth prospects and high potential for utilizing the abundance of wood in BiH (50% of the country is covered with forest) to expand into downstream higher value joinery products. BiH has a long tradition for producing good wood raw materials and joinery which would satisfy local / regional demand as well as export market demands. The relatively low cost, skilled labour, gives the joinery industry a competitive advantage (Revealed Comparative Advantage of 108 - NACE Code 36) which it has not yet been able to fully realize, mainly due to lack of export market orientation. In the joinery sub-sector, the existence of high-quality materials, high quality joinery products and low cost labour are critical factors. The presence of all of these factors gives the team confidence that the sector has a strong base on which to produce competitive export products.

### Strategic Options

There are at least three possible main strategies which could be applied to this sector: 1) to become sub-contractor or joint-venture partner to a foreign (EU) enterprise; 2) to develop own products of world quality; 3) bid on domestic and international tenders for large construction works requiring standard as well as made to measure joinery. The second strategy is by far the most difficult and capital intensive to pursue as it requires good modern machinery and equipment, a good export marketing manager and a finance manager who

understand modern financial accounting and capital procurement plus a general manager who can lead the team to success. It also requires modern computerised management information and control systems and a certified quality assurance system. Very little of all this is available in most of the enterprises of the Joinery Sub-Sector. The first strategy, to become a sub-contractor for construction work abroad would require a lot less know-how and management and it would be a very good learning experience for both management and staff preparing them for moving to strategy 3 and subsequently to strategy 2 in due time. In the production area it would first of all require investment in staff training, in machinery and equipment and in modern computerised management information and control and quality assurance systems. The third strategy would require the same as strategy 1 and additionally a sales force which could work out bids and an implementation team travelling the world installing the joinery. It should be noted that very often these bids also contain furniture which may require co-operation with one or more furniture enterprises. It should also be noted that a good cash flow is needed for such contracts putting extra strain on working capital funding.

### **Overall Value Chain constraints to competitiveness**

At the beginning of the supply chain the newly created Cantonal forest management enterprises in charge of the management of the forests of each Canton basically consist of resources taken over from the old SOEs and not all of the old large wood processing factories have been privatised. In these enterprises no real restructuring process has been completed, which means that the basic problems of old traditions and culture of work, overstaffing, lack of adequate equipment, lack of scale of operations, etc. remain to be solved. The overstaffing of the past has resulted in a situation where most profits have had to be used for salaries, and too little have been left over for investments in efficient machinery and forest management. Such organisations have serious constraints to competitiveness and even survival and they could negatively affect the supply of wood for the joinery sub-sector.

#### **10.1.1 Product, production, supplies and infrastructure - joinery**

The Joinery Sector has large potential to contribute to the BiH economic development if the products are targeted EU and other export markets and if enterprises invest in new competitive manufacturing facilities for mass production of higher value-added products or existing facilities are restructured and modernized. Other obstacles are related to unfavourable trade and customs policies on imported equipment, parts and subassemblies for re-export; low capacities of relevant ministries; lack of consistent public support to the sector and lack of effective and favourable investment promotion policies.

#### **Constraints on supply of raw materials and sub-assemblies**

BiH has sufficient reserves of high quality raw materials for semi-final and final products produced in the wood/joinery industry. If bought locally, wood is competitive on quality (depending on the products produced) and price because of the savings on transport. Generally, international (EU) customers are interested in BiH wood, but not in BiH production. This indicates quality and perhaps delivery problems in the processing enterprises.

Standard, solid sawn wood boards and timber are produced in sufficient quantities. Of composite materials there is only plywood and associated veneer production in BiH. There is one MDF mill, Mediapan (Busovaca), but due to its obsolete technology and subsequently poor cost competitiveness the facility is not in operation. Consequently, the local joinery industry is obliged to import particleboard and MDF.

#### **Constraints on infrastructure**

The transportation systems for wood raw materials are deficient. The railway system hardly functions, there are no highways, and there are only few forest access roads. Access to forests is also decreased due to mines and their removal will take a long time. Finished goods transportation on large trucks is the only realistic option, but the conditions of the access roads to the major European highway system via Brzko makes it very slow for enterprises far from Brzko to bring their product to EU markets.

#### **Constraints on products**

Most of the enterprises produce joinery of a reasonably good quality with a design targeted at domestic and regional markets or markets with the same building standards. For those who want to export own products the main constraint is market information on which to base product design and product design.

#### **Constraints on production**

Production to EU standards require sustainable wood production certificates and quality management which are introduced only in the few enterprises exporting to EU. Those who have certification have usually had foreign consultants assisting them with setting up the systems and getting certification from foreign institutes because these services were, and still are not available in BiH.

Setting up production cells for larger series necessary for export to large markets is rather capital intensive and it would need support by competent technological institutes to make the cells flexible enough to tackle the variations in production.

#### **Constraints on investments in machinery**

Given the present level of production and technology the condition of the machinery is acceptable on average and better in modernised enterprises. Only a smaller number of the enterprises are thinking of investment in new technology possibly because they do not think of, and plan for expansion into EU markets.

With increasing wage levels and increasing export efforts the need for investment in more modern machinery will increase significantly. When at the same time the production is not efficiently managed compared to Best Manufacturing Practices due to lack of modern production systems the result is that the production costs are higher than they should be considering the relatively low wages.

Enterprises exporting to the EU and other heavily industrialised countries follow the required standards and are certified according to ISO. See Section 10.2.4 for a complete account of certification.

#### ***10.1.1.1. Conclusions and recommendations - furniture***

Public institutional support in terms of effective policy instruments and major improvements in legal, administrative and tax treatment of the private sector and its SMEs should be improved as the future development of the sector depends on it.

The remaining state owned forest enterprises need to be privatised, rationalised and restructured to secure sufficient wood supplies to the future increase in production of joinery at reasonable prices.

Forest management needs to be improved by increasing the forest road grid which is currently at approximately 15% of the level of EU countries.

Access to market information should be improved by providing access points with data bases and assistance in their use.

Formal written strategic plans which are almost non-existent should be supported to make sure that the enterprises have considered carefully all their options and communicated the common goals and strategies to all concerned.

For extended export targeting Northern Europe (EU) it would be necessary to design the products according to the building standards of the potential customers of those markets. If the enterprises are sub-contractors to EU enterprises the product design is given and they can concentrate on producing to the required specifications and search for new customers. Most of the enterprises are not yet in that situation so extensive support is needed.

#### **10.1.2. Human Resources - joinery**

Forest education and research in both the FBiH and the RS is placed under the two respective Ministries of Education. Training is conducted on three levels: vocational training, forest technicians and higher forest education. The vocational training program educates Forest Workers during a three year program. After one additional year a Forest Worker may become a Forest Technician. Higher forestry education (Forest Engineer, Master of Forestry) is provided through the Forest Faculties in Sarajevo and Banja Luka. The production area of the supply chain should thus be adequately served.

#### **Constraints on management and human resources**

The wood sector's long isolation from the international markets has resulted in drainage of management capacity, and limited capacity to develop new products. Production Foremen and Production Engineers are well trained in traditional technologies, but when it comes to modern production cell

technology and in particular scheduling and machine loading they may need additional training.

Marketing and finance managers educated in modern methods are mostly not present in BiH enterprises. In large enterprises there are salesmen who of course take care of sales, but rarely do any strategic or operational marketing planning and implementation of plans. In many enterprises finance and accounting are not using modern information systems and pricing is mostly based on a cost plus calculation and never on contribution costing. When these enterprises calculate their orders or the basis for expansion they might therefore not make the right financial decisions.

There are plenty of good skilled (3 years of vocational school) labourers available. The technical skills exist thanks to a long tradition in the sector, but additional investment in continuing education/modernization is sorely needed.

The marketing functions or the marketing advisers in the case of smaller enterprises need to learn effective customer negotiation and handling systems and its requirements for just in time delivery capabilities. The ability to communicate in English and other foreign languages is lacking in many enterprises making it very difficult to access foreign markets. There is thus an urgent need for well educated and trained salesmen with excellent language capabilities to take care of the so important customer relations.

Many of the top leaders of the enterprises need to modernise their management / leadership style and learn to make formal strategy and marketing planning.

#### ***10.1.2.1. Conclusions and recommendations – human resources***

The marketing departments can be foreseen to be rather weak until an adequate number of managers and staff are educated. Until then extensive support should be given on access to export markets; participation in EU trade fairs; trade promotion tours and development of contacts with EU enterprises; identification and contracting of export / import agents and identification of shipping agents. Support would also be need in filling in export documents.

Many top leaders should be given the opportunity to modernise their management / leadership style. This would require attending shorter courses in business administration and leadership.

Training courses for particularly marketing managers are of the utmost importance for export and should be supported both financially and technically.

Even though there seem to be an adequate number of workers available the new production centre technologies and CNC machines require extension education and probably new skills. There is thus a need for support to define the need for new skills and design curricula as well as coverage of operating costs.

The ability to communicate in English and other foreign languages should be supported as a high priority as it is very difficult to access foreign markets without being able to communicate directly with the stakeholders.

### **10.1.3. Marketing - joinery**

Sales and exports of the BiH wood sector have increased quite well over the past five years, albeit from a very low base. Some 60% of the Forestry and Wood sector production is exported and in 2005, wood industry exports reached € 350 million. Export of primary and semi-finished products accounted for 69 percent of total exports while final products accounted for the remaining 31 percent. The joinery industry has grown the past few years when construction activity has been growing and some enterprises have made inroads into the export markets. The largest export markets are Croatia, Serbia, Montenegro and Austria.

Although the EU joinery market is difficult and demanding, there are some positive trends supporting BiH joinery-processing firm's competitiveness:

- EU outsourcing for construction parts production has been increasing for the past several years due to higher pressure on joinery prices in EU. Most of the outsourcing has been to the nearby countries, Poland, Lithuania, Latvia and Estonia.
- Although transport on BiH roads is cumbersome the country is geographically located, very close to the EU market, giving it substantial advantages in terms of transport costs and logistics management over Chinese and other Asian competitors.
- Many firms in Eastern Europe have moved up the value chain, starting from supplying elements and parts and moving up to producing finished construction elements and even houses as their expertise and wages have grown making room for BiH enterprises.
- BiH has an abundant amount of high quality forests, especially beech and plenty of skilled craftsmen able to produce all types of joinery and final complicated products.

The EU market seems to be ready for BiH joinery enterprises who have the expertise and initiative to attempt to access it. Generally, joinery export seems to have good growth potential, but it is said to grow quite slowly at the moment.

The major market access constraint of the joinery sub-sector seems to be the lack of effective marketing.

In order to pursue any of the three strategies mentioned above most enterprises lack market information and a realistic marketing plan. They seem to be unable to use available easily accessible market information to create powerful marketing plans and strategies due mostly to lack of competent marketing staff.

The marketing plan and strategy should spell out which markets they should attempt to enter with which products, at which prices, distributed through which distribution channels, supported by effective promotional efforts. Lacking such planning there can be no precise information basis and action plans for effective

market access although there is of course more or less successful attempts to sell more in present markets and to expand mostly on local, well known Balkan markets.

#### ***10.1.3.1. Conclusions and recommendations - marketing***

Public and private institutional support for export could play an important role in getting the information, particularly for the smaller enterprises and assist them with production of good marketing plans. The plan does not have to be a fancy document, but the marketing people must have thought through what they want to do and how they want to do it.

The marketing functions or the marketing advisers in the case of smaller enterprises should receive some support with effective customer relations and handling systems required for just in time delivery capabilities.

With regard to market information collection, marketing planning and plan implementation of e.g. strategy 1) to become sub-contractor or joint-venture partner to a foreign (EU) enterprise or strategy 3) bid on domestic and international tenders for large construction projects; the marketing function should be looking to alleviate the constraints in the following areas:

- Making sure that their enterprise would be able to make competitive products which are ISO certified and CE marked and in accordance with EU and other specific industry standards particularly rules on sustainable forestry.
- Getting market information on EU enterprises already using or looking for sub-contractors.
- Getting export market information on potential customer group's design, building standards and quality preferences.
- Being able to price competitively to make realistic bids for sub-contractor production.
- Identifying possible distribution channels and shipping agents and use more than one distribution channel.
- Product delivery modes, packaging, promotion, advertising and of course sales and longer term customer relationship managers.

The marketing departments can be foreseen to be rather weak until an adequate number of managers and staff are educated. Until then extensive support should be given on access to export markets; participation in EU trade fairs; trade promotion tours and development of contacts with EU enterprises; identification and contracting of export / import agents and identification of shipping agents. Support would also be need in filling in export documents.

#### 10.1.4. Standards and certification plus assistance with attaining certification - Joinery

Geographic region	Mandatory certifications and standards	Voluntary/B2B-required certifications and standards
<b>BiH</b>	<ul style="list-style-type: none"> <li>• Old YU legislation that includes old (compulsory and not replaced) JUS standards</li> <li>• Certificates required by national legislation</li> </ul>	<ul style="list-style-type: none"> <li>• JUS standards (non-compulsory one's after 2003)</li> <li>• BAS Standards (based on EN/ISO) until combined with adopted new regulations (esp. BAS/TC 33 on Plywood, Wood based panels, Wood refuse, Cork and Prodac Wood and BAS/TC 34 on Doors, Windows and Furniture)</li> </ul>
<b>EU</b>	<ul style="list-style-type: none"> <li>• EU product quality and safety related legal measures (implementing e.g. ISO and EN European Standards)</li> <li>• CE Marking</li> <li>• EU EMAS environmental management regulation (but EMAS certificate is voluntarily to obtain)</li> </ul>	<ul style="list-style-type: none"> <li>• HACCP</li> <li>• ISO standards (e.g. ISO 9001:2000/ISO 14001 environmental management standards)</li> <li>• DIN standards</li> <li>• Sustainable forestry standards such as e.g.: <ul style="list-style-type: none"> <li>• FSC certificate</li> <li>• PEFC certificate</li> </ul> </li> </ul>

The table above provides a general overview on standards and certifications in the joinery sub-sector in BiH and EU. The right column includes standards and certifications laid down by a legally binding norm although some of them can be obtained on a voluntary basis. The left column includes voluntary/B2B-required certifications and standards, which are not made compulsory by law. The rows 'BiH' and 'EU' only show the origin. Hence, standards and certificates mentioned for example in second column of the row 'EU' are also applied in BiH.

From the voluntary standards mentioned above ISO appears to be the most common one, sometimes in combination with DIN standards. EMAS as an environmental management system could not be found while some of the assessed enterprises have an ISO 9001:2000 environmental management system already implemented and are even contemplating up-grading it to ISO 14.001.

FSC standards or PEFC standards for sustainable wood harvesting are so far not widely introduced in BiH. The USAID CCA programme does, however, indicate that forest certification such as the chain of custody certification (CofC) which is a certification product of FSC or PEFC is being introduced. These forests standard certifications could of course be requested by business partners in external markets (e.g. FSC or PEFC in the European Market)



#### **10.1.4.1. Mandatory standards/certificates in BiH (JUS standards and other mandatory certificates)**

##### **10.1.4.1.1. Processes to obtain standards/certificates**

Enterprises in the joinery sub-sector are often obliged to provide certificates in accordance with the old outdated ex YU regulations and JUS standards. This is in some cases the only standard these enterprises work with (see details provided on the web-pages listed in Annex 5).

##### **10.1.4.1.2. Institutions**

Certification and control of the mandatory standards and certificates is performed by the relevant public institutions such as the Institute for Metrology. These institutes do not need to be internationally accredited when it concerns the BiH national standards. The BiH national standards are only valid in the EU if they are accepted by European enterprises and if no European standard is legally required. Private institutions are usually not working in this publicly regulated sector.

##### **10.1.4.1.3. Support sector**

Public institutions (such as the Institute for Metrology as well as the inspectors) provide general information on which mandatory standards/certificates are required by enterprises at the different stages of the value chain. Further information, technical and financial assistance and training in setting up standards and certification systems can be gathered from public as well as from private institutions. Public institutions are for example the Chamber of Commerce, the Foreign Trade Chamber (FTC including the future Export Promotion Agency - EPA) and the EICC. Private institutions are all the certification institutions internationally accredited themselves for certification of a certain standard or co-operating with an internationally accredited institution. These private institutions include in addition to their fulltime employees a number of associated consultants certified under a specific standard.

##### **10.1.4.1.4. Quality of support**

According to the USAID CCA, support is generally lacking in the wood sector. The main issue is a lack of laboratories for testing and for certification which is a precondition for export to the EU. Nobody is interested in investing in these facilities since the relevant regulations have been passed but not implemented and demand is very low. Universities do not have laboratories and are not interested in building capacities in this field; there are no centres for excellence except in Zenica, within the REZ (regional development agency).

According to USAID CCA the product safety – law has been passed but not implemented due to lack of trained inspectors. The training has just started and once the law is implemented it will probably generate demand and consequently private investment in laboratories. Few enterprises have their own facilities for testing products during the development phase leaving the enterprises to seek certification abroad.

#### **10.1.4.2. Mandatory standards/certifications in the EU (many ISOs and CE-marking)**

##### **10.1.4.2.1. Processes to obtain standards/certifications**

Mandatory standards required by EU-law (such as the CE-marking or ISO standards implemented in certain directives) have to be complied with by all stakeholders (joinery enterprises, public labs, inspection bodies etc.) once the legislation is in force. One BiH joinery enterprise processing imported wood from Germany further stated that in their case certification is done by the German exporter. In addition the European legislation on the EMAS environmental management certificate and the EU Eco label (26) has to be implemented. But this legislation – different to the one formerly mentioned - leaves the decision up to the enterprises as to whether or not to enter the procedure to obtain one of these two EU labels (see details provided on the web pages listed in Annex 5).

##### **10.1.4.2.2. Institutions**

The EU legislation laying down the preconditions (institutions, procedures etc.) is neither transposed nor in force in BiH. Hence the only way for BiH enterprises to fulfil these requirements is to obtain the certificates through foreign institutions on a voluntary basis (see below).

At least one joinery enterprise has acquired DIN EN ISO 9001:2000 certification because it was necessary for subcontract export to EU customers.

##### **10.1.4.2.3. Support sector**

In the support sector concerning standards mandatory in the EU mainly private institutions are active. These are all the certification enterprises internationally accredited themselves for the certification of a certain standard or co-operating with an internationally accredited institution. These private institutions include besides their staff a number of associated consultants certified under a specific standard.

On joinery enterprise with German business contacts was assisted by BH Certification, a BiH consulting enterprise in Sarajevo which is affiliated with DQS, a member of IQNET, Germany. They were certified by Deutscher Akkreditierungsrat (DAR). Another joinery enterprise was certified by SGS Switzerland SA according to ISO 9001:2000.

One enterprise situated in the town Odzak indicated that its DIN EN ISO 9001:2000 certification was subsidized by the Canton.

The USAID CCA program has already implemented seminars on CE certification especially for the wood sector.

##### **10.1.4.2.4. Quality of support**

According to USAID CCA there is no accredited laboratory providing sufficient support to product certification such as CE marking. As most BiH

joinery enterprises export to Croatia, 80% of exporters use a laboratory in Slavonski Brod (privatized, ex-state owned) for the certification.

According to the USAID CCA foreign buyers usually provide the needed certificates for BiH exporters but costs are higher.

#### **10.1.4.2.5. Voluntary standards in BiH and in the EU**

Voluntary standards in BiH and in the EU will be dealt with together as a broad overlap exists.

#### **10.1.4.2.6. Processes to obtain voluntary standards/certificates in BiH (some JUS Standards, BAS Standards..)**

The BAS Standards (esp. BAS/TC 33 on Plywood, Wood based panels, Wood refuse, Cork and Prodac Wood and BAS/TC 34 on Doors, Windows and Furniture) are prepared by the Institute of Standardisation. They will become compulsory for all stakeholders (enterprises in the joinery sub-sector, public labs, inspection bodies etc.) in accordance with the technical regulations on conformity assessment, once these regulations are in force i.e. when the BiH legislative procedures are implemented.

#### **10.1.4.2.7. Processes to obtain voluntary standards/certificates in the EU (many ISO, etc.)**

The mandatory certification processes with regard to ISO standards in the joinery sub-sector already mentioned above, can also be requested by national or EU-business partners or by certain external markets and only then can these standards be fulfilled although no legal requirements exist or will only exist in the future when EU legislation enters into force. This is especially valid for ISO and one enterprise clearly indicated its competitive disadvantage in not fulfilling this standard (see details provided on the web pages listed in Annex 5).

According to USAID CCA forest certification is e.g. carried out by chain of custody certification (CofC). This is provided mainly by two foreign worldwide institutions, FSC and PEFC (see details provided on the web pages listed in Annex 5).

#### **10.1.4.2.8. Institutions**

The certificates for enterprises for these nationally and internationally requested standards are mostly provided by internationally fully accredited institutions and the enterprises they cooperate with nationally, such as TÜV Thüringen together with TÜV Adria and DQS and BH Certification, a BiH consulting enterprise.

#### **10.1.4.2.9. Support sector and quality of support**

Enterprises in the joinery sub-sector are not fully aware of voluntary standards (e.g. ISO 9001) or they lack knowledge of the possibilities for up-grading certificates to an existing certificate (such as ISO 9.001 to ISO 14001).

### **10.1.4.3. Constraints and recommendations**

#### **Constraints**

- Lack of knowledge within the sector about the obligation to have products CE Marked as a precondition for export into the EU
- Lack of laboratory staff and of sufficient technical testing capacities
- The sector lacks knowledge about voluntary certification possibilities and advantages

#### **Recommendations:**

- Support should be provided to awareness building of the necessity of the certification and CE marking when exporting into the EU as well as to the production of a guidance document on mandatory CE marking<sup>19</sup>
- Support should be provided to improve technical and staff capacities in laboratories nationally accredited for testing products related to the Joinery Sub-sector.
- Seminars on CE Marking should be provided complementary to the seminars run by USAID CCA and to the IFC provided at seminars which are based on a more general and theoretical document named ‘International Standards and Technical Regulations’
- Support should be provided to capacity building on available voluntary standards on environmental management systems (ISO, EMAS) and the production of a guidance document on voluntary standards

### **10.1.5. Business support services - joinery**

#### **10.1.5.1. Factors that limit competitiveness of the value chain**

The joinery sector is dominated by small and medium size enterprises with narrow product range. In general, they have low demand for business services although many of these enterprises lack many skills needed for expansion and growth. A relatively small group of successful medium size enterprises uses modern management, technology and production practices. These enterprises demand business services and they are ready to pay for the services.

Business services offered by public and private providers are not tailored particularly to the needs of joinery producers. Two donors, GTZ and USAID, supported the wood sector and joinery producers through cluster projects. The outcomes of these projects have been establishment of local and regional clusters and establishment of a state level wood cluster in 2008. This cluster includes production enterprises and government institutions, RDAs, consultants, associations, educational organizations and other stakeholders.

Initial successes accomplished through these projects in building relationships among enterprises and their relations with public and private business service providers, could generate an important impact on the sector development

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<sup>19</sup> IFC has provided a general and theoretical document named ‘International Standards and Technical Regulations. This is a brochure on internal market and conformity assessment principles. It does not constitute a practical guidance for every directive, but rather a documentation on how to get started.

provided established relations continue based on the stakeholders' joint interest. Future donor support will most probably be needed. It is expected that USAID will start a new project in the wood sector in 2009.

#### **10.1.5.2. *Assessment of private and public institutions that need to be in place to assist the enterprises***

##### **10.1.5.2.1. *Business support services provided by governments***

The governments provide no business services directed particularly to the SMEs in the wood sector. However, SMEs can use business services provided by different general agencies and/or business centres. These services include information on legal framework and available financial sources, basic consulting and training for start ups and SMEs.

##### **10.1.5.2.2. *Business support services provided by regional development agencies (RDAs)***

Regarding business support services, only few of RDAs implement projects in the wood sector. However, most RDAs implement projects that provide business services to SMEs meaning that SMEs from the wood sector can benefit from these services in "competition" with SMEs from other sectors.

ARDA plans to start a project focused on the wood sector. The components of the project will be the assistance to SMEs in finding reliable consultants and a voucher scheme for consulting and training services. The funding and the implementation of this project are still not certain.

REZ has been very active in USAID CCA project and has established close relations with wood enterprises. It also supported establishment of the Centre for Excellence in wood sector (technology support centre), in cooperation with the University of Zenica. This year REZ, in cooperation with the University Zenica and with the financial support from FBiH Ministry for Development, Entrepreneurship and Craft, has organized training for 19 employees from wood enterprises. The training is on the use of CNC technology.

NERDA started implementation of a new project in 2007, CREDO, that will be sector specific and the wood sector is one of the selected sectors. The enterprises from the sector will get consulting services and/or training financed partly by enterprises and partly by a Development Fund (to be set and managed by the project).

##### **10.1.5.2.3. *Business support services provide by development agencies and business support centres (BSCs)***

Most development agencies and business support centres don't provide specific services to the joinery sector. Enterprises from the sector can use services provided for SMEs and start-ups as described in section 5.4.3.

Thanks to the support of RS Agency for SMEs to cluster development in 2007, several small local clusters of joinery producers were established or strengthened. The clusters are located in Prijedor, Gradiska, Mrkonjic Grad and Sipovo.

PLOD, the newly established Regional centre for business relations between domestic SMEs and enterprises from EU opened officially in May 2008, but not all specific activities are as yet defined. It will focus on several sectors, including the wood sector.

Among LDAs, two provide direct support to wood enterprises: RAZ, the agency from Zavidovic, and PREDA, the agency from Prijedor. RAZ recently initiated establishment of local wood sector incubator. PREDA initiated the establishment of regional cluster in 2005 and supported the cluster until it became financially sustainable. The cooperation is still very close.

#### **10.1.5.2.4. *Business support services provided by Chambers of Commerce (CoCs) and associations***

CoCs do not provide any specific services to enterprises from the joinery sector. However, SMEs from the sector can benefit from their services.

Recently, the Export Promotion Agency was established within FTC. EU EXPRO I project supported the agency in the preparation phase, and new EU EXPRO II is expected to start soon with the focus on institution building but will also work with 22 enterprises. Timber and wood products are among selected priority sectors.

Several CoCs have been active in wood cluster (USAID CCA project). Among them, FBiH CoC contributed the most.

Most existing associations in the wood sector were initiated and supported (at least in their initial stage) by donors. Donor support has been in the form of raising awareness of enterprises about the benefits they can get from joint activities, financial support including operational costs of the offices with small number of professional staff, capacity building of association's management and staff, financial support for services development and delivery.

There are just a few successful associations that continued to be active after donor support ended, with stable membership and needed financial resources. In the wood sector, existing associations are local and they mostly operate as informal groups or clusters with small number of members. The establishment of the association at state level, DRVO, was initiated 6 years ago by a donor funded project, and even after substantial support by several donors it has not been able to get enterprises' support and to build financial sustainability. It has not been active for the last three years.

Outcomes of USAID CCA project are two active regional clusters (in Bihac region and in Zenica-Doboj Canton). Services to members include information on market trends, product quality, technology, and links with export markets. The state level cluster established by the same project is in its initial stage and it does not provide business services to members.

Regional wood cluster in Prijedor is an example of a successful and financially sustainable cluster. It has 42 members, which are all small enterprises. The cluster has been supported by PREDA, by several donors and RS Agency for SMEs. Services for members include promotion, study tours to foreign wood clusters, trade fairs, training (technology, production processes, less general management skills), education on international standards, information, and product design.

There several active local clusters in RS and FBiH.

#### **10.1.5.2.5. *Business support services provided by private service providers***

Individual free-lance consultants or consulting enterprises in most cases reach SMEs through projects financed by donors and very rarely have long term relationships with them. Donors have financed many projects that were supposed to build capacities of local advisers and help them to establish relationships with SMEs. The services provided to enterprises are free or highly subsidized. There has been an expectation that, before the end of the project, SMEs would become aware of the need of services and would be ready to pay for them. There are very few examples that these services and providers continued these activities. This is probably due to a combination of lack of willingness to pay for services on the part of the potential clients; the services may not match the perceived needs; the recruiting and training of experts do not produce capable experts and donor support stopped short of delivering sustainable consulting businesses.

Good supply has been built in general management skills and is increasing in international standards (ISO, CE mark) that is in segments where donors have provided, in the previous years, extensive capacity building for local consultants.

Within the wood cluster (USAID CCA project), 17 consulting enterprises in technology, quality management, design and general management cooperated with SMEs and developed new products and relations that are expected to continue.

#### **10.1.5.3. *Recommendations***

Recommendations for EC are:

- Promote the ideas of cluster, cooperation and association among enterprises in the joinery sector.
- Promote networks of all existing clusters and associations in the joinery sector and support establishment of the network.

- Promote cooperation among enterprises in joint supply, marketing, promotion and sale.
- Support development of new business services for joinery enterprises, such a training and consultancy in technology, modern production equipment, production processes, and product design.
- Promote and support enterprises' cooperation with Universities and schools.
- Support capacity development for design professionals and their relations with enterprises.
- Support establishment of enterprises' business relations with foreign partners, contractors and investors.

### **10.1.6.Finance - joinery**

#### **10.1.6.1. *Factors that limit competitiveness of the value chain***

Weaknesses on the demand side are different for medium size and large enterprises than for small private joinery producers. Many large enterprises are still not privatized, have accumulated enormous debt, have unresolved ownership issues and almost no credit capacity. Only after privatization they can have credit capacities needed for restructuring and modernization.

Successful medium size enterprises do not have major obstacles in accessing credit market and getting investment loans with favourable terms.

Most small enterprises from joinery sector face the same obstacles as SMEs from other sectors.

The major obstacles on the supply side are interest rates, collaterals and other terms. Even loans provided by development banks and special credit lines funded by local governments and donors are above credit capacities of many SMEs and most start-ups in the sector.

#### **10.1.6.2. *Assessment of private and public institutions that need to be in place to assist the enterprises***

##### **10.1.6.2.1. *Finance provided by development banks***

The Investment-development bank of RS manages 6 credit lines. Out of them, two lines are for enterprises and entrepreneurs (total amount for 2008 is 80,4 million KM) and SMEs from the joinery sector can apply for these loans. The implementation of these credit lines is performed by 6 commercial banks and three micro credit organizations. The following terms and conditions are applicable:

- For start ups, maximum loan amount is 30.000 KM; repayment period is 5 years, with grace period of 6 months; interest rate 7,13-7,33%, depending on the location; amount for 2008 is 12,9 million KM.
- For entrepreneurs and enterprises, maximum loan amount is 5 million KM; repayment period is 15 years, with grace period of 18 months;



maximum interest rate is 6,03% (special incentives for underdeveloped areas (5,83%), processing industries (5,73%), members of clusters (5,73%), exporters (5,03%) and tourism (5,73%)); amount for 2008 is 67,5 million KM.

The Investment bank of FBiH carries out its operations directly and through commercial banks. Four credit lines are in implementation and enterprises from the joinery sector can apply for three of them. The following terms and conditions are applicable:

- For production and services, interest rate is 5%; maturity max. 7 years, and grace period up to 1 year.
- For export, revolving credit, interest rate EURIBOR+1%, no grace period.
- For employment
  - Terms for industry and services: interest rate 4%, grace period 6 months, maturity max. 5 years; maximum amount is 500.000 KM, that is 10.000-25.000 KM per job.

The general impression from interviewing these two banks is that they are not sufficiently transparent and that approvals are based on political and economic criteria. Also, approval processes are long. The critics are much stronger regarding the Investment bank of FBiH than regarding the Investment-Development bank of RS.

#### **10.1.6.2.2. *Credit guarantee funds (CGFs)***

Credit provided by CGF from Brcko District can be used by SMEs from the joinery sector. The new cycle that started in 2008 is based on 1,300.000 KM deposit provided by the government. Credit lines have been increased (deposit multiplied by 3 to 5) and 4 commercial banks are selected as implementers. Agreed terms are: interest rate of 7.5%, the loan amount up to 100.000 KM and maturity up to 5 years.

CGF managed by LINK Mostar provides credits which can be used by SMEs and start-ups from the joinery sector. The total credit line now available is 4,6 million KM. Interest rate is 7%, grace period is 6 months, the loan amounts up to 50.000 KM, and maturity is up to 5 years. In the previous period most users have been established SMEs (81%) and only 19% start-ups.

Special CGF for youth is available for start-ups and SMEs. The loan amounts from 5.000 KM to 30.000 KM (20.000 KM for start-ups), interest rate 6,2%, grace period 6 months, maturity 5 years. The fund covers the whole BiH and it is managed by LINK Mostar, SERDA Sarajevo, NERDA Tuzla, NGO TALDI Tuzla, MCO Sinergija Banja Luka and NGO CeBEDA Travnik. These organizations provide assistance in the preparation of business plans and applications and they charge 1% of the loan amount for their services.

SERDA established one regional CGF in 2006, with deposit of 1 million KM and credit line provided by Zagrebacka banka in the amount of 3 million (to be increased to 4 million KM soon).

The success of the first established CGF increased interest of the governments to provide deposits for the guarantee fund and to work through selected commercial banks to issue the loans. Banks are also very satisfied with this instrument and they start providing larger credit lines with lower interest rates.

New funds have been established in Canton Zenica-Doboj (500.000 KM as deposit, credit line 1,5 million KM), municipality Prijedor (deposit of 600.000 KM, credit line in the amount of 3 million KM for agriculture and SMEs), NERDA, cantonal government and municipality Tuzla (deposit 600.000 KM, credit line 2 million KM, for SMEs and craft, interest rate 6.6%).

#### **10.1.6.2.3. Commercial banks**

Regarding credit offered to SMEs and start-ups by commercial banks, there are constrains on both supply and demand side. However, commercial banks are major source of finance for successful medium size enterprises from the wood sector.

Constrains on the supply side are not related to the lack of available loans but to the terms and conditions that clients have to satisfied in order to be accepted by banks as well as the high interest rate (about 9%). Major obstacles are related to the requested collaterals and short grace period. The weakness of the commercial banks, very often pointed out by enterprises is that staff has inadequate knowledge on specific characteristics of SMEs and that is why banks do not offer loans tailored to their needs. Additional barrier is that banks favour larger loans that are above the credit capacities of small enterprises.

Major demand side constrains are business skills of SMEs that limit their capability to develop and present reliable business plans and business strategies.

Among commercial banks, ProCredit Bank and Volksbank have the most experience in financing small enterprises. Comparing these two banks, ProCredit bank offers more favourable conditions regarding collateral, duration and grace period, tailoring them to the client's situation and charging interest rates between 10,5% and 18%. On the other side, Volksbank charges lower interest rate to borrowers (9,5%) but has tighter conditions on collateral.

Local governments provide interest rate subsidies to SMEs resulting in an interest rate of 6%. Although this subsidy has increased use of credits offered by commercial banks, the application procedures are complicated.

Most commercial banks are becoming more involved in the micro finance sector, either directly by down scaling their offers or indirectly by financing micro credit organizations. Banks' advantage is related to the interest rates (much lower than rates charged by MCOs) but MCOs have an advantage in collateral requirements and other conditions.

#### **10.1.6.2.4. Special credit lines**

Special credit lines are financed by donors and local governments (different levels) and implemented by commercial banks and/or MCOs. Most of them target SMEs. Sometimes commercial banks add their own funds to increase the credit lines.

The EFSE (the European Fund for Southeast Europe) is one of the major providers of long-term funding for local financial institutions for lending to micro and small enterprises. Partnering lending institutions in BiH are 8 banks (including ProCredit bank) and 7 MCOs. IFC and EBRD also support the financial sector with different credit lines and financing facilities in order to strengthen credits for SMEs and to assist development of other financial instruments (leasing, factoring and mortgage credits).

In many cases these special credit lines increase the banks' offer for SMEs, but do not result with changes in procedures and terms. This means that they do not create more favourable conditions for clients.

Special credit lines funded by local governments and implemented by commercial banks and/or MCOs in most cases provide credits under more favourable conditions. Some recently introduced special credit lines are the following:

- The government of the Canton Sarajevo funded a new credit line (to be implemented by Nova banka Banja Luka) in the amount of 7 million KM, with interest rate of 2%. One of the eligibility criteria is that client has to be located within the Canton.
- The municipality Centar Sarajevo and Raiffeisen banka Sarajevo funded a special credit line in the amount of 1 million KM, with the interest rate of 6%.
- City Banja Luka and NLB Banja Luka funded a new credit line in the amount of 4,5 million KM with the interest rate of 6,5%.

#### **10.1.6.2.5. *Other providers of financial services***

Among other financial service providers, micro credit organizations are the most active in financing start-ups and SMEs. Leasing and factoring are still not important financial instruments for these market segments. However, successful medium size enterprises from the sector do use leasing as the source of financing.

Start-ups are among the typical clients of MCOs. Most MCO offer loans with very similar conditions, maximum size up to EUR 15.000 (to be increase to EUR 25.000), maturity up to 3 years, grace period up to 9 months, collateral requirements mostly promissory notes. The collateral requirements and procedures are more acceptable to start-ups and small enterprises than requirements of the commercial banks.

Thanks to the activities of MCOs, which are covering the whole country, the access to loans is not an issue for start-ups and small enterprises. The major barrier to them are interest rates, which are between 18 to 27% .

Leasing is a relatively new financial instrument, with which SMEs are not familiar. This is fast growing sector in BiH. The request for 10-12% of own financing is an obstacle for SMEs. On the other side, the most attractive segment for leasing enterprises are individuals and strong enterprises. They are less interested in entering the lower end of the market. Micro leasing is not used. This could be an opportunity for MCOs to act as the agents of leasing enterprises that want to reach the low end of the market.

A new financing provided in May this year by EBRD to Raiffeisen Leasing in the amount of 10 million EUR has to be used for SMEs from all sectors (less than 250 employees and less than 10 million turnover). Defined types of leasing contracts are micro lease (maximum amount of EUR 10.000) and small lease (maximum amount of EUR 125.000. The expected average is EUR 50.000. This will increase credits offered to SMEs, but as the same conditions will be used as for other leasing agreements it means that the number of eligible and acceptable clients will not increase.

Factoring has been introduced in BiH recently. This instrument is still not legally regulated. State owned export credit agency, IGA, provides export credits and specific factoring services, but both services are provided in small amount and do not play an important role. Recently one Slovenian factoring enterprise, Prvi Faktor, registered as an enterprise in BiH and one bank, FIMA, announced that they will be introducing factoring. Because of the high costs attached to this instrument it is not expected that factoring will be accepted and used by SMEs soon.

#### **10.1.6.3. Recommendations**

Recommendations for EC in this field are:

- Assist education and training of managers and staff of commercial banks on needs and characteristics of SMEs; the objectives of the education should be to simplify procedures for loan application and assessment, improve the risk assessment capabilities of the staff and define an appropriate risk profile for these clients. Further studies are needed to determine ways and means of effecting the required changes..
- Assist development of micro leasing adjusted to the needs of SMEs and star-ups.
- Improve basic business skills of SMEs, including business plan development skills.
- Support introduction of special credit lines for exporters.

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## 11. Overview of the constraints and recommendations – cross-cutting issues

### 11.1.1. Some ideas for improvement of institutional support to competitiveness of the sub-sectors value chains

The overview is based on the findings and recommendations of this study. . It is concerned only with the enterprise needs.. It is an attempt to place the needed policies, strategies, institution building and activities with the institutions where it is felt it can be best planned and implemented for the benefit of the enterprises.

<b>Institution Suggested to be Chiefly Responsible</b>	<b>Cross Cutting Recommendations for Improvement of Competitiveness of the Sub-Sectors Value Chains</b>	<b>Remarks</b>
Ministerial Level (BiH, FBiH, RS, Canton, Municipality)	<p>Support financially the competitiveness of all sectors before EU rules inhibits it.</p> <p>Strengthen the investment in machinery and equipment by introducing better incentive depreciation rules.</p> <p>Set up loan guarantee schemes for the RDAs to administer.</p> <p>Introduce special subsidised credit lines for farmers and SMEs in need of expansion proven, by feasibility studies to increase competitiveness.</p> <p>Support the expansion of the forest road grids.</p> <p>Establish and implement land redistribution policies, strategies and implementation in order to achieve larger farm sizes.</p> <p>Implement and enforce the farm registration to complete the register.</p> <p>Privatise and rationalise the remaining enterprises particularly in the wood and</p>	The time before the EU rules kicks in is the last chance for favour its industry with cheap loans and in particular subsidies would be worthwhile borrowing money from the EBRD and provided the industry uses these subsidies to increase competitiveness.

Institution Suggested to be Chiefly Responsible	Cross Cutting Recommendations for Improvement of Competitiveness of the Sub-Sectors Value Chains	Remarks
	metals sectors.	
Regional Development Agencies	RDAs should concentrate on regional development in a broad sense. In their efforts to support SMEs they would be most useful if they act as initiators and facilitators in setting up SME support organisations.	RDAs are not particularly well suited for owning or managing support organisations as they have very limited staff which are experts and are too far removed from the pragmatic realities of businesses.
Local Development Agencies	LDAs should concentrate on regional development in a broad sense.	Although LDAs are closer to businesses than RDAs they are particularly well suited for owning or managing SME support organisations as they have very limited staff which are business oriented and are too far removed from the realities of businesses.
Business Support Centres	<p>BSCs should preferably be of the one-stop-shop type and be able to assist enterprises with getting training and good advisors on technical, management and marketing issues such as solving the cool chain issues at dairies and berries, fruit and vegetable producers.</p> <p>Raise SME awareness of the importance of standards and certifications for access to the EU market (this point is covered below under standardisations and certifications).</p> <p>Provide easy access to and training for accessing EU and other market data bases.</p> <p>Provide support for cluster formation and administration.</p>	<p>The BSCs should be working as the link between enterprises and service providers. <b>See below for suggestions on the scope and effectiveness of BSCs.</b></p> <p>Sanitary and phytosanitary standards (HACCP, EU GLOBALGAP, Eco-labelling and organic farming certification etc.).</p> <p>Quality infrastructure (e.g. EU technical regulations and directives for each Sub-Sector, ISO, Automotive and other standards).</p>
Extension Centres for advise to	To alleviate the negative consequences of small farm size persuade farmers to move to technologies (hot houses) and/or crops (paprika, berries etc.) which can	Use leading farmers and accepted experts to promote the concept

<b>Institution Suggested to be Chiefly Responsible</b>	<b>Cross Cutting Recommendations for Improvement of Competitiveness of the Sub-Sectors Value Chains</b>	<b>Remarks</b>
Berries, Fruits and Vegetables, Dairy and MAP Sub-Sectors	<p>be profitably produced on small plots.</p> <p>Raise farmer awareness of the benefits of collective action and assist organising farmer co-operatives.</p> <p>Raise farmer awareness of the potential of organic products and the importance of standards and certifications for access to the EU market.</p> <p>Assist in solving the cool chain issues at farms, dairies and berries, fruit and vegetable producers.</p> <p>Increase basic business and financial skills of farmers and SMEs through education and advisory service.</p>	<p>The extension centres should be modelled on the best EU extension centres. Twinning arrangements should be formed with best extension centres for exchange of know-how and market information etc.</p> <p>Eco-labelling and organic farming certification (KRAV etc.). CE Marking Sanitary and phytosanitary standards (EUROPGAP, GLOBALGAP etc.).</p> <p>All agricultural sub-sectors are in need of assistance e.g. farmers need to learn effective breeding programs and cleanliness, the vegetable and MAP growers need to learn business management and development of new varieties etc. etc.</p>
Foreign Trade Chamber (FTC) and local Chambers of Commerce (CoC)	<p>The FTC could improve its support to SMEs by strengthening its foreign network through an expansion of its foreign trade office's representations to all major markets. It would also be obvious for FTC to expand its courses in international certification and standardisation.</p> <p>FTC and CoCs could improve assistance to their member enterprises with e.g. market analyses pointing out opportunities for the BiH enterprises, finding customers, finding matching enterprise partners, assist trade delegations, assist</p>	<p>The analysed SMEs did not think they had much support from the local CoCs. It was often claimed that larger enterprises benefited from the FTC activities. The FTC in HACCP and CE marking has achieved success.</p> <p>Since membership of the CoCs became voluntary in 2008, chambers have experienced a serious loss of members indicating members do not think their services are worth attending. Some chambers have had some success offering information on and trade</p>



<b>Institution Suggested to be Chiefly Responsible</b>	<b>Cross Cutting Recommendations for Improvement of Competitiveness of the Sub-Sectors Value Chains</b>	<b>Remarks</b>
	enterprises wishing to participate in - or visit trade fairs, arrange and support enterprises in their export efforts, training in EU standards and certification requirements etc.	international and EU standards and EU legislation.
Confederation of Industry and Sector Industrial Associations	<p>Develop SME's awareness of the importance and utility of industry associations as basis for making such organisations member financed.</p> <p>Assist SMEs with formation of effective member oriented and member managed industry associations and a confederation of industry as umbrella organisation.</p>	<p>The present sector industrial associations are mostly one man show no real attractive offers for their members wherefore there are difficulties in getting members who will pay for their services.</p> <p>The main activities of the associations and the confederation are: lobbying government on behalf of the members; running conferences and seminars to heighten know-how and contact network among their members; initiate and participate actively in arranging export promotion and study and sales promotion tours abroad (in cooperation with FTC); legal assistance; export documentation assistance; statistics etc.</p>
University and Technological Institutes	Support institution building of agricultural as well as wood and metals technological institutes.	<p>It is suggested that, in particular the technological centres should be developed to offer "practical" research on products, production and logistics. Examples would be to assist in solving the cool chain problems of farms, dairies and berries, fruit and vegetable producers and a new product and production technology.</p> <p>The agro-industrial technological institute need to support development of downstream of exportable dairy products such as cheese.</p> <p>In addition they could be the leaders of the extension services, to back up and train the trainers and staff of the extension centres.</p>

<b>Institution Suggested to be Chiefly Responsible</b>	<b>Cross Cutting Recommendations for Improvement of Competitiveness of the Sub-Sectors Value Chains</b>	<b>Remarks</b>
	<p>Strengthen university faculties as regards, in particular, the subjects general management, marketing and functional and aesthetic design. Support, in particular the introduction of more MBA schools in co-operation with EU and US, Canadian and other countries universities. The faculties of Engineering, Agri-processing and Wood Processing need to support modern functional and aesthetic product design and modern production management including extensive CAD, CNC and production management and control systems.</p> <p>The USAID CC supported experiment by the School of Fine Arts with furniture design should be continued as the furniture industry is in dire need of modern designs.</p>	<p>The introduction of MBA schools is a step in the right direction. The offer of short extension courses could be very useful for the educate managers in modern management as well as market product design.</p> <p>The shortcomings of the managers are particularly in the general management including strategic planning / business and marketing, modern production management and accounting.</p>
Public Extension Course Centres	<p>Set up or strengthen existing “Extension Course Centres” to enable them to offer courses in management for first time managers, marketing and export courses for practical export marketing / sales work.</p> <p>Educate bank staff on simplification of procedures and forms required for loans to individual farmers, SMEs and co-operatives.</p>	<p>The courses which should be short term (say 3 days to 3 weeks days per week for a longer period) should aim at educating managers and staff who need to learn the application of methods in a pragmatic way.</p>
Vocational Schools	<p>There is a need to review how the schools and the enterprises can better co-</p>	<p>The enterprises complain that the co-operation with the v</p>

<b>Institution Suggested to be Chiefly Responsible</b>	<b>Cross Cutting Recommendations for Improvement of Competitiveness of the Sub-Sectors Value Chains</b>	<b>Remarks</b>
	operate to achieve a good education of satisfactory skilled staff.	schools often do produce the desired skilled staff. On the other hand, it looks as though the enterprises do not always face up to their responsibility to make the practical training fruitful.
Design Schools	Improve the education of furniture and other products designers by twinning with EU design schools.	A recent experiment where designers from the Sarajevo School of Arts designed furniture for 10 enterprises produced quite good results.
Private Consultants	With relatively small enterprises who can not afford to have specialist services in-house it is very important for BiH to have a corps of good private consultants. The efforts to educate them should thus be continued. At the same time, the donors need to stop providing services for free and start convincing the enterprises of the benefits of paying for good advisory services.	Many private consultants have been trained by donors, but most have not been able to build up a sustainable business. One of the main problems seems to be that BiH enterprises are not used to paying for advisory services and the free donor supported services confirm this in their belief that such services are free.
Co-operatives	Organise farmers in co-operatives for purchasing of farm supplies, price negotiations with processors and facilitate education and knowledge sharing.	Use leading farmers and accepted experts to promote the concept and ensure care that the co-operatives are organised and owned by the farmers, while run by the farmer's choice of professional management. Avoid "pseudo" co-operatives with participation of processors and suppliers as these would be confronted with the impossible task of serving dual, opposing purposes.
Standards and Certification Institutes	The recommended actions of these organisations are explained below in chapter 10..	
Language schools	The primary schools are now teaching English so the young people entering the enterprises and institutions in the future will speak at least English. There is, however an urgent need for the present managers and staff to learn English so any initiative to set up good English (or other large business language) courses should be supported.	Meeting many persons in industry and public institutions one notices a serious lack of managers and staff speaking foreign languages. It is of great information on technology, designs, business and customer requirements. It is an issue in order to access foreign markets as a strong competitive advantage. It is absolutely imperative that one speaks at least English at high level.

<b>Institution Suggested to be Chiefly Responsible</b>	<b>Cross Cutting Recommendations for Improvement of Competitiveness of the Sub-Sectors Value Chains</b>	<b>Remarks</b>
	Business people should be encouraged to learn at least English.	
Banks and finance institutions	<p>Develop micro leasing schemes adjusted to the needs of small farmers.</p> <p>Assist in educating bank staff on simplification of procedures and forms required for loans to individual farmers, SMEs and co-operatives.</p> <p>Help introduce special subsidised credit lines for farmers and SMEs.</p>	

### **Ideas and opinions on development of business support institutions / organisations**

BiH lacks coherent SME support policies and strategies. There is therefore no coherent and co-ordinated public support to industry nor is there any co-operation and co-ordination between the different agencies attempting to support industry. It also follows that government is not guiding and managing the donor assistance for optimal application. This project is not required to provide solutions for those issues, but we will suggest some overall principles for, mainly, public business support organisations.

#### **Foreign Trade Chamber**

The FTC is charged with the responsibility to promote and assist export. Membership of the FTC is compulsory so it has a very large membership base. In relation to the needs of the enterprises the FTC could improve its operations by strengthening its foreign network by expanding its foreign trade offices representations to all major markets of at least the EU. To lend these offices weight they could be placed at the BiH embassies as is the custom of many EU countries. These offices should work as the local market access point. The FTC could thus better assist their member enterprises with e.g. market analyses pointing out opportunities for the BiH enterprises, finding customers, finding matching enterprise partners, assist trade delegations, assist enterprises wishing to participate in - or visit trade fairs, arrange for and support enterprises in their export efforts etc. They could use the resources of the Euro Info Correspondence Centre (EICC) and the Export Promotion Agency as a starting point. To ensure a pragmatic approach these offices should be staffed by industry experts drawn from the private sector. In order to achieve such improvements it is important to staff the FTC board, management and advisors with experienced and pragmatic managers and specialists drawn from the private industrial sectors. It is very important for an organisation with compulsory membership for the members to have full control with its policies and activities otherwise it risks being seen as a costly bureaucratic hindrance to development.

It would be helpful to support FTC by affording TA and twinning with similar EU Chambers of Commerce and foreign Embassy Trade Missions. As regards the local Chambers of Commerce it would seem natural to integrate them with FTC in order to achieve good co-operation and co-ordination of common efforts. The CoCs ought to be organised and staffed along the same lines as the FTC to secure utility and member interest.

#### **Confederation of Industry and Industry Associations**

The industry associations visited by the Project Team are almost all very weak with regard to affording enterprises assistance. They are mostly under funded and under staffed and do not have the backup of their members. Assuming that these associations in time will want to develop and take on similar responsibilities as their sister organisations in the EU they need to be strengthened considerably starting with raising the interest of the enterprises. It seems that one way to strengthen them is to avoid that the donors act as initiators and drivers and instead concentrate on identifying drivers in the form of outstanding business managers who would assist in re-designing the scope of the main activities which such associations should offer. In particular the board should consist of highly respected business people, but also the management and main advisors should be drawn from the ranks of industrial enterprises to gain and keep the respect of enterprise members. For the various industry associations to play a powerful role in determining industrial policy and strategies they should be organised into a confederation of industry. There is a balance between activities and scope of work of

the FTC / CoCs and the confederation of industries / industry associations The level of information gathered for this report does, however, not allow us to make any sensible recommendations regarding the division of responsibilities and activities so we will leave that up to subsequent projects.

### **Business Support Centres**

In BiH most of the business support centres are uncoordinated, understaffed, underfinanced concerned mostly with easing the administrative burdens of the enterprises and serving mostly the start-ups. One of the best BSCs had only two customers per day in 2007 even though their services are virtually free. The SME managers stay away and when asked they do not seem to trust that the BSCs are worth their attention.

This is not only a BiH problem. Many Business Support Centres in emerging economies the world over find it very difficult to gain the trust of the enterprises they are to serve. Even though the BSCs are at times assisted by competent donor funded advisors, as soon as the advisors disappear, so does the best of the local advisors who gets employed by private enterprises based on the training they received at the BSC. Naturally, this erodes the customer base and the funding resulting in even less service worthwhile for the enterprises. To turn around this trend and build strong BSCs it is suggested that the following measures might improve the situation:

- Make sure that the needs and the requirements of the SMEs of the local area is well known by running a Needs and Requirement Analysis.
- Raise the SME awareness of what a BSC could do for them.
- Design the BSC service package at SME participative meetings using highly respected industrial managers as drivers.
- Organise the Business Service Centre as an NGO created and owned by the local business community with a board consisting of 60% SME managers. The remainder of the board seats should be offered to one public representative and experts and networking persons such as bankers and managers from large enterprises - only the SME managers should have voting rights.
- Commit municipal, cantonal and state funding of administration and have a fund ready for funding of special projects.
- The management and staff should be as competent as the best consultants and be drawn from industry. They should be compensated at a level competitive with comparable jobs in industry and consulting as they otherwise they would not stay for long.
- Services should be decided by the owners / users (SMEs). It could include advise on registration, credit applications, permits and other publicly related matters which could be provided for free.
- Other services such as database search training (for in-house BiH, EU and other data-bases), preliminary diagnoses of individual SME problems including drawing up of Terms of Reference for expert assistance and assistance with managing the experts should be paid for by the SMEs based on a voucher scheme for expert assistance.
- The BSC should keep a data-base of well qualified experts.

- Finally, the BSC should have a size which would allow to hire a sufficient number of well qualified staff of no less than 10. The adjustment parameter would be the number of SMEs covered.
- The professional anchor organisations would ideally be the technological and management institutes.
- The umbrella organisation should be an association of business support centres organised as a privately owned collective.

### **11.1.2. Constraints and recommendations on cross-cutting issues regarding standardisation & certification**

The following chapter includes detailed information on constraints and recommendations on cross-cutting issues regarding

1. the Institutes of Accreditation (BATA) and Standardisation (BAS)
2. awareness and
3. education.

#### **11.1.2.1 Institutes of Accreditation (BATA) and Standardisation (BAS)**

The institutional issues regarding the BATA and the BAS have already been described above in connection with the six sub-sectors.

In general enterprises complain that BiH institutions are not yet accredited to issue internationally valid certificates necessary for access to the EU and other international markets forcing them to become certified by foreign institutions at a higher cost than national institutions would presumably charge. The main reasons for the lack of accreditation are the broad lack of transposition, implementation and enforcement of technical regulations and conformity assessment procedures.

The current situation in accreditation, certification and standardisation often restricts enterprises in their efforts to export products into the European market. This disadvantage is expressed in space, time and money. Hence enterprises lose potential expansion within the EU, have in many cases to pay more money than necessary to obtain a certain certificate on fulfilling a standard and need to spend more time (and effort) to fulfil an unnecessary parallel system of international and BiH national standards.

If product quality legislation is not transposed when the SAA enters into force it is likely to lead to a partial loss of the BiH home market. Additionally, if by this date the EU- product quality legislation is not transposed and BiH products do not comply with these European requirements, products from BiH are legally excluded from export into the EU, unless they obtain certificates from a EU Country, at a presumed cost and time disadvantage. At the same time, products from the EU fulfilling the legal requirements when the SAA enters into force could be imported into BiH without restrictions. This is particularly true for the agricultural markets which are already dominated by foreign products. Therefore, the EU legislation laying down the preconditions for accreditation and standardisation (institutions, procedures etc.) should urgently be transposed, adopted and implemented.

The work to get BATA accredited and its staff trained should be supported to enable that institution to accredit and train the staff at the certification institutions. As soon as BATA is accredited the required certification institutions should be staffed, trained and accredited to enable them to issue valid international certifications to enterprises. The accredited institutions would in



turn need to set up training courses for (private) consultants to teach them design, implementation, follow-up and re-certification support of certified enterprises.

### **11.1.2.1.1. Awareness**

Most of the interviewed institutional managers emphasized that most consumers and many enterprise managers and public sector stakeholders are not fully aware of the significance of accreditation, standardisation and certification for their eventual export possibilities to the EU. Awareness building therefore becomes an important first step in the change process to bring the BiH enterprises in a better position for exporting their products and substitute imports.

To uncover the awareness level and propose possible solutions the situation of each stakeholder group (consumers, the public institutions and enterprises) is described below.

#### ***11.1.2.1.1.1. Consumer awareness building***

A strong home market based on customer preference and loyalty is very important for most enterprises as a strong platform for becoming successful exporters to the EU or any other market. Although there are exceptions the general impression gleaned from stakeholder interviews remains that consumers in BiH are not particularly proud of their national enterprises and the wide variety of products they produce. 'Made in BiH' is, by far, not a main attraction for local consumers, and many enterprises. This view was supported by donors which emphasized that there existed a wide lack of public awareness within the population of BiH about the interrelationship between products safe for consumer usage and accreditation, standardisation and certification. Some awareness building has taken place through certification seminars published in local newspapers, but more effort is certainly needed.

#### ***11.1.2.1.1.2. Awareness building in the public sector***

For effective support of the private sector awareness building for people working in the public sector is of the utmost importance.

The linkages between different regional development agencies, various chambers and enterprises and their actual or potential members need to be improved significantly. This could be done through raising the interest for, and awareness of the work of accreditation, certification and standardisation of the respective partners. Conferences organised by and for the public sector with international guests from the certification business area could be opened up to BiH enterprises to enhance co-operation and politicians could provide support to national enterprises, during their visits abroad.

### ***11.1.2.2. Awareness building of enterprises***

Apart from the general awareness about certifications it is widely stated that enterprises are not fully aware to what extent, if at all, standards and certifications such as ISO and the CE marking apply to them.

In addition to the general lack of awareness of the importance of certifications enterprises often lack knowledge of them. They do not know the appropriate standards and the procedure towards their certification and they often do not know where to find public institutions and specialized private support consultants providing assistance with the certification procedures.

The underlying reasons for the low level of awareness are threefold:

- Lack of funds for certifications and for hiring consultants to assist with installation of the required control systems and training of staff.
- Even though many enterprise managers find certification reasonable they lack the authority to introduce it because entrepreneurs/enterprise owner's are not yet willing to introduce certification particularly if they do not plan to export into EU in the near future. .
- Many enterprises are production oriented and therefore not sufficiently concerned with export markets. If the competition is not too strong they do not even seem overly concerned with import substitution.

Awareness is said to be highest in the dairy sector because the Veterinarian inspectors have already been compelled by law to implement HACCP. Generally some awareness has already been build through advertisements for certification seminars published in local newspaper and/or diverse contributions on the local TV. But still many enterprises are not fully aware of the advantages of a certification (e.g. for ISO) which apart from the improvement of export possibilities are:

- Lower costs because ISO introduces appropriate control systems at the right points in the process thereby saving costly rework and misappropriated controls.
- More efficient use of resources such as raw materials, human resources and machines.
- Reduction of product wastage/scrap

In order to overcome the lack of knowledge on certification issues financial support should be provided for the development of a central web-based data base of certification institutions and experts (local as well as international) and a central web-based database on available certification training courses within BiH.

In the following table the constraints and corresponding recommendations are summarized for the cross-cutting issue ‘awareness’.

Constraints	Recommendations
<ul style="list-style-type: none"> <li>• Most consumers and many enterprises lack preference for products ‘Made in BiH’</li> <li>• Most consumers are said to be unaware of the importance of certification for product quality, safety and producer claimed properties</li> <li>• Lack of awareness in the public sector of the importance of issues related to accreditation, standardisation and certification</li> <li>• Lack of awareness among many enterprises of the importance of issues related to accreditation, standardisation and certification for export into the EU and the threat of import from the EU after the enforcement of the SAA</li> </ul>	<ul style="list-style-type: none"> <li>• Consider support to broad public awareness campaigns on products ‘Made in BiH’ and possible introduction of a related brand ‘Made in BiH’</li> <li>• Consider support to broad public information campaigns targeting consumers by means of adequate mass media (at least TV and newspapers) in order to raise awareness about issues in connection with certification (esp. concerning product safety)</li> <li>• Consider support to trust-building and co-operation seminars for regional development agencies (on sectoral and cross-sectoral issues)</li> <li>• Consider support to business visits abroad of private and public institutions together with high ranking politicians as “market door openers”</li> <li>• Consider support to broad public information campaigns by means of adequate mass media (at least TV and Newspapers) targeted at enterprises in order to raise awareness about issues in connection with certification, product labelling and promotion (esp. concerning product liability)</li> <li>• Consider support to development of a data-base of accreditation and certification institutions and a register of certified BiH certification experts</li> <li>• Consider EU co-financed stimulation funds such as already appears to be issued e.g. by the Ministry of Economy in the RS</li> </ul>

### 11.1.3. Education

Besides awareness building, information dissemination, education and practical training are very important for implementation of standards and certifications.

Although several institutions from the private, public and donor sectors (e.g. TÜV Adria together with BIOBASE, EICC, USAID LAMP, IFC) already work in this area and have provided many seminars on different issues related to standards and certificates, much more training is necessary. The higher education institutions lack education in certification and standardisation issues especially in combination with practical training.

Information dissemination, education and training efforts are not managed in a coherent manner to ensure that they fulfil safe minimum standards. In order not to duplicate efforts and cause unnecessary expenses this should be managed and co-ordinated carefully.

#### 11.1.3.1. Education of consumers

Consumers should mainly be educated by following the recommendations already mentioned, in the above section on awareness building.

### ***11.1.3.2. Education of the public sector***

Special education on inspection & quality control and the implementation of certain registration procedures in accordance with EU standards have already been provided to certain public sector stakeholders by USAID LAMP. Participants included representatives of the BiH Plant Protection Agency, RS and FBiH (sanitary and phytosanitary) Inspectorates, BiH Food Safety Agency, the Ministry of Health and Agricultural institutes/laboratories. The training encompassed a study tour to Israel to learn the process of enforcing phytosanitary inspection & quality control and to implement pesticide registration procedures in accordance with EU standards. The aim was to provide participants with a clear understanding of the process from inspection in the field (border inspection and nursery inspection) to laboratory analysis and the reporting of results.

These attempts do however cover only a small number of enforcement and control staff from the public sector due to the lack of awareness of the need for such training among higher administrative personnel. One interview partner estimated that only about 1% of all inspectors (sanitary, market, veterinary) are educated to a satisfactory level.

The totally different levels of education among inspectors leads to different approaches and results during enterprise control visits. Often the private enterprise assessed by an inspector has much more knowledge, e.g. of food safety standards and procedures, than the inspector himself.

Some university faculties have organised their laboratories to carry out tests for certification. These services are already being used by enterprises. The staff of these laboratories are very practical oriented and can also provide training e.g. on preventative control monitoring (based on the EU regulations) for farmers using pesticides. In this connection, according to one interview partner from USAID LAMP, specific courses about EU agricultural subsidies and support already exist in Croatia. More, and better laboratories and competent staff is needed to establish/improve laboratories and operate appropriate certification systems.

### ***11.1.3.3. Education of enterprises***

This field is divided into two types of enterprises:

1. those who need the certificates for their products and
2. the consultants/institutes who provide services for enterprises to gain the certificates.

Enterprises seem to lack knowledge about certificates, their applicability and the procedure for obtaining them. Even enterprises that are generally aware of the existence of a certain certificate does neither necessarily know if this certificate is compulsory for its own products/services nor how to obtain it. Most farming (enterprises) do not know the requirements for getting European agricultural certifications and they do not understand how to use the support and subsidy systems for certifications. There seems to be no written information material readily available in the Bosnian language and although many institutes do have the relevant information there are only few offices where this information is

readily available. This could be overcome by means of adequate brochures and a web-based data base with a list of all compulsory certificates and standards which is regularly updated (e.g. by public institutions). The website could be linked to further useful information such as availability of different kinds of subsidies for certification including their budget, maximum amount for each enterprise and the application procedure.

Many enterprises have a problem paying the rather high cost of training seminars. In several cases (e.g. the training courses for the 'HACCP manager' run by the enterprise BIOBASE) all participants pay for themselves even though they have very limited funds. The price for a 5 day seminar (by e.g. TÜV Adria) teaching participants the certification procedure for HACCP is about 430 Euro. In Croatia a similar (10 day) course costs 5000 Euro. As a consequence many Croatians participate in the BiH seminars where they get the same certificate. In the light of this price difference the BiH price can certainly not be seen as being excessive.

Partly funded training opportunities for individuals and enterprises should be provided in order to reduce the financial constraints (e.g. 1/3 EU, 1/3 public, 1/3 individual/ enterprise). This would help:

- Individuals to become certified on certain standards (as trainer, inspector etc.)
- Enterprises to get employees certified
- Enterprises to get their production and products certified.

In particular smaller enterprises attending training sessions on certification issues face certain international and business-environmental constraints such as:

- Lack of knowledge exchange with foreign enterprises working in the same field of certification
- Lack of adequate project management courses concerning implementation of certificates
- Lack of information about the availability and procedures of obtaining grants
- Lack of model (good practice) projects from which to learn
- Enterprises lack of knowledge and financial power for adequately promoting their certification and certified products/services

In order to overcome some of these constraints an association of consultants named 'Focus'<sup>20</sup> was registered in 2007. This association aims to support its members inter alia by providing a database of certified consultants and by organizing educational support for their members.

Many university graduates with education relevant to industry and certification institutes who have just finished university remain without a job. With government/donor financial support of training in certification and certificate control this resource could be utilised to give the certification service a much needed lift. For example, unemployed biologists, who are unable to find a job without knowledge of HACCP and other certificates could be upgraded at existing training institutions enabling them to get jobs in industry and institutions.

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<sup>20</sup> Information provided by BioBase during the interview at 6<sup>th</sup> March 2008.

Co-operation between business and scientific institutions is presently lacking. It could be intensified through:

- courses with mixed participation of institutional staff and students and enterprise staff
- support of internships and traineeships in enterprises
- running/enhancing job fairs and enterprise exhibitions at universities and
- the creation of virtual job centres specific to certification at technical and natural sciences faculties.

In the following table the constraints and corresponding recommendations for the cross-cutting issue ‘education’ are summarized.

Constraints	Recommendations
<ul style="list-style-type: none"> <li>• Lack of education in higher education institutions especially in combination with practical work concerning standardisation and certification</li> <li>• Lack of training possibilities for unemployed academics to increase their employability in the standardisation and certification sector</li> <li>• Managers and staff of public institutions and private enterprises lack knowledge and information on mandatory permits and certificates</li> <li>• High costs of training seminars for individuals as well as for enterprises</li> <li>• Costs of certification training seminars for local trainers are too high to be affordable for individuals and even for SMEs. They would be even higher if (the needed) international trainers were employed to run courses on project management and marketing knowledge</li> <li>• High costs for enterprises to get internationally certified</li> <li>• Farmers do not know the requirements for getting European agricultural certifications and they do not understand how to use the support and subsidy systems</li> </ul>	<ul style="list-style-type: none"> <li>• Consider supporting the strengthening of public educational institutions (universities, academies) already dealing with certification in order to provide increased services to the private sector</li> <li>• Consider support for strengthening co-operation on certification between business and scientific and higher education institutions supporting internships &amp; traineeships, job fairs &amp; enterprise exhibitions at universities and specific virtual job centres</li> <li>• Consider supporting public institutions and/or private associations’ training courses for unemployed academics (e.g. HACCP for unemployed biologists fresh from the university)</li> <li>• Consider support for the production of brochure(s) and/or website(s) containing all permits and certificates necessary for certain activities (1)</li> <li>• Consider financial support for training seminars on certification, sharing the expenses between state BiH, EU and enterprises</li> <li>• Consider financial support of training seminars for private certification associations on latest certification developments, project management and marketing</li> <li>• Consider supporting institutions when they certify SMEs</li> <li>• Consider support to courses for farmers about European agricultural certifications and the opportunities to avail themselves of support and subsidy systems</li> </ul>

## General References / Reports

- A. Cluster Competitiveness Initiative (Cluster Selection) hard copy only
- B. OECD Mapping
- C. FIAS Competition Guide (IBRD/WB) – general info for Dev. Countries
- D. FIAS+Competition+Policy+Final
- E. Investor Guide – Promotional material B&H
- F. Industrial Strategy for RS (in Bosnian) hard copy only
- G. EIU - Country Report for B&H Dec 2007 – hard copy only
- H. Economist Country Report BiH 1 2 1
- I. B&H Economic Trends – hard copy only.
- J. BiH Economic Studies
- K. BIHET Sept 07
- L. SERDA Poslovni Incubator – booklet
- M. Various SERDA brochures and CDs
- N. SERDA Regional Strategy and Implementation Framework 2006-2007 – booklet
- O. SERDA Pre-investment study for Gasification of Podrinje
- P. SERDA planning books – 5 volumes in BOS
- Q. 2007 FIPA Investor Guide
- R. Revised MTDS+AP
- S. SME Dev GAP Briefing Paper – final version
- T. Final TNA 5Dec English M2
- U. Feasibility Study for CMOs – Inception report 2007 – hard copy only
- V. RED Mapping of SME and RED Institutional framework
- W. A current account of processes, business start permits; construction permits
- X. Final Report SME Interventions and GAP Analysis
- Y. D1 Final
- Z. D3 Final
- AA. PoliFinalversion1inc

## **Annex 1: Terms of Reference**



**Terms of Reference**  
**Framework Contract Commission 2007 – Lot 5**  
**“Value Chain Mapping Analysis”**

**Background**

Bosnia and Herzegovina (BiH) is aspiring to membership of the European Union (EU). The technical negotiations rounds for the Stabilisation and Association Agreement (SAA) have been concluded and once the SAA is signed BiH will need to harmonise its legal standards and economic competitiveness with conditions in EU, even before being granted the status of an accession country. The degree of competitiveness of each country's economy, including BiH, is decisive towards achieving the right to accession. According to the Copenhagen Criteria acceding countries must have stable institutions guaranteeing democracy and the rule of law, they must implement the *acquis* and have a functioning market economy and they must guarantee sufficient competitiveness in the internal Union market. Currently BiH, like most countries in South-East Europe are not able to withstand the competitive pressures within the EU.

Competitiveness generally means that individual firms, the firms of a region or country or the firms of a sector/branch are well supplied with production factors, well organised and managed and are therefore able to rely on the necessary infrastructure that they can successfully assert themselves in domestic and world markets while maintaining a satisfactory standard of living. Competitiveness of a country should be promoted by a structure policy, which forms a system of prerequisites including appropriate infrastructure, high-quality production factors, efficient competing and complimentary firms, demanding customers and suppliers (and if possible organised in a “supply chain”) and competent management. The EU's concept of competitiveness refers to the entire national economy, although efficient firms are at the centre of the conceptual deliberations. This was further spelled out by the European Council in Lisbon (2000) and the EU Directorate General Enterprise “The creation of the most competitive and dynamic knowledge-based economy in the world capable of sustainable growth with more and better jobs and greater social cohesion would finally depend on how successful enterprises are, in particular, small and medium sized enterprises”.<sup>1</sup>

According to DG Enterprise the following determinates of competitiveness have been defined:

- Training and upgrading for a business-orientated society
- Access to financial resources for small and medium-size enterprises (SME), as well as expanding and high-tech firms;
- Access to research and innovation as well as better utilization of patents by SMEs;
- Strengthening business development services;
- Improvement of public administration;
- Improvement of employment and working conditions.

For countries in transition, such as BiH, there are further challenges, for BiH must also develop and implement active and market-orientated economic policy in order to create conditions for a favourable framework for firms. This includes the creation of stable political, legal and administrative conditions. At the firm level this means improved access to capital,

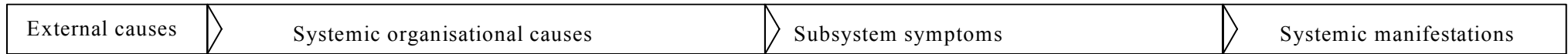
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<sup>1</sup> Source: EU DG Enterprise (2000) p 5

## **Annex 2: Company Diagnosis Methodology**

## Diagnosis model

Causality chain →



Influence 0	Organisational attitudes 1	Organisational structure 2	Process 3	Organisational functions		Consequences 6
				4 Developmental	5 Maintenance	
Non-controllable	Organisational climate	Horizontal	Planning	Marketing		Significant
Can be influenced			Vertical	MIS	Production	
	Management and corrective action	Human resources				
	Personal attitudes		Finance			
Monitor	Project	Resolve causes		Provide symptomatic relief		Arrest!
Periodic	Very long term	Long term		Medium to short term		Now!

← Solution chain 211

## **Annex 3: List of Meetings**

## List of contacts and meetings – companies and institutions

Organisation	Contact Name and Title	Contact Parameters	Meeting Status	Sector/products	Remarks
<b>SARAJEVO Region</b>					
RDA SERDA Sarajevo	Sefkija Okeric, director	+387 33 652 935	25.02.08. 15,00	RDA	Support to SMEs
Association of MAP Foreign Trade Chamber Branislava Đurđeva 10	Goran Brčkalović, General Secretary	tel: +387 33 202 968 mob. +387 65 666 055	26.02.08 9,30	MAP sub-sector, support services	
EICC (Foreign Trade Chamber) Branislava Đurđeva 10	Senad Hromić, Director	+387 33 551 765	26.02.08. 11,00	All sectors' support	
Association of fruit and vegetable producers Paromlinska 43 (Klas company)	Miralem Sejdić Gosp. Babić	+387 63 434 710	28.02.08. 9,00	Association of Agriculture producer Klas company	
Company ŽICA Džemala Bijedića 16	Hrusto Tupekovic, general manager Avdic, marketing manager	+387 33 775 100	28.02.08. 13,00	Metal processing	Medium sized company
MoFTER Musala 2	Dušan Nešković, Minister's assistant for Agriculture and Head of Sector	+387 33 209 819	03.03.08. 11,00	Government	
Chamber of commerce Sarajevo Canton	Munevera Pahor, Secretary General	<a href="mailto:muneverap@pksa.com.ba">muneverap@pksa.com.ba</a>	03.03.08. 13,00	Chamber	
Company KLAS Paromlinska 43	Alija Šabanović	+387 33 727 124	05.03.08. 9,00	Berries, processed fruits and vegetables	Large company
Company ANS DRIVE		+387 777 770	.05.03.08. 13,00	Wood processing, construction materials	Medium sized company
Council of Ministries BiH DEP (EPPU)	Azemina Vukovic, director	+387 33 218 552 <a href="mailto:avukovic@dep.gov.ba">avukovic@dep.gov.ba</a>	07.03.2008. at 9,00	Government	
Canton Sarajevo Ministry of Economy	Abid Saric, minister	+387 33 562 121 <a href="mailto:privrsa@ks.gov.ba">privrsa@ks.gov.ba</a>	19.03.08. at 10,00	Government	Support to enterprises

Organisation	Contact Name and Title	Contact Parameters	Meeting Status	Sector/products	Remarks
Business Support Center Novi Grad Sarajevo (within SERDA), Trg nezavisnosti 12	Šefkija Okerić Asad	466 746 062 466 729	20.03.08 at 10,00	Business support Center	
USAID LAMP	Maja Berbić, Finance expert	061 487 204 <a href="mailto:mberbic@usaidlamp.ba">mberbic@usaidlamp.ba</a>	20.03.08. 14,00	Access to finance for agribusinesses	
UPI Bank Sarajevo (Zgrada uprave kod Pozorista)	Enes Merzic Safet Hadzic	+387 33 497 575 497 649 <a href="mailto:upibanka@bih.net.ba">upibanka@bih.net.ba</a>	21.03.08. 9,30	Banking	Access to finance
Ministry of Agriculture FBiH Titova (zgrada Sipada)	Brkovic Nijaz, Assistant Minister	+387 33 261 930 <a href="mailto:info@fmpvs.gov.ba">info@fmpvs.gov.ba</a>	24.03.08. at 10,00	Government	
EDC Excellence in Innovation Josipa Štadlera 24	Sanscho Ramhorst, Chief of Party Aida Falan	+387 33 273 631 061 210 130 (Aida) <a href="mailto:afalan@edc.org">afalan@edc.org</a>	25.03.08. 11,00		
WB Mirjana Karahasanović			25.03.08. at 15,00		
Company MILCOS (Teloptic group)	Adin Fakić, director Rusmir Omičević, Brand Manager Derviš Turčinović, Teloptic	+387 33 638 870 <a href="mailto:info@teloptic.ba">info@teloptic.ba</a> Mr. Dervis Turcinovic (061 183 825)	03.04.08. 11,00	Dairy products	
Company FAVEDA Jukićeva 70	Aida Zubčević, director	+387-33 486 761 <a href="mailto:faveda@bih.net.ba">faveda@bih.net.ba</a>	22.04.08. 10,00	Agriculture, MAP	
Faculty of Agriculture and Food processing (with Institutes) Sarajevo	Mirsad Kurtović, Dean Milenko Blesić	+387 33 219 202 <a href="mailto:kazra@bih.net.ba">kazra@bih.net.ba</a> Zmaja od Bosne 8	26.05.08. 10,00		
Mechanical Faculty Sarajevo	Izet Horman (Wood processing catedra)	033 653 055 061 214 650	30.05.08.	Wood processing - education	Phone interview - Jasmina

## BANJA LUKA 10.03.-12.03.08.

Organisation	Contact Name and Title	Contact Parameters	Meeting Status	Sector/products	Remarks
RS Ministry of economy, sector for SMEs and entrepreneurship	Milan Cvijic, assistant minister	051 338 370 <a href="mailto:m.cvijic@mper.vladars.net">m.cvijic@mper.vladars.net</a>	Monday 10.03.08. 12,30	Government	Lejla
LAMP Banja Luka 1. Krajiškog korpusa bb	Sladjana Bundalo	051 315 417 065 917 033	Monday 10.03.08. Around 13,00	USAID Project	Ib
Vitaminka Banja Luka Braće Pišteljić 22	Zarko Mikic, director	051 300 049 <a href="mailto:Vitaminka.kibih@blic.net">Vitaminka.kibih@blic.net</a>	Tuesday 11.03.08.	Fruit and vegetables processing	Ib
Plantago Laktasi (MAP producer)	Aleksandar Vukmirovic, director	051 587 006 065 582 336 <a href="mailto:plantago@blic.net">plantago@blic.net</a>	Tuesday 11.03.08. 10,00	Medicinal and aromatic herbs	Ib
RS Chamber of Commerce Đure Daničića 1	Dragica Ristic, Executive director	051 215 833 <a href="mailto:dragicar@komorars.ba">dragicar@komorars.ba</a>	Tuesday 11.03.08. 10,00	Chamber	Lejla
SME Agency Banja Luka, Vuka Karadžića 4	Nikola Vukmirovic, director	051 247 440 <a href="mailto:Rars-msp@blic.net">Rars-msp@blic.net</a>	Tuesday 11.03.08. 13,00		Lejla
ARDA Banja Luka Krfaska 74	Slobodan Markovic, director	051 433 720 065 441 291 (Danijela)	Tuesday 11.03.08. 13,00		Ib
PREDA Prijedor anatska bb (bivša zgrada Poreske uprave)	Miso Reljic, director	052 241-601 <a href="mailto:preda@prijedor.com">preda@prijedor.com</a>	Wednesday 12.03.08. 10,30		Lejla
Metalna industrija Prijedor	Milovan Atlagic, director	052 232 511 <a href="mailto:mip@poen.net">mip@poen.net</a>	Wednesday 12.03.08. 10,30		Ib Note: PREDA will help with translator for Ib

**BIHAĆ 13.03.-14.03.08.**

Organisation	Contact Name and Title	Contact Parameters	Meeting Status	Sector/products	Remarks
Una-Sana Cantonal Chamber 501. slavne brigade bb	Ismet Pašalić, president	037 227 762 061 163 235 061 159 793 (Sadeta) <a href="mailto:pkusk@bih.net.ba">pkusk@bih.net.ba</a>	Thursday 13.03.08. 12,00	Chamber	
PLOD center Matchmaking Center Bihac	Haris Komić	037 220 690 063 797 740 <a href="mailto:plod@plod.ba">plod@plod.ba</a>	Thursday 13.03.08. 12,00		
Mayor Municipality Bihać Bosanska 4	Hamdija Lipovača, mayor Kata Repac, Assistant to Mayor for development, entrepreneurship and crafts	037 229 605 <a href="mailto:kabinet@bihac.org">kabinet@bihac.org</a>	Friday 14.03.08. 9,00	Government	



**MOSTAR REGION 26.03.-28.03.2008**

Organisation	Contact Name and Title	Contact Parameters	Meeting Status	Sector/products	Remarks
RDA REDAH Mostar Bulevar narodne revolucije 17.	Ivan Jurilj, director Nevzet Sefo, RIC	+387 36 557-210 580-121	Wednesday, 26.03.08 13,00	Support to SMEs – all sectors - RDA	Ib and Lejla
RDA REDAH Center for Rural Development, Buna Mostar	Himzo Tule Nevzet Sefo	+387 36 480 936 +387 36 557-210	Wednesday, 26.03.08 14,30	Agriculture	Ib and Lejla
Association LINK Mostar Bulevar narodne revolucije 55a	Tomislav Majić Amela Bećirović	+387 36 580 151 580 142 GSM: 061 480 963	Thursday, 27.03.08. 10,00	Support to SMEs – all sectors Association	Lejla
Company Jaffa Commerc Blagaj, Mostar	Hamo Badžak Nedim Badžak	036 572-333 061 130-300	Thursday, 27.03.08. 10,00	Agriculture SME recommended by RDA REDAH	Ib
FBiH Ministry of Development, entrepreneurship and crafts	Jozo Bejić, General Secretary	036 449-120 036 449-123 GSM 063 896-599	Thursday, 27.03.08. 13,00	Government	Lejla
Company Zalmo, Hamida Vuka 27, Mostar	Harun Zalihić	036 570-345 061 194-624	Friday, 28.03.08. 9,00	Metal processing SME recommended by RDA REDAH	Ib

<b>ZENICA REGION</b>					
<b>Organisation</b>	<b>Contact Name and Title</b>	<b>Contact Parameters</b>	<b>Meeting Status</b>	<b>Sector/products</b>	<b>Remarks</b>
Institute for Metallurgy “Kemal Kapetanović”, Zenica Travnička cesta 7 <a href="http://www.miz.ba/">http://www.miz.ba/</a>	Mirsada Oruč, director	032 247 999 (Sanela) E-mail: <a href="mailto:miz@miz.ba">miz@miz.ba</a>	29.04.08. 9,30	Metal processing technologies R&D	R&D  Ib and Meliha
Company KRIVAJA, TMK Zavidovići, Radnička br. 2 <a href="http://www.krivaja-tmk.com/">http://www.krivaja-tmk.com/</a>	Ismet Mujanović, director Šemsudin Skejić, technical director	032 878 064 (Aida) E-mail: <a href="mailto:inzenjering@krivaja-tmk.com">inzenjering@krivaja-tmk.com</a>	29.04.08. 12,00	Joinery and houses; sawmill	Ib and Meliha
Business Service Center Zenica – Government of Zenica-Doboj Canton Kučukovići 2 (zgrada RMK Prometa) <a href="http://www.zdk.ba/BS/CPHP/index.php">http://www.zdk.ba/BS/CPHP/index.php</a>	Dženana Čolaković, General Secretary Salih Alispahić Valida Imamović Asim Kico	032 449 920 E-mail: <a href="mailto:bsczdk@bih.net.ba">bsczdk@bih.net.ba</a>	29.04.08. 12,00	Support to SMEs	Dženana Čolaković, General Secretary will not be on the meeting – she nominated her 3 assistants to attend Lejla
RDA REZ Zenica Štrosmajerova 11 <a href="http://www.rez.ba/">http://www.rez.ba/</a>	Amela Malicbegovic, director Maja Kišić, Team Leader Economic development	+387 32 462 161 <a href="mailto:amela@rez.ba">amela@rez.ba</a> <a href="mailto:maja@rez.ba">maja@rez.ba</a>	29.04.08. 15,00	RDA Support to SMEs	Lejla

<b>TUZLA AND BRCKO REGION</b>					
<b>Organisation</b>	<b>Contact Name and Title</b>	<b>Contact Parameters</b>	<b>Meeting Status</b>	<b>Sector/products</b>	<b>Remarks</b>
NERDA CREDO Project Agribusiness Center Center for entrepreneurship promotion and dev.	Enes Drljević Amra Jaganjac Mirza Kušljugić	035 274 385 <a href="mailto:nerda@nerda.ba">nerda@nerda.ba</a> M. i Ž. Crnogorčevića br. 5	07.04.08. 13,00	RDA	Ib, Lejla, Meliha
Company TMD AI Gradačac Sarajevska 62	Fadil Novalić, director Tadija Leutar, Marketing manager	035 822 800 035 822 803 e-mail: <a href="mailto:fadil.novalic@cimos.eu">fadil.novalic@cimos.eu</a>	08.04.08. 9,30	Metal processing	Ib, Meliha
Tuzla Municipality ZAVNOBiH-a 11	Safet Husanović, Head of Department for Entrepreneurship and Development	035 307 380 035 307 387 E-mail: <a href="mailto:safeth@tuzla.ba">safeth@tuzla.ba</a>	08.04.08. 9,00	Government	Lejla
USAID LAMP Tuzla, M. Tita 34/A/3	Midhat Glavic Rozalija Galac	035 252 603 061 710 613 (Mithat) E-mail: <a href="mailto:mglavic@usaidlamp.ba">mglavic@usaidlamp.ba</a>	08.04.08. 14,00	USAID	Lejla
Rudmont Zivinice			08.04.08. 14,00		Ib, , Meliha
Company Salkanović Odžak	Mr. Salkanovic, director	063 340 081 <a href="mailto:Salkanovic-tisleraj@tel.net.ba">Salkanovic-tisleraj@tel.net.ba</a>	09.04.08. 11,00	Furniture and Joinery producer	Ib, Meliha
Chamber of Economy of Brčko District Cvijete Zuzorić bb (zgrada Šipada III sprat	Miroslav Čosić, president	049 217 556 (Aida) 049 216 116	09.04.08. 09,00	Chamber	Lejla
Credit-Guarantee Fund Cvijete Zuzorić bb zgrada Šipada	Husein Čaušević, director	049 232 260	09.04.08. 14,30		Lejla
Company Bosnaplod Brčko District Vojvode Mišića 66	Nermin Bašić, Director	049 216 076 <a href="mailto:bosnaplod@bih.net.ba">bosnaplod@bih.net.ba</a>	10.04.08. 9,00	Fruits and vegetables producer and processor	Ib, Meliha
Brčko District, Department for economic development	Amra Abadžić, Head of sub-department	049 217 993 e-mail: <a href="mailto:amraab@bdcentral.net">amraab@bdcentral.net</a>	10.04.08. 9,00	Government	Lejla

## List of Meetings standards and certification

Organisation	Contact Name and Title	Contact Parameters	Meeting Status	Objectives	Remarks
EC Delegation	Dina Karic, Task Manager, Delegation of the European Commission to BiH	tel: +387 33 254 798 fax: +387 33 666 037 <a href="mailto:Dina.KARIC@ec.europa.eu">Dina.KARIC@ec.europa.eu</a>	25.02.08 16:00	Project start and clarification of ToR	
IFC-PEPSE Hamdije Kresevljakovica 19/IV	Selma Rasavac Ivana Cuk	+387 33 251 555	25.02.08. 12,30	SMEs, manufacturing general, ICT	
Mr. Radomir Marinkovic consultant to Institute for Standardisation	Radomir Marinkovic Ćemaluša 6/II, room 77	Tel. +387 61 143 825	25.02.08. 11,00	Standards – all industries	Mr. Marinković will give suggestions for meetings that would be the most relevant
Institute for Accreditation	Refik Salihović Hamdije Ćemerlića 2	Sarajevo	25.02.08. 14,00	Accreditation procedures	
EC – EICC (Foreign Trade Chamber)	Senad Hromic	+387 33 551 765	26.02.08. 11,00	Export / import data	Call next week, Mr. Hromic is not in sarajevo
TUV BiH Marka Marulica 2/II  Instead of GTZ	Muhamed Peljto, former GTZ expert for wood industry now director of TUV for BiH	+387 33 668 433 +387 33 641 404 +387 61 156 151	27.02.08. 10,00	Wood	GDZ is not involved in wood industry any more
EC – Support to Export Promotion	Cristine Young	+387 33 250 199	27.02.08. 15,00	Export project data	Met with Volker

Organisation	Contact Name and Title	Contact Parameters	Meeting Status	Objectives	Remarks
Company Žica			28.02.08 13,00		Volker joined meeting with Ib and Lejla
Company Klas			28.02.08 9,00		Volker joined meeting with Ib and Lejla
Canton Sarajevo Veterinary Station	Nedim Brdarić Lejla zahirović		29.02.08 10,00		
USAID - LAMP	Benjamin Toric	+38733273620 061 487 202	29.02.08. 16,30	Agribusiness, herbal sector	
BiH Institute for Standardization, Lukavica	Sead Rekić		03.03.08. 10,00		
EC Task Managers	Sanja Spaic Vesna Grkovic Jelena Milos		03.03.08 14,30 15,00 15,30		
USAID - LAMP	Nedim Džano	+38733273620 061 137 249	04.03.08. 9,00	Agribusiness, herbal sector	
State Administration (Office) for plant protection	Sabaheta Cutuk, deputy Director		04.03.08 11,30		
Twinning project "Support to the State Veterinary Office	Caroline Schollmeyer		04.03.08. 15,00		
BIO-BASE H. Cemerlica 2/XI	Esada Nuhbegovic	063 830023 <a href="mailto:biobase@teamlink.ba">biobase@teamlink.ba</a>	06.03.08. at 9,30	authorized for HACCAP certification,	Small enterprise

Organisation	Contact Name and Title	Contact Parameters	Meeting Status	Objectives	Remarks
Company FAVEDA Slatinski put 66 (Kobilja glava)	Aida Zubčević, director	486 761	22.04.08. 10,00	Medicinal and aromatic plants producer	Small enterprise
Company Milcos Mostarsko raskršće bb	Adin Fakić, director, Samila Maraj, HACCAP expert	033 638 870 061 183 825 (Derviš Turčinović)	24.04.08. 12,00	Dairy	
Company EĆO Pijačna 6 (FORUM business center)	Suad Ećo, director Elvedin Osmanović	766 800 061 157 265 (mr. Ećo) 061 352 318 (mr. Osmanović)	23.04.08. 10,00	Furniture producer	Small enterprise, 15-20 employees  <a href="http://www.eco-company.ba">http://www.eco-company.ba</a>
Company Hano Kolodvorska 12 A	Nahid Hasanbegović, director	727 330	24.04.08. 09,00	Metal processing – aluminium profiles, windows and facade	Medium sized enterprise, 51 employee  <a href="http://www.hano-bih.com/eng/osnovno.htm">http://www.hano-bih.com/eng/osnovno.htm</a>

**Annex 4: List of Donor Projects**

## Donors' projects in: Agriculture, Metal processing and Wood processing industries and cross-cutting projects

Donor/Project	Partners	Duration	Value	Description
<b>AGRICULTURE</b>				
<b>EU SESMARD (Supporting the Harmonization of the Agriculture, Food and Rural Sector of Bosnia and Herzegovina)</b>		March 2006-2008		<p>Specifically the project is intended to support the strengthening of the capacity of agriculture and rural sector institutions at state level to perform the core state level competencies related to policy, legislation, administration and related services, contributing substantially to the strengthening of central coordination and harmonisation functions. A range of results are anticipated through this technical assistance including development of:</p> <p>Clear and effective reporting lines and coordination procedures for all administrative levels, including development of institutional capacities needed for future agricultural development and EU harmonization. This includes assistance in preparation of the draft state framework law on Agriculture, Food and Rural Development.</p> <p>Basic capacity at state level to coordinate agriculture, food and rural development strategies, policies and system at country-wide level, within an appropriate legal framework.</p> <p>Relevant staff at State and Entities level, to be capable to perform specific job related tasks including drafting of legislation, financial planning, international relations issues in animal and plant health, rural development planning, collecting, summarising, presenting and analysing sector data and other core tasks.</p> <p>Mechanisms to support development of sector executive agencies as the instruments to carry out the state level administrative and coordination functions (i.e. veterinary, phytosanitary, payments and other linked institutions).</p>
<b>SDC Switzerland Implementation: GTZ Company support in the Fruit and Vegetable Sector PN 57.3000.7-001.00</b>	Management for Development and Cooperation (DEZA)	Phase I 01.01.05-31.12.06 Phase II 01.01.07-31.12.09	€ 2,5 Mio	<p>Support of agricultural production companies through registered unions SHOs (Self - Help - Organizations) and societies. Improvement in sector of marketing and sustainability of the economic situation of agricultural companies. Advising in sector:</p> <ul style="list-style-type: none"> <li>- Production support and expansion</li> <li>- organizational development of societies</li> <li>- opening up of markets for fruit and vegetable products,</li> <li>- founding of agricultural advising services</li> <li>- management education</li> <li>- further qualification and advising of producers</li> </ul>



Donor/Project	Partners	Duration	Value	Description
				- IP implementation (Integral Production)
<b>SDC Switzerland Implementation: GTZ SME- support in the Fruit and Vegetable Sector Gradačac in Bosnia and Herzegovina (BiH) PN 57.3017 1-001.00</b>	Management for Development and Cooperation (DEZA)	Phase I - III 2000 – 31.03.2007 Phase 4 01.04.2007 31.03.2009	Local budget € 535.332	The main goals for the Phase IV stayed constant and they are: <ul style="list-style-type: none"> <li>• Customer supply with local fruit and vegetable is improved.</li> <li>• The income of the agricultural production companies is higher.</li> <li>• Cross regional market chance for fruit and vegetable agricultural production companies is higher through the effective integration in value chains.</li> </ul> All the project components are sustainably consolidated and committed in the self responsibility of the relevant institutions. <ul style="list-style-type: none"> <li>• PMG Gradacac will be committed to its members, presented through the board, with balanced cash flow and a positive balance until 31.03.2009</li> <li>• PMG Krajina will be supported until 31.03.2008 to the guaranteed company growth out of own finance means.</li> <li>• The organization, conception and financing of the advising ring until 31.03.2009 is consolidated so that an own carry on is possible.</li> <li>• The women support component is committed to the local institutions until 31.03.2008.</li> <li>• The component spreading of IP is integrated into the planned DEZA project regarding IP.</li> <li>• The component youth support will be committed to an own institutional structure until 01.01.2008.</li> </ul>
<b>WORLD BANK Agriculture and Rural Development Project</b>	BiH Government SIDA	From October 1, 2007 to December 31, 2011, with June 30, 2012 set as the closing date	IDA 21 USD million  SIDA 6 USD m  BiH Governmen 9,18 mill. USD	The Project Development Objective is to assist BiH to strengthen the capacity of its State-level and Entity-level institutions to deliver more efficient and effective agricultural services and support programs as well as to make a substantial contribution to an acceleration of BiH's eligibility to access support under the European Union Instrument for Pre-Accession Assistance for Rural Development (IPARD). <p>Key outcome indicators will include:</p> <p>Sixty-percent of disease and pest inspections implemented on the basis of expected risks.</p> <p>Pluralistic, stakeholder driven and outcome based contracted extension services operational at the level of each Entity and benefiting twenty-percent of commercial farmers.</p> <p>One hundred-percent of rural development structural payments made through harmonized, EU IPARD compliant institutions and systems at the level of each Entity.</p> <p>Veterinary Office of BiH implementing effective animal identification system encompassing seventy-percent of cattle, swine and small ruminants.</p> <p>Classical Swine Fever (CSF) test and slaughter program established and incidence of brucellosis reduced by thirty-percent.</p> <p>Administration of BiH for the Protection of Plant Health implementing plant health monitoring and risk</p>

Donor/Project	Partners	Duration	Value	Description
				<p>assessment systems.</p> <p>Food Safety Agency of BiH implementing a risk based food safety system.</p> <p>Entity-level Inspection Directorates are effectively implementing BiH's plant health, animal health and food safety laws and regulations</p> <p>Entity-level Agricultural Information Units established and assembling FADN information from 300 farms.</p> <p>Entity-level Department for Extension with a multi-stakeholder governing body established and has approved CY2010 Entity extension work plan and budget.</p> <p>At least 100 of contracted extension/advisory service providers accredited with specific competencies implementing at least 50 outcome-based extension contracts.</p> <p>Entity-level farm and entitlement registries and Paying Systems established and accredited by the World Bank to disburse Project funds.</p> <p>EU IPARD compliant rural development plans established and overseen by effective Monitoring Committees.</p> <p>Fifty percent of agriculture and rural development funding used for structural payments through a World Bank accredited paying system in each Entity.</p> <p>Hundred percent Project funds disbursed according to plan, timely and accurate completion of all annual operating, training and procurements plans.</p> <p>Beneficiary surveys indicate fifty percent awareness of Project and overall satisfaction with Project activities.</p>
<p><b>SIDA</b>  <b>Economic Development and Employment Creation</b></p>				<p>The support to rural employment has been channeled through six NGOs, which have worked with advisory services to farmers. This support will be phased out during 2008. The World Bank has recently initiated a 3-year development project in the agricultural sector. Sida has decided to partner with the WB by contributing with a complementary grant component.</p> <p>Projects regarding land administration has been supported for six years in order to improve the land registry system and secure property rights which also will have positive effects on the financial market.</p>
<p><b>SIDA</b>  <b>Quality and Regulatory Infrastructure Development for Food Safety and Quality in South East Europe (regional)</b></p>		<p>September 2005  September 2008</p>	<p>Value: 1.5 MEUR</p>	<p>Beneficiaries: Ministry of Foreign Trade and Economic Relations, Food Safety Agency, Accreditation Institute, Foreign Trade Chamber</p> <p>The aim is to provide technical assistance in enhancing the food safety systems of the countries involved and to increase international trade flows.</p>
<p><b>Norway</b>  <b>Support to agro-cultural projects</b></p>				<p>The project support several individual projects in cooperation with Jæren produktutvikling in Norway. Amongst others, the funds are supposed to build, improve and exchange competence between Time and Øksnevad colleges and the equivalent education in Konjic. Support is also given to the sales organisation "Agroneretva" whose goal is to help their members sell their products as well as facilitate the opportunities for export of these. Moreover, continuous training and competence</p>

Donor/Project	Partners	Duration	Value	Description
				development, marketing and economy in agro-cultural matters are receiving extensional attention and are viewed as crucial for future development. In addition, some of the funds are earmarked for research in Srebrenica and Bratunac in order to evaluate possibilities for future agricultural projects in the area.
<b>Spanish Agency for International Cooperation (AECI) Center for Rural Development and Agriculture</b>		From end of 2006-end of 2009	The total value of the project 504, 700 €, 90% contributed by AECI (455,500.€) and 10% (49,200 €) by REDAH.	Overall objective of the project is to improve the level of rural and agricultural development of the Herzegovina Region. Specific goal is to support the creation and consolidation of Centers for Agricultural and Rural Development of Herzegovina Region.  Project beneficiaries are anyone who uses the services of Centers for Rural and Agricultural Development: - Agricultural producers and manufacturers in Herzegovina Region; - Agricultural associations, cooperatives and other types of commercial agricultural associations; - Municipalities from Herzegovina region - Students and academics of Faculty of Agriculture; - Inhabitants of the Herzegovina Region whose livings standards will improve.
<b>Government of Netherlands Export Development Programmes Bosnia-Herzegovina</b>				New programmes (open for application): <ul style="list-style-type: none"> <li>• Engineering Products</li> <li>• Tourism</li> <li>• Pipe and process equipment 2005 - 2012</li> <li>• Subcontracting, Castings and Forgings</li> <li>• <b>Organic and Conventional Food Ingredients for industrial use 2006 -2010</b></li> </ul>
EU forecasted project: Strengthening and harmonization of the BiH Agriculture and Rural Sectors Information System, Bosnia and Herzegovina, EC/BiH/08/015, EuropeAid/126652/C/SER/BA			<b>Indicative budget</b> EUR 1,300,000	
EU forecasted project: Pilot support to the Rural development Programming Bosnia and Herzegovina, EC/BiH/08/017, EuropeAid/126651/C/SER/BA			<b>Indicative budget</b> EUR 1,000,000	
EU forecasted project: Support to Implementation			<b>Indicative budget</b>	

Donor/Project	Partners	Duration	Value	Description
and enforcement of BiH Food Legislation, Bosnia and Herzegovina, EC/BiH/08/018, EuropeAid/126654/C/SER/BA			EUR 1,000,000	
USAID Forecasted Project: Private Sector Competitiveness Development		Multi-annual		Industries: Wood processing, <b>agriculture</b> , tourism and light metal industry
<b>WOOD PROCESSING</b>				
USAID Cluster Competitiveness Activity (CCA)		July 2004 – July 2008	Budget: \$16 million	The overall goal of CCA is to advance economic growth and job creation in BiH by supporting improved competitiveness in the wood processing and tourism industries. CCA provides technical assistance to promote the development of industry clusters, i.e. the private sector firms, financial providers, government and non-government agencies that support the operation of an industry. The project also works to inform cluster companies about global market trends and improve product quality and operational productivity. CCA strengthens connections among cluster companies and their links to export markets, attracting investment to cluster companies and improving their business environment. CCA plays a leading role in coordinating the international community's activities in forestry reform aimed at sustainable economic governance of BiH's forests. The project manages the \$1.5 million "Competitiveness Implementation Fund" and promotes the \$47 million DCA Loan Guarantee facility that supports business finance to the wood processing, tourism and agri-business sectors.
USAID Forecasted Project: Private Sector Competitiveness Development		Multi-annual		Industries: <b>Wood processing</b> , agriculture, tourism and light metal industry
<b>METAL PROCESSING</b>				
GTZ Open Regional Fund Foreign Trade for South-East Europe  "Export support in the Car Supporting Industry through inter-linkage of the car clusters in the Western Balkan"		Phase I 01.01.2007- 31.12.2009	297.000 €	Complete aim of the part measure 1 is to increase the positioning of car support companies in the Western Balkan on the west European and the global market. The strategy includes the combination of coherent measures. Following interventions are planned: <ul style="list-style-type: none"> <li>• Design and architecture of a regional Internet portal, to increase the nationwide and regional acknowledgement of the subcontractor in the Western Balkan. At the same time represents the portal for the regional producer an information and communication basis which facilitates a regional cooperation in the supply chain all the way to the <i>Supply Chain Management</i>.</li> <li>• Support of common sale activities. The establishment of a sales office in Germany which will do marketing for Bosnian, Serbian and Macedonian subcontractors (direct addressing of</li> </ul>

Donor/Project	Partners	Duration	Value	Description
PN 06.2077.3-001.01				<p>potential buyers, Firm pools etc.) is planned.</p> <ul style="list-style-type: none"> <li>Support of other common marketing measures like common fair participation (Automechanika Frankfurt, Z-Messe Leipzig), organization of marketing and cooperation (Congress, cooperation stock exchange), organization of employer delegations to West Europe and organization of business trips of potential customers to companies on the Western Balkan.</li> </ul>
Government of Netherlands Export Development Programmes Bosnia- Herzegovina				<p>New programmes (open for application):</p> <ul style="list-style-type: none"> <li><b>Engineering Products</b></li> <li>Tourism</li> <li><b>Pipe and process equipment 2005 - 2012</b></li> <li><b>Subcontracting, Castings and Forgings</b></li> <li>Organic and Conventional Food Ingredients for industrial use 2006 -2010</li> </ul>
USAID Forecasted Project: Private Sector Competitiveness Development		Multi-annual		Industries: Wood processing, agriculture, tourism and <b>light metal industry</b>
<b>CROSS-CUTTING</b>				
EU EXPRO (Building Export Promotion Capability in BiH)		2006-2008		<p>The overall project objective is to build export promotion capacity in BiH. This will be achieved through implementation of 3 separate project components designed to:</p> <ol style="list-style-type: none"> <li>Provide capacity building support to MoFTER (Ministry of Foreign Trade and Economic Relations) and the FTC (Foreign Trade Chamber), in order to secure an effective institutional framework that can implement a BiH export promotion strategy. The FTC has been appointed as the acting Export Promotion Agency for BiH with the approval of MoFTER</li> <li>Assist the Foreign Trade Chamber in developing international competitiveness and capacity to export in specific sectors</li> <li>Improve access to trade and market information and increase awareness of BiH's export potential among BiH intermediaries and the business community in BiH and internationally</li> </ol>
Government of Netherlands CBI - Centre for Promotion of Imports developing countries - The Netherlands				<p>CBI offers the following services to exporters and business support organizations (BSO's) in selected developing countries:</p> <p><i>EU market information</i></p> <p>A variety of tools to keep exporters and BSO's in developing countries in step with the very latest development on the EU market.</p> <p><i>Company matching</i></p> <p>An on-line facility that links well-versed suppliers in developing countries eligible for CBI assistance to reliable importing companies in the EU.</p> <p><i>Export Development</i></p>

Donor/Project	Partners	Duration	Value	Description
				<p>Export development programmes are designed to assist entrepreneurs in developing countries in entering and succeeding on the EU market and/or consolidating or expanding their existing market share.</p> <p><i>Training</i> Training for exporters and BSO's on, among others, general export marketing and management; trade promotion; management of international trade fair participations; and developing client-oriented market information systems.</p> <p><i>BSO</i> <span style="float: right;"><i>development</i></span></p> <p>The BSO development programme consists of several institutional support modules tailored to the specific needs of selected organisations, countries and sectors.</p>
<b>GTZ Vocational Education and Training PN 06.2117.7-001.00</b>		Total project duration 2004-2009 Current project phase 01.01.07-30.09.09	1.400.000	The VET Project contributes to the implementation of the VET reform in Bosnia and Herzegovina. The VET offers shall be adapted in order to correspond to the economic requirements now and in the future. Important is the compatibility of VET in the EU because of mobility rising of skilled workers and the attractiveness of Bosnia and Herzegovina. The aim of the current project phase is to improve the employability of graduates in public vocational schools. In that matter the project supports the performing of mechanisms and instruments in pilot-schools to improve the cooperation with private economy. Advising measures in the project are: curricula development, professional orientation models, capacity development (local management and professional school staff) regarding new teaching contents and action oriented methodology, as well as school management. <b>Sectors chosen are: metal-processing, wood-processing and electrical engineering.</b> Gender specific subjects are involved automatically
<b>GTZ Local and Regional Economy Support PN 2007.2109.2-001.00</b>		<b>Total Project Duration:</b> 01.2008 – 31.12.2012  <b>Actual Project Phase</b> 01.2008 – 31.12.2009	Total Phase 2.500.000 Euro  Assignment Volume 1.000.000 Euro	The focus of the Project is the „sustainable economic development“, and it runs at the Meso level, but it includes interventions at the macro level as well as at the micro level. The regional and local support and economic organizations shall contribute to the support of the new project to set impulses for a dynamic support policy which guides the public sector as well as entrepreneurs, associations and service providers to give their support to the increase of market concurrency. The contribution of the project compared to the measures of other donors is to dispose instruments and strategies for regional economy support and at the same time to support the coordination between regional and local development agencies. Support components of the project are advising, education and training for the partner organizations, equipment delivery for innovative supports and local allowances for pilot projects.
<b>SIDA Economic Development and Employment Creation</b>	Governments of Great Britain and the Netherlands	2008-2011	An initial funding of EUR 11 million	Together with Great Britain and the Netherlands, Sweden contributes to the funding of the Enterprise Sector Recovery Fund (ESRF), which will work with relevant state and entity ministries addressing a number of structural economic problems.
<b>SIDA</b>				Sida has made substantial contributions to the strengthening of the micro credit organisations of

Donor/Project	Partners	Duration	Value	Description
<b>Economic Development and Employment Creation</b>				Bosnia-Herzegovina. Sida has also worked with the Regional Development Agencies of Bosnia-Herzegovina; the one in northeast Bosnia (Tuzla) is called NERDA and covers 34 municipalities from both entities. Sida's cooperation with NERDA is planned to continue until 2010 and aims at improving conditions for employment growth at small and medium-sized enterprises in the northeast.
<b>SDC-SECO SIPPO: Swiss Import Promotion Programme</b>		2004-2007. A follow-up mandate is in progress.		Since 1999, SIPPO promotes import to Switzerland and Western Europe of products from developing and transition countries, including Bosnia and Herzegovina. It familiarizes local exporters with European norms and standards, quality requirements and import regulations, custom regulations and charges; gives in-depth support in the fields of design, quality management and product adjustment and support to producers with general sales promotion; identifies exportable products; trains locals in marketing and export processing and supports participation at international trade fairs. Access to European markets in the domains of jewelry & handicrafts, toys, <b>furniture &amp; home textiles, garden &amp; office furniture, wood for industrial purposes, technical products &amp; electronics, castings, forgings &amp; vehicle parts</b> , plastic & rubber, <b>machine parts &amp; electronics</b> , garments & textiles, software.
<b>SDC-SECO SOFI/SECO Start-up Fund (SSF)</b>		1997-2007 (SOFI) / 2009 /SSF)		The Swiss Organisation for Facilitating Investments ( <b>SOFI</b> ) is a joint initiative of SECO and KPMG Switzerland. SOFI is a consultancy firm conceived as a one-stop-shop to encourage, facilitate and contribute to the effective implementation of investment projects in development and transition countries. To this end, SECO has given SOFI a mandate to provide the following public services: <ul style="list-style-type: none"> <li>• Promote in OECD countries the idea of investing in developing and transition countries</li> <li>• Disseminate information on investment conditions and opportunities in developing and transition countries</li> <li>• Conducting on-the-job training for local partner institutions</li> <li>• Consulting services at project level: investment strategy, feasibility studies, business planning, partner search, due diligence, financial structuring, and support for clients during the project implementation phase.</li> </ul> SECO has also mandated SOFI to administer a credit line, the <b>SECO Start-up Fund (SSF)</b> . This fund finances up to 50 percent of costs incurred by Swiss companies during the start-up phase of an investment project in a SECO partner country.
<b>IFC Sub-national Competitiveness</b>				This project aims to stimulate competition for investment among localities and to reduce the cost and risk of doing business by: <ul style="list-style-type: none"> <li>• Designing and implementing procedures to systematically improve the quality of the stock and flow of regulations on the national and local levels since local reforms must be linked to national reforms in order to address issues in the BEE that are beyond the control of localities.</li> <li>• Improving transparency by establishing registers of regulations and procedures related to business licenses, permits, and inspections that will be accessible to the general public and regularly updated;</li> </ul>

Donor/Project	Partners	Duration	Value	Description
				<ul style="list-style-type: none"> <li>Assisting in the implementation of the simplified administrative procedures and building on e-government platform for service delivery;</li> <li>Building the capacity of local officials to implement and sustain the reforms.</li> <li>Measuring impact of reforms</li> </ul> <p>The Sub-national Doing Business study will capture differences in business regulations and their enforcement across 22 localities in South East Europe, based on the following indicators:</p> <ul style="list-style-type: none"> <li>Starting a business</li> <li>Dealing with licenses (construction permits)</li> <li>Registering property</li> <li>Enforcing contracts</li> </ul> <p>These localities can compare their business regulations with other locations in the country or region and with other locations around the world. The Sub-national Doing Business report:</p> <ul style="list-style-type: none"> <li>Captures country and regional differences in regulations and their enforcement by all levels of government</li> <li>Fosters competition among locations to improve business regulation and put reforms on the political agenda</li> <li>Allows cities to tell their story and compare themselves with each other and with 178 economies</li> <li>Creates a tool for specific locations to compete globally</li> <li>Measures progress over time through repeated benchmarking</li> </ul>
<b>IFC Southeast Europe International Standards and Technical Regulations Program</b>	Royal Norwegian Ministry of Foreign Affairs			IFC Southeast Europe International Standards and Technical Regulations Program is assisting companies in Albania, Bosnia and Herzegovina, Macedonia, and Serbia to increase their awareness about international standards and technical regulations and provide both companies and local service providers with a range of topical training and consulting services relevant to specific industries.
<b>SDC-SECO and IFC PEP SE Corporate Governance Program</b>	IFC PEP SE	2005-2008	SECO Contribution: USD 2.7m	<p>The PEP SE Corporate Governance program is a three-year technical assistance operation implemented by the International Finance Corporation (IFCP) and funded by SECO. The main goal of the Program is to improve Corporate Governance of companies and banks through training and advisory services and by strengthening the overall environment for corporate governance, through awareness raising at different levels, policy and legislative advice and education of different stakeholders. This goal will be supported by four activities:</p> <ul style="list-style-type: none"> <li>Assist companies and banks to implement good corporate governance practices; thus improving the quality of business lending and access to affordable capital, increasing their decision-making capacity and operational efficiency, and enhancing their reputations.</li> <li>Develop an effective corporate governance framework; in support of open and transparent markets able to attract investment, as well as a fair, rule-based and enforceable regime.</li> <li>Increase the training capacity of educational institutions; thus helping these to train the next</li> </ul>



Donor/Project	Partners	Duration	Value	Description
				<p>generation of investors, directors, managers and other stakeholders on good corporate governance.</p> <ul style="list-style-type: none"> <li>• Increase public awareness of corporate governance issues.</li> </ul> <p>The impact of the program will be that beneficiary companies operate more effectively, have better access to finance, can attract foreign investment, and improve potential entry or expansion into the EU and other international markets.</p>
<b>UNDP ICT for Development - ICT4D</b>				<p>UNDP ICT for Development (ICT4D) portfolio has six projects:</p> <ul style="list-style-type: none"> <li>➤ e-Government Project</li> <li>➤ Legislation Database Project</li> <li>➤ Growing Sustainable Business</li> <li>➤ eLegislation Reform Project</li> <li>➤ Global Compact</li> <li>➤ eSEEurope Initiative</li> </ul>
<p>EU forecasted project: EU Support to institutional capacity building for Regional Economic Development, Bosnia and Herzegovina, EC/BiH/08/029, EuropeAid/126861/C/SER/BA</p>			<p><b>Indicative budget</b> EUR 2,500,000</p>	
<p>EU forecasted project: Building in the Capacity to promote exports and develop the export base in BiH, EC/BiH/08/023, EuropeAid/126850/C/SER/BA</p>			<p><b>Indicative budget</b> EUR 1,500,000</p>	

**Annex 5: List of WEB Pages – Standards and Certifications**

## List of WEB Pages – Standards and Certifications

Standards	Institution/Internet sources
Mandatory	
<ul style="list-style-type: none"> <li>EU food quality and safety related legal measures implementing e.g. ISO, EN (European Standards) and HACCP</li> </ul>	<a href="http://www.iso.org/iso/iso_catalogue/management_standards.htm">http://www.iso.org/iso/iso_catalogue/management_standards.htm</a> <a href="http://www.cen.eu/cenorm/standards_drafts/index.asp">http://www.cen.eu/cenorm/standards_drafts/index.asp</a> <a href="http://en.wikipedia.org/wiki/Hazard_Analysis_and_Critical_Control_Points">http://en.wikipedia.org/wiki/Hazard_Analysis_and_Critical_Control_Points</a>
<ul style="list-style-type: none"> <li>EU EMAS environmental management regulation (but voluntarily to obtain)</li> </ul>	<a href="http://ec.europa.eu/environment/emas/index_en.htm">http://ec.europa.eu/environment/emas/index_en.htm</a>
<ul style="list-style-type: none"> <li>EU Eco label regulation (but voluntarily to obtain)</li> </ul>	<a href="http://ec.europa.eu/environment/ecolabel/index_en.htm">http://ec.europa.eu/environment/ecolabel/index_en.htm</a>
<ul style="list-style-type: none"> <li>EU organic food regulation standard and related certificate</li> </ul>	<a href="http://ec.europa.eu/agriculture/qual/organic/index_en.htm">http://ec.europa.eu/agriculture/qual/organic/index_en.htm</a>
<ul style="list-style-type: none"> <li>Agricultural EU-legislation on Protected Designation of Origin (PDO) / Protected Geographical Indication (PGI), TSG (Traditional Speciality Guaranteed) (but voluntarily to obtain)</li> </ul>	<a href="http://ec.europa.eu/agriculture/foodqual/quali1_en.htm">http://ec.europa.eu/agriculture/foodqual/quali1_en.htm</a>
Voluntary/B2B-required	
<ul style="list-style-type: none"> <li>HACCP</li> </ul>	<a href="http://en.wikipedia.org/wiki/Hazard_Analysis_and_Critical_Control_Points">http://en.wikipedia.org/wiki/Hazard_Analysis_and_Critical_Control_Points</a>
<ul style="list-style-type: none"> <li>'Clean production' certificate</li> </ul>	Different approaches e.g. by SEED in WorldBank Project <a href="http://www-wds.worldbank.org/servlet/WDSContentServer/WDSP/IB/2002/01/18/000094946_020103_10121683/Rendered/PDF/multi0page.pdf">http://www-wds.worldbank.org/servlet/WDSContentServer/WDSP/IB/2002/01/18/000094946_020103_10121683/Rendered/PDF/multi0page.pdf</a>
<ul style="list-style-type: none"> <li>IP' (integrated production) certificate</li> </ul>	Different approaches e.g. by Swiss IOBC <a href="http://www.iobc.ch/ip_principles.html">http://www.iobc.ch/ip_principles.html</a>
<ul style="list-style-type: none"> <li>UNECE standards on fresh fruits and vegetables</li> </ul>	<a href="http://www.unece.org/trade/agr/standard/fresh/fresh_e.htm">http://www.unece.org/trade/agr/standard/fresh/fresh_e.htm</a>
<ul style="list-style-type: none"> <li>ISO standards (e.g. ISO 9001:2000/ISO 14001 environmental management standards)</li> </ul>	<a href="http://www.iso.org/iso/iso_catalogue/management_standards.htm">http://www.iso.org/iso/iso_catalogue/management_standards.htm</a>
<ul style="list-style-type: none"> <li>ISO 22000</li> </ul>	<a href="http://www.iso.org/iso/iso_catalogue/catalogue_tc/catalogue_detail.htm?csnumber=35466">http://www.iso.org/iso/iso_catalogue/catalogue_tc/catalogue_detail.htm?csnumber=35466</a>
<ul style="list-style-type: none"> <li>GLOBALGAP (=EUREPGAP)</li> </ul>	<a href="http://www.globalgap.org">www.globalgap.org</a>
<ul style="list-style-type: none"> <li>GMP (Good Manufacturing Practicing)</li> </ul>	<a href="http://en.wikipedia.org/wiki/Good_manufacturing_practice">http://en.wikipedia.org/wiki/Good_manufacturing_practice</a>
<ul style="list-style-type: none"> <li>KRAV</li> </ul>	<a href="http://www.krav.se/sv/System/Spraklankar/In-English/">http://www.krav.se/sv/System/Spraklankar/In-English/</a>
<ul style="list-style-type: none"> <li>IMO</li> </ul>	<a href="http://www.imo.ch/index.php?seite=imo_index_en">http://www.imo.ch/index.php?seite=imo_index_en</a>
<ul style="list-style-type: none"> <li>OK</li> </ul>	<a href="http://organskakontrola.ba/o-nama1.htm">http://organskakontrola.ba/o-nama1.htm</a>
<ul style="list-style-type: none"> <li>NOP (National Organic Program) for US market</li> </ul>	<a href="http://www.ams.usda.gov/NOP">www.ams.usda.gov/NOP</a>
<ul style="list-style-type: none"> <li>DIN standards</li> </ul>	<a href="http://www.din.de/cmd?level=tpl-home&amp;languageid=en">http://www.din.de/cmd?level=tpl-home&amp;languageid=en</a>
<ul style="list-style-type: none"> <li>UK soil association certificate</li> </ul>	<a href="http://www.soilassociation.org/">http://www.soilassociation.org/</a>
<ul style="list-style-type: none"> <li>BIO SUISSE</li> </ul>	<a href="http://www.bio-suisse.ch/en/consumer/bud/index.php">http://www.bio-suisse.ch/en/consumer/bud/index.php</a>
<ul style="list-style-type: none"> <li>FAIRWILD</li> </ul>	<a href="http://www.fairwild.org/">http://www.fairwild.org/</a>