Strategy for increasing competitiveness and attracting investments in dairy, fruits and vegetable value chains in Federation of Bosnia and Herzegovina

July 2014

Contents

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Acronyms and abbreviations

BiH - Bosnia and Herzegovina
CBBiH - Central Bank of Bosnia and Herzegovina
FBiH - Federation of Bosnia and Herzegovina
FDI - Foreign Direct Investments
FIPA - Foreign Investment Promotion Agency of BiH
IRM - Investment Reform Map
M&A - Merge and Acquisition
MOFTER - Ministry of Foreign Trade and Economic Relations of BiH
R&D - Research and Development
RS - Republika Srpska
SEE - South-East Europe
UNCTAD – United Nations Conference on Trade and Development

1.0. INTRODUCTION

This Strategy and data are based on the detailed agribusiness competitiveness study done in 2013, as a part of IFC assistance to Federal Ministry of Agriculture, Water Management and Forestry (FBiH), assessed the present competitiveness of agribusiness Value Chains (VCs). The results showed that dairy, fruit and vegetable sub-sectors although most competitive in FBiH, rank less competitive than their immediate competitors in the region. For this reason, this Strategy focuses on increasing competitiveness and attracting investments in these two sub-sectors. Government of Federation BiH authorized ministry to prepare this Strategy and propose for adoption.

1.1. SUMMARY OF THE SECTOR

In 2011 agriculture contributed 7.6% to BiH GDP. Nevertheless, BiH has a persistent trade deficit (approx. 22% of total GDP in 2009) with agriculture and food sector accounting for the most significant share (circa 30% equating to €970 million in 2009) and with only 35% to 40% of BiH food needs being met by local producers.

Although permanently decreasing, agriculture as a share of FBIH GDP is still relatively high as compared to the developed and highly developed countries. In 2012 the share of agriculture gross value added in the FBIH GDP structure was 4,5% which was 0,6% lower than in 2011.

Agricultural products did not significantly contribute to the FBIH external trade. This statement is supported by the fact that in 2012 the external trade volume of agricultural products amounting 68,8 million KM, contributed only 1,31% to the total trade volume.

In 2012 and previous years the agriculture in FBIH had a negative foreign trade balance. In 2012, the value of exported agriculture products was 68,8 million KM, and the value of imported agricultural products was 403 million KM; the export-import balance was 17%. In comparison with 2011, in 2012 the foreign trade deficit of agricultural products was increased by 1,3% or 3,9 million KM. In 2012 the share of agriculture products export in the total FBIH export was 1,31%, and the share of agri import in the total FBIH import was 4,05%.

According to data from 2012, FBIH is particularly strong in the three sectors (with a share in GDP):

- Agriculture, forestry and fishing 8,6%;
- Manufacturing 23,1%;
- Trade /Wholesale and retail 26,6%;

One of the ways to improve the efficiency of development and operations of SMEs is by stimulating "organic cluster development", i.e. strengthening of their competitiveness through mutual connections and collaboration. This is of particular importance when it comes to connecting education, science and production with the aim of mastering new technologies, job creation and entering new markets. In that regard, it is necessary to consider the contribution targeted FDI can make towards creating innovation clusters whose members would be enterprises which produce high value added products, universities, institutes, research institutions and others.

The above mentioned sectors have the willingness to export but the quality of products the turnover of new producers and the face pace of changing customers' needs present serious barriers to their success. A comprehensive and systematic approach to mitigate identified barriers including much faster responses to market trends, and better quality infrastructure, can improve the competitiveness of these sectors and bring them closer to the club of developed countries.

1.2. FDI trends in Balkans[1]

The summary covers foreign direct investment (FDI) trends by all companies investing in six destination countries between January 2010 and February 2014. Capital investment and jobs created has not been recorded for all projects. Averages are based only on projects that have data recorded.

1.2.1. Summary

FDI projects peaked in 2012
Some 230 projects, or 25.8% of projects, were recorded in 2012. This was the year in which the highest numbers of projects were recorded. During this period a total of 12,155 jobs were created and USD 2.79 billion capital was invested by these projects, equating to a 23.6% and 20.8% of total jobs and capital investment respectively.

Domestic Market Growth Potential key motive for investors
Domestic Market Growth Potential was the top motive cited by companies for 41.5% of projects. This was followed by regulations or business climate and skilled workforce availability at 30.2% and 22.6%, respectively.

Key investors account for more than one-third of projects.
The top 10% of investors have created a total of 314 projects, 35% of the total projects. These investors have created a combined total of 19,677 jobs, which equates to almost two-fifths of the overall total. The combined capital investment from these companies reached USD 2.98 billion, equating to more than one-fifth of the total for all companies.

Textiles is top sector with almost one-sixth of projects.
Out of a total of 38 sectors, Textiles accounted for 14.6% of projects. Project volume in this sector peaked during 2012, with 39 projects tracked. Total jobs creation and capital investment in this sector was 9,144 jobs and USD 211.10 million respectively.

Largest projects originate in Turkey
With an average project size of USD 133.50 million, projects originating in Turkey are approximately two and a half times larger than the average across all source countries. Ranked seventh in overall projects recorded with 32 in total, Turkey created a total of 2,343 jobs and USD 1.34 billion capital investment.

Serbia attracts almost half of projects.
Out of a total of six destination countries, Serbia is the top destination country, accounting for almost half of projects tracked. Total investment into Serbia resulted in the creation of 33,295 jobs and USD 7.94 billion capital investment, equating to an average of 264 jobs and USD 52.60 million investment per project.

[1] source: Trends Report – Balkans Jan 2010 to Feb 2014, fdimarkets.com

1.2.2. Key FDI Trends

Between January 2010 and February 2014 a total of 893 FDI projects were recorded, equating to a 1.2% share of global FDI. These projects represent a total capital investment of USD 13.41 billion, which is an average investment of USD 49.70 million per project. During the period, a total of 51,588 jobs were created.

The largest number of projects was announced in 2012, with 230 projects that year equating to a 1.3% share of global FDI. Average capital investment peaked in 2013, while average job creation peaked in 2011.

Table 1: Headline FDI trends by year

Year	**Number of projects**	**% growth per annum**	**Jobs created**		**Capital investment**	
			Total	**Average**	**Total (USD m)**	**Average (USD m)**
2014	37	n/a	3,105	310	488.50	54.30
2013	216	n/a	10,335	184	3,242.70	56.90
2012	230	n/a	12,155	270	2,792.70	45.80
2011	230	27.8	17,480	317	3,524.00	45.20
2010	180	n/a	8,513	193	3,360.10	51.70
Total	**893**	**n/a**	**51,588**	**245**	**13,408.10**	**49.70**

Source: fDi Intelligence from The Financial Times Ltd

In terms of project type, 89.7% of projects are new investments. New projects have an average capital investment of USD 53.30 million and job creation of 255 per project.

The average capital investment for expansion and co-location is USD 29.50 million and USD 57.40 million respectively. The average number of jobs created in these project types is 202 and 14 respectively.

The motives for investment were cited by companies for 53 projects. The key reasons for investment were domestic market growth potential, regulations or business climate, skilled workforce availability, in that order.

1.2.3. Industry Analysis

Out of a total of 38 sectors, the top five account for more than two-fifths of projects. Textiles is the top sector accounting for almost one-sixth of projects tracked. Project volume in this sector peaked during 2012, with 39 projects tracked.

Automotive Components has generated the highest number of total jobs and has the largest project size, with 481 jobs per project. Alternative/Renewable energy has both the highest total and highest average investment at USD 4.23 billion overall and USD 141.00 million per project.

Table 2: FDI trends by sector

Sector	No of projects	Jobs Created		Capital investment	
		Total	Average	Total (USD m)	Average (USD m)
Textiles	130	9,144	351	211.10	14.10
Food & Tobacco	107	3,353	209	532.50	16.10
Financial Services	52	35	5	26.80	13.40
Alternative/Renewable energy	49	1,745	436	4,228.80	141.00
Consumer Products	47	2,096	161	222.80	18.60
Real Estate	46	0	0	2,324.00	136.70
Automotive Components	42	15,412	481	575.10	21.30
Business Services	40	908	113	100.80	25.20
Transportation	39	2	2	82.70	41.40
Software & IT services	34	452	50	7.00	7.00
Other sectors	307	18,441	194	5,096.50	40.10
Total	**893**	**51,588**	**245**	**13,408.10**	**49.70**

Source: fDi Intelligence from The Financial Times Ltd

Out of a total of 18 business activities, the top five account for the majority of projects. Manufacturing is the top business activity accounting for almost one-third of projects tracked. Project volume in this business activity peaked during 2011, with 77 projects tracked.
Electricity has both the highest total and highest average investment at USD 4.62 billion overall and USD 170.90 million per project. Manufacturing has generated the highest number of total jobs, while Construction has the largest project size with 485 jobs per project on average.

Table 3: FDI trends by business activity

Business activity	No of projects	Jobs Created		Capital investment	
		Total	Average	Total (USD m)	Average (USD m)
Manufacturing	278	41,248	286	4,090.30	24.50
Retail	223	2,146	214	387.80	21.50
Sales, Marketing & Support	107	524	52	24.60	12.30
Business Services	85	211	17	43.80	7.30
Construction	56	970	485	3,131.10	125.20
Electricity	41	1,125	375	4,615.00	170.90
Logistics, Distribution & Transportation	41	1,312	218	286.40	23.90
Design, Development & Testing	15	336	67	8.70	8.70
ICT & Internet Infrastructure	11	0	0	0.00	0.00
Customer Contact Centre	7	945	157	1.10	1.10
Other business activities	29	2,771	230	819.20	74.50
Total	**893**	**51,588**	**245**	**13,408.10**	**49.70**

Source: fDi Intelligence from The Financial Times Ltd

1.2.4. Important Companies

A total of 556 companies invested in six destination countries between January 2010 and February 2014, out of a total 25,692 companies investing in FDI globally.

The top 10 companies accounted for a combined total of 123 projects (13.8% of projects). Within the past 12 months, eight of the top 10 companies have announced projects, with Agrokor being the top investor for this period with eight projects.

Table 4: Top 10 companies: number of projects

Company name	*Source country*	*No of projects*	*Global projects**	*% of global projects***	*Projects in last 12 mths*
Schwarz Beteiligungs (Schwarz Gruppe)	Germany	23	411	5.5	7
Inditex	Spain	21	542	3.8	5
Mercator	Slovenia	14	50	28	2
Gazprom	Russia	13	147	8.8	1
New Yorker	Germany	12	112	10.7	0
Agrokor	Croatia	11	18	61.1	8
Jysk Holding	Denmark	8	51	15.6	4
Metro	Germany	7	481	1.4	1
Deutsche Telekom	Germany	7	121	5.7	3
Petrol	Slovenia	7	10	70	0

*Total number of projects worldwide from the company regardless of report criteria.
** The share of global projects from the company which match report criteria.
Source: fDi Intelligence from The Financial Times Ltd

The top 10 companies account for 1.9% of job creation and 3.4% of capital investment. Collectively, they create smaller projects in terms of job creation at 8 jobs on average. These companies generally provide lower capital investment at an average of USD 3.76 million per project.

During the period March 2013 to February 2014, 59 projects were announced by 54 companies that had not previously had a project recorded by fDi Markets since 2003.

These investments created a total of 2,887 jobs and generated USD 1,860.05 million capital investment. To provide perspective on the size of these companies, the majority of these companies have a turnover of USD 9 million or less.

Out of a total of six destination countries, Serbia is the top destination country, accounting for almost half of projects tracked. Project volume in this destination country peaked during 2013, with 118 projects tracked.

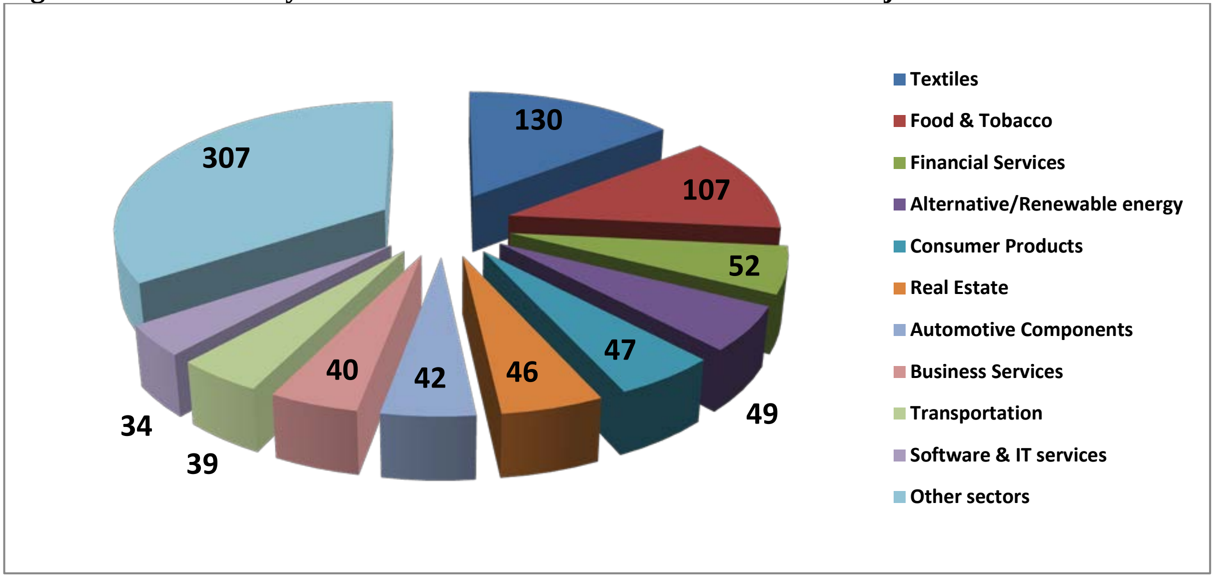
Serbia has received the highest number of total jobs and greatest investment with a total of 33,295 jobs and USD 7.94 billion investment. Montenegro and Albania have the largest project size on average in terms of investment and jobs creation, respectively.

Table 5: Top 10 companies: number of projects

Destination country	*No of projects*	*No of companies*	*Jobs Created*		*Capital investment*	
			Total	*Average*	*Total (USD m)*	*Average (USD m)*
Serbia	439	336	33,295	264	7,938.10	52.60
Croatia	181	132	3,050	127	1,814.80	56.70
Bosnia-Herzegovina	111	94	2,947	117	979.20	32.60
Macedonia FYR	103	95	11,746	345	1,507.80	33.50
Montenegro	30	30	0	0	1,036.40	148.10
Albania	29	25	550	550	131.70	26.30
Total	**893**	**626**	**51,588**	**245**	**13,408.10**	**49.70**

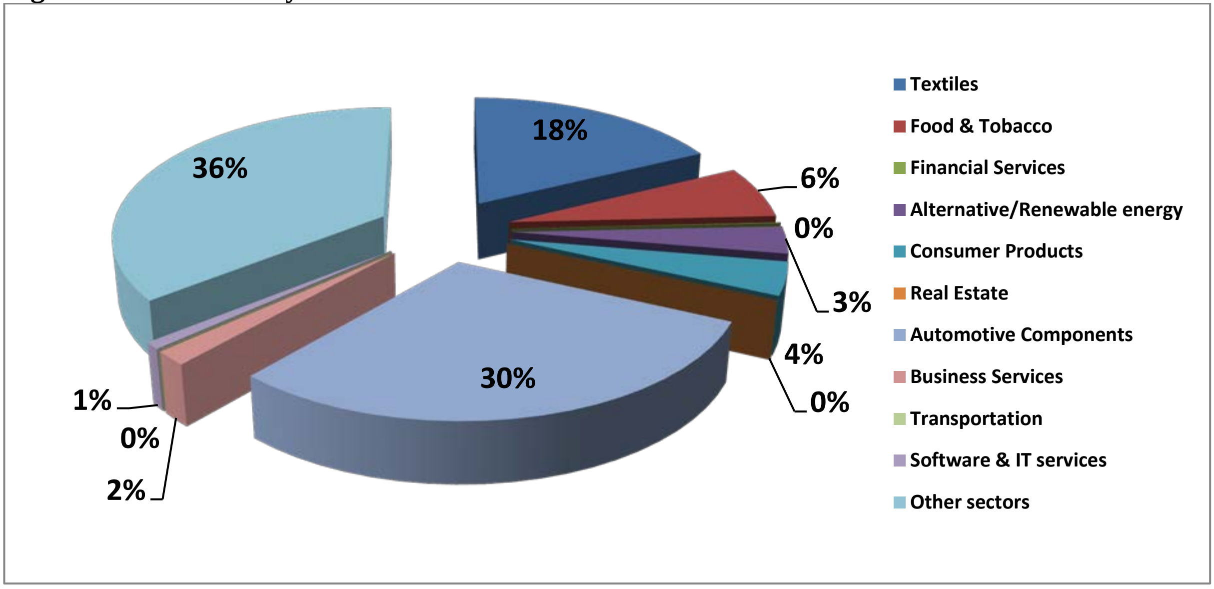
Source: fDi Intelligence from The Financial Times Ltd

Figure 1. FDI trends by sector - Jan 2010 to Feb 2014 - Number of Projects



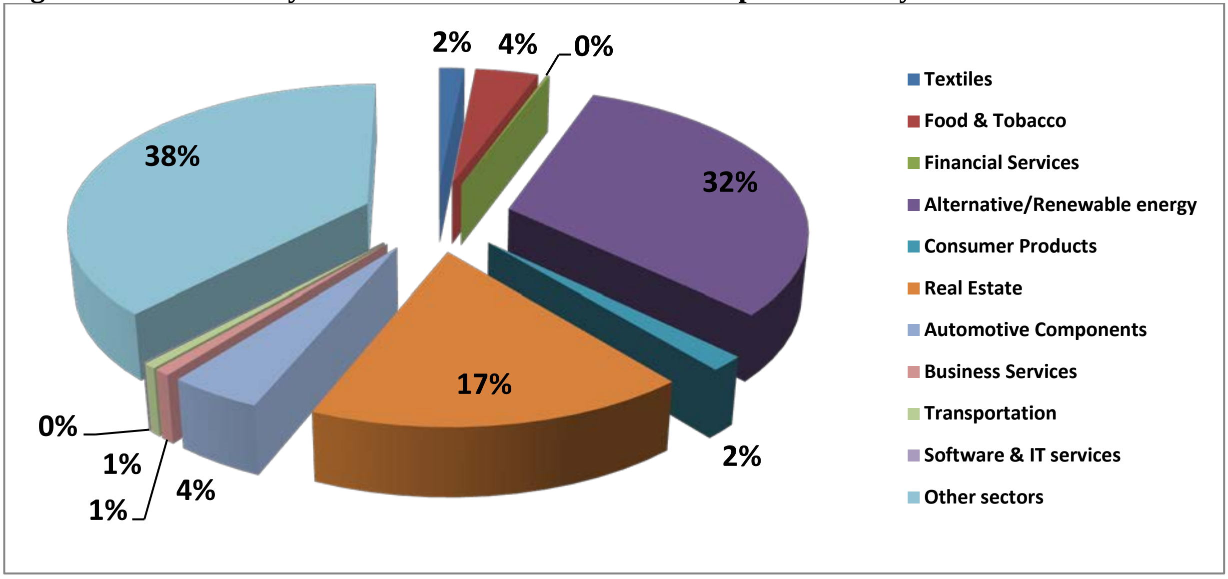
source: calculation based on Trends Report – Balkans Jan 2010 to Feb 2014, fdimarkets.com

Figure 2. FDI trends by sector - Jan 2010 to Feb 2014 – Jobs Created %



source: calculation based on Trends Report – Balkans Jan 2010 to Feb 2014, fdimarkets.com

Figure 3: FDI trends by sector - Jan 2010 to Feb 2014 – Capital Intensity %



source: calculation based on Trends Report – Balkans Jan 2010 to Feb 2014, fdimarkets.com

With ICT along with business, financial and IT-enabled services accounting for almost half of all FDI decisions throughout Europe in 2012, this should serve as an early indicator for the Federation of Bosnia and Herzegovina in terms of providing the investment policy cornerstones now in order to better anticipate and respond to the changing dynamics of FDI in the future. In the short term, FYR Macedonia is one useful example to look at, recognizing its dramatic improvement in FDI performance.

1.2.5. FYR Macedonia

FYR MacedoniaFYR Macedonia now ranks 23rd in the World Bank Doing Business 2013 report, ahead of France, Austria along with Switzerland and close to Germany for ease of doing business. The country’s ambitious reform agenda has clearly given FYR Macedonia a competitive edge. While capital intensity of FDI projects declined in FYR Macedonia in 2012, the FDI decision flow, set against a recessionary backdrop, has been noteworthy as shown in the table below. Most importantly, adding new 8,000 jobs is the most important – far beyond amount of investment. Whether or not Macedonia’s grant and free zone regime represents value to tax payers and would satisfy close cost benefit analysis scrutiny is debatable. Nevertheless, for every mobile investment project FBiH loses, there is also an opportunity cost which must be borne in mind.

Table 6: FYR Macedonia becomes major recipient of FDI – deal FDI flow over last 15 months to March 2013

Company	Planned activity	Investment	New Jobs	Comments
Eurohold Bulgaria	Photovoltaic production	EUR 15 million	115	100% export
Istem Medical Turkey	Medical devices	EUR 22 million	300	Technologically advanced investment
Draexlmaier Germany	Automotive components for	EUR 30 million	4,000	This will act like catalyst for additional automotive investment

	Mercedes			
Kemet Electronics USA	Electrolytic capacitors	EUR 15 million	400	Parent is $1 billion sales company – new facility is 11,200 m^2
Kromberg & Schubert Germany	Automotive parts	EUR 20 million	2,500	Parent group employs 24,000
Protek Russia	Homeopathic Medicine	EUR 5 million	130	One of Russia's largest pharmaceutical companies employing 12,000
Van Hool Belgium	Bus manufacturing	EUR 20 million	500	Plan to produce 400 busses a year for USA market – company is largest integrated bus manufacturer in Europe
Teknohose Italy	Hoses for automotive sector	EUR 10 million	200	Like many other investors they selected the Technological – Industrial Zone near Skopje airport
Motherson India	Rear view mirrors for cars	EUR 12	140	Motherson is one of the largest producers of rear view mirrors in the world
Indicative total of sample investments		EUR 149 million	**Expected new jobs created** circa 8,300	

Table 7: Republic of Serbia – deal FDI flow over last 15 months to March 2013

Company	Planned activity	Investment	New Jobs	Comments
Fulgar Italy	Textile	EUR 10 million	100	Reinvestment of the Italian synthetic yarn maker. The new plant will increase overall production by 40%, adding another 100 jobs to the 115 workers Fulgar already employs.
Henkel Germany	Chemicals/ Soap, cleaning compounds, & toilet preparation	EUR 3,5 million	60	Henkel has been present at the Serbia market of 11 years. In 2002 Merima Kruševac became part of the **Henkel** CEE group.
Henkel Germany	Chemicals/ Soap, cleaning compounds, & toilet preparation	EUR 7 million	30 Reinv	Reinvestment that was announced in the occasion of 10th anniversary of the company in Jan 2012
Lamda Development/ Latsis Group Greece	Real Estate/ Commercial and Institutional Building	EUR 387,5 million	3,000	Lamda Development represents one of the most respected investment companies in Europe and in the world.
Clover Technologies/ Clover Holdings USA	Business Machines&Equipment	EUR 17 million	200	The company has 34 facilities in 14 countries providing global support. Monochrome laser R&D located in Ottawa Illinois and Novi Sad, **Serbia.**
GEOX Italy	Footwear	EUR 15,5 million	1.250	The government of Serbia will provide 9,000 euros for each new job. Production is expected to begin in 2014, Annual capacity to produce 1.25 million pairs of shoes.
Airbus/ EADS Netherlands	Aircrafts	EUR 63 million	250	Education & Training
Continental Wind Partners USA	Renewable energy/ Wind electric power	EUR 416 million	136	CWP has been active in Serbia since 2009, It moved its London head office to Belgrade to run their European activities. In the next four years CWP plans to invest into the development of Cibuk wind park, in the Kovin municipality, with an

				installed capacity of 300 MW and with the possibility of extending to the city of Pancevo. The wind park will provide electric power for about 30,000 households.
Higson Group Hong Kong	Textile/ Clothing	EUR 4 million	500	Higson Group specialises in design, production and distribution of textile garments. Best known for its Iguana sportswear brand. It plans to export its Serbia-made products to the EU, Russia and other countries with which Serbia has free trade agreements.
Naftna industrija Srbije/ Gazprom Russia	Chemicals	EUR 75,5 million	1.144	Co-location
Rosati Industria Vetro Italy	Glass&Glass products	EUR 5 million	202	Under the Investment Support Program implemented by the Serbian Investment and Export Promotion Agency (SIEPA), the Italian company will receive the employment incentive equal to €7,000 per a new employee.
Delhaize Group Belgium	Food & Tobacco	EUR 15 million	183	Food retailing from Belgium operating in 11 countries in 3 continents.
Tigar Tyres/ Michelin France	Tyres	EUR 171 million	700	Most of the tyres produced in Serbiawill supply fast-growing markets in Russia, Central and Eastern Europe, Africa and the Middle East. The latest move enhances Michelin's strategy to strengthen its presence in the entry-level market segment, which it projects will grow 30% worldwide over the next 10 years.
Magna International Canada	Car seat covers	EUR 5,5 million	132	Magna International **is** the world's fourth-largest auto supplier. Magna Seating Chomutov, a unit of Magna International, has been granted free of charge land in Serbia's Odzaci for the construction of a plant.
Albon Engineering & Manufacturing UK	Motor vehicles gasoline engines & Engine parts	EUR 7,5 million	200	Large independent manufacturing and design company specializing in the machining and assembly of engine components for automotive and diesel manufacturers world-wide.
Greiner Packing/ Greiner Austria	Plastics Packing Material & Unlaminated Film	EUR 6,5 million	100	Greiner Packaging Serbia has acquired the a Serbian dairy producer Hipol.
Jeanci Turkey	Clothing	EUR 5,5 million	500	Jeanci plans production for brands that include Cavalli, Ferre and Versace and will increase workforce tenfold to 1,150 when it completes the plant in the southern city of Leskovac in 2014,
Boral Alumynium Turkey	Aluminum profiles and truck trailer doors	EUR 54 million	300	The state will subsidize the investment project with total of EUR 10 million,

Confezioni Andrea Italy	Textile	EUR 9 million	500	The leading company in the luxury car covers sector in Italy and in Europe. The factory in Serbia is the biggest plant of the company.
Greenworks Holdings Belgium	Waste management&Remedies	EUR 69 million	879	Clinical waste management plant built in compliance with the strictest European ecological and safety standards
Grundfos Denmark	Industrial Machinery & Equipment	EUR 51 million	350	One of Denmark's largest companies and the largest pump manufacturer is operating in almost 50 countries. The Serbian facility will supply growing markets including Russia.
Swarovski Cristalware Austria	Jewelry	EUR 15 million	600	In March 2012, the town of Subotica granted Swarovski 7.8 hectares of publicly-owned land for the factory.
Indicative total of sample investments		EUR 1.413 million	**Expected new jobs created** circa 11.316	

Table 8: Republic of Croatia – deal FDI flow over last 15 months to March 2013

Company	**Planned activity**	**Investment**	**New Jobs**	**Comments**
Galapagos Belgium	Biotechnology/ R&D	EUR 57,5 million	100	Fidelta in Croatia is a new drug discovery service company and third service division of Galapagos, a clinical stage biotech company focused on developing novel medicines.
Ryanair Ireland	Air Transportation	EUR 53 million	281	Low budget Ryanair's first base in the former Yugoslavia and 54th in Europe with 16 new routes in the UK and Europe.
Vodafone Italia	Communications	EUR 5 million	130	Customer contact center established in Croatia following the company decision to move its call centre away from Italy.
Karlovacka pivovara/ Heineken Netherland	Beverages	EUR 6 million	26	Expansion
Krka Farma Zagreb/ Krka dd Novo Mesto Slovenia	Pharmaceutical	EUR 4 million	16	Expansion
HB Reavis, Luxembourg	Commercial & institutional building construction	EUR 61 million	799	The company's first investment into Croatia with 34,000 sq. meters of gross buildable area.
Indicative total of sample investments		EUR 232,5 million	**Expected new jobs created circa** 1.367	

1.3. GROWTH BOTTLENECKS IN DAIRY AND FRUITS AND VEGETABLES SUB-SECTORS IN FBIH

Markets for the dairy and fruit and vegetables sub-sectors are growing and the BH as well as FBiH exports are gaining market share. Market trends show relatively optimistic picture on future growth on the World and EU markets for both sub-sectors but competition on the markets will increase, as new countries are increasing their production fast. In addition: (a) requests regarding hygiene standards, environmental protection and animals‘ welfare, will require new investments at farm level but also at processing and logistic levels and will increase total production costs; (b) non-tariff measures, like sanitary and phytosanitary (SPS) measures and private voluntary standards adopted by the agro-food chains and supermarkets are gaining in influence; and (c) future export performance will be driven by improvement in supply chains, including creation of stable value chains and increasing productivity.

The strong position of producers from all neighboring countries, EU and the presence of the world strongest producers could prevent FBiH from increasing the export on WBCs‘ markets in a short run without FBiH closing the performance gaps in terms of productivity and improving specific critical success factors (CSF) such as: (a) strict quality control and compliance with (international) standards, (b) quality of products, (c) providing quantities needed, (d) capability of proper packaging and labeling, (e) offer competitive prices, (f) reliable delivery and in line with orders, (g) ability of doing business on line, (h) image of country of origin, (i) operate with a degree of professionalism, and (j) market activities.

Although the future performance analysis enclosed within the Competitiveness Study shows relatively positive future outlook for the two sub-sectors the general competitiveness of the sub-sectors in the international market is still weak, mostly due to low quality, high price and assortment of products which will no longer meet the customer‘s needs. Crucial for the improvement of the selected sub-sectors‘ competitiveness are: (a) the meeting of the aforementioned critical success factors (CSF); (b) continuous improvement in productivity; (c) creation of stable value chains; and (d) restructuring of products assortment towards the emerging consumer needs. These would require the implementation of the comprehensive investment cycle into modernization of technology, equipment, processes and knowledge all along the VC with parallel improvement of business environment.

A range of constraints, which influence the ability of the dairy and fruit and vegetable sub-sectors to increase the productivity and meet the CSFs, have been identified during this assignment conducted for the Competitiveness Study. Ranking of constraints for the WBC and EU markets confirmed that two sub-sectors are facing similar challenges.

The main binding constraints that prevent two sub-sectors from being more competitive are:

- Quality Infrastructure
- Policy and regulations
- Technology, R&D and Innovation
- Access to Finance

Consequently, the constraints are predominantly undermining four critical success factors (CSF), namely:

- Quality control, quality infrastructure and compliance with EU standards
- Quality of produce
- Quantities of Products

Reliable delivery of products, which are all of key importance for the main regional retailers that are sourcing products for their retail chains.

A great majority of identified constraints is common to both sub-sectors in FBiH. They are in domain of public and private sector. Some of them could be eliminated only with a common action of public and private sector. Infrastructural constraints are on the top of the list in both sub-sectors. The most important infrastructure binding constraint with a highly negative effect on compliance with (international) standards is related to quality control system including: (a) inefficient veterinary authority with its sporadic and inconsistent enforcement of standards by veterinary inspectors due to the complex organizational structure and obvious discrepancies between legislation and practice, (b) inadequate health and hygiene control along the VCs; (c) inefficient phytosanitary and hygiene authority ; (d) lack of accredited laboratories; (e) inadequate border control checks to prevent import of deficient raw material, other inputs and products to FBiH; (f) inefficient administration (veterinary, phytosanitary, laboratories) and (g) excessively complicated administrative procedures (licenses, permits) which increase the production costs. Also, cold storages, warehousing and in some cases irrigation is infrastructure binding constraint for these sub-sectors.

Policy and regulatory constraints are seen as binding due to an overly comprehensive agricultural policy system, which is not efficient to help the stakeholders to meet demanding quality standards and influences also on other CSF, mostly on quality of products, quantities needed and competitiveness of prices. Different interpretation of the legislation by various public institutions, caused by inadequate quality of inter-ministerial communication and coordination and weak vertical dialogue and coordination among the competent ministries and other public establishments, requires special attention as it increases confusion in the system. Administrative procedures are too long and even routine operations are very demanding and stressful for the private stakeholders. Finally, different regulations in RS and FBiH are causing additional problems for the companies operating in both entities.

Obsolete technology, equipment and processes especially among smaller producers and processors are the main reasons for relatively low productivity for both sub-sectors. This binding constraint prevents both sub-selected sectors to meet sufficient economy of size and a constant quality of products. It has a negative influence on quantities requested and on meeting the quality standards. Low level of applied research addressing the needs of private sector in all three chains, which would assure better and more constant product quality, only compounds the situation.

Lack of access to quality finance to invest into modernization of technologies, equipment, processes, and irrigation, which is in both sub-sectors related to: (a) unfavorable commercial loan conditions, (b) inadequate system and delayed payment of subsidies and (c) long payment period of retailers hinders the modernization and increasing of productivity in all three sectors. Twelve investment plans (from 36,000 EUR to 15,000,000 EUR per investment) have been identified in FBiH during this assignment.

However vast majority of smaller firms do not possess the financial resources nor do they have the managerial capabilities or knowledge to invest. Due to the lack of quality financial resources in FBiH the inflow of quality international financial recourses to start the investment cycle is crucial. At the same time, FDI avoids FBiH and prefers countries in the region that have a (much) friendlier business environment (and larger markets) and where FDI has been promoted and implemented as coordinated public private action.

Weak horizontal and vertical organization of the private sector in two selected sub-sectors strongly hinders creation of a stable and efficient VC, which is one of the most important preconditions for competitiveness in the international markets. The study found constraints on almost all levels of both sub-sector VCs analyzed. In fact, many of them are common to both VCs. Inputs into VCs are mostly imported, often expensive and sometimes even of questionable quality (especially in the fruit and vegetable sector) and therefore with negative effect on financial performance as well as quality and quantity of production.

VCs are facing very high duality of production with great majority of small subsistence and semi subsistence farm on one hand and only a few bigger, market oriented farms on the other. They are usually more advanced and better performing, while small ones underperform and have very low productivity due to lack of knowledge, obsolete equipment and lack of resources for upgrading.
Collection of milk and fruit and vegetables is expensive due to dispersed location of farms, and often also storage and handling facilities are missing. Duality is present also in the processing sector.

On one hand small farms do some processing, often even without sanitary control. On the other there are medium and / or bigger processors who are facing many problems from high costs of inputs, shortage of domestic inputs (in terms of quality and quantity), increasing sanitary and environmental standards‘ requests, and obsolete and underutilized production capacities. Unfavorable are also very traditional product assortment with few value added products and low ability to innovate, strong negotiation power of retailers, intensive foreign competition and lack of marketing activities at the domestic market.

Despite of the fact that a lot of sales to consumers still take place in form of small shops, at marketplaces or informally, retail chains, dominated by regional retailers, are becoming more and more influential and are often dictating ‘rules of the game‘. In addition, they are frequently competing with products, usually from countries of headquarters of retail chains, which supply the chain at the regional level.

Due to several unsuccessful clustering attempts in the past, and in spite of international agro clusters success stories, cluster approach to strengthening local value chains appears not to be considered in the FBiH.

Most of the identified binding constraints (almost 60% for WBC markets and almost 65% for EU markets) fall within business environment constraints categories. Business Environment analysis reveals that the business environment in BH/FBiH is not attractive sufficiently to draw FDI. In spite of some improvements in the business environment of FBiH, most of the other countries in the region have been addressing business environment barriers more aggressively and have subsequently improved their relative competitiveness in comparison to BH/FBiH. A number of BE improvements successfully implemented in BH/FBiH, such as the inspection reform, the movable property register, the simplification of procedures for startups or for construction permits, business registration reform, have not sufficiently improved the position of BH/FBiH vis-à-vis its principal competitors. For BH/FBiH to catch-up with its neighboring countries, at least doubling of or even tripling of the current business environment reform efforts is required.

All identified binding constraints require a serious effort and a joint action of public and private stakeholders to eliminate them in the shortest possible time in order to secure the long term competitiveness of the selected agribusiness sectors in the global market and thus enable them to contribute to the growth of the FBiH economy. Unfortunately, the main conclusion of the brief dialog and coordination analysis enclosed in the study is that the public private dialog and coordination in FBiH is rather weak. The general impression is that the dialog and coordination among competent public institutions and private sector exist, but are not efficient on all institutional levels despite of the fact that many informal ways of dialog and cooperation exist in all administrative levels.

The evaluation of the potential for improving the PPD in the selected agribusiness sectors in FBiH shows that they all have a slight potential to develop an effective public private dialogue as three of the criterion, namely champions, public sector and constructive setting, are assessed as nearly strong elements which can boost the development of a constructive PPD in FBiH. The private sector is assessed by average. The existence of individuals who are perceived by their peers to represent the sectors‘ broad interests can help with establishing a fruitful PPD. However, the assessment of the potential for the establishment of an effective PPD reveals a relatively high possibility to reach this goal in both entities and on the state level.

1.4. OPPORTUNITIES FOR ENHANCING COMPETITIVENESS AND INCREASING INVESTMENT IN DAIRY AND FRUITS AND VEGETABLES SUB-SECTORS

RECENT PERFORMANCE ANALYSIS

Recent Performance Analysis of the study was performed against the exports, productivity, employment, investments, and findings were as follows:

Export

Markets dairy and fruit and vegetable sub-sectors were growing and the BH export were gaining market share in 2008-2011 period**,** where fruits and vegetables share was in average growing at a lower rate. BH dairy sector is competitive at both global and EU markets (highest values of RCA indicator among the analyzed sectors, both at EU and world markets) and had been able to improve its competitiveness over time. ‘Milk and cream’, not concentrated nor sweetened‘ and ‘Buttermilk and yogurt' are the subcategories that are actually competitive at global and EU-27 level. In general, the values of the RCA indicator are higher at World markets in comparison with EU market level. It does not suggest that level of competitiveness of BH dairy industry is lower at the EU market. It suggests that the EU markets for these products are more attractive than the total global markets and that intensity of trade at EU market is higher. BH has a slight comparative advantage of fruit and vegetable products, but only in the markets other than the EU. The difference between the two markets is due the fact that EU market is more attractive and intensity of trade at EU market is higher than world average.

However, HS-4 level analysis os the study showed that some fruit categories (‘frozen fruits & nuts', ‘apples, pears and quinces, fresh', 'apricots, cherries, peaches, nectarines, plums & sloes, fresh', 'jams, fruit jellies & marmalades') and some vegetable categories (‘cucumbers and gherkins, fresh or chilled', 'vegetables, provisionally preserved (unfit for immediate consumption)', 'dried vegetables', 'cucumbers, gherkins and onions preserved by vinegar') have above average advantage in both markets. In addition, ‘potatoes‘, ‘lettuce and chicory, fresh or chilled' and ‘prepared or preserved vegetables (excl. frozen)' have advantage at the world level.

Productivity

Limited Productivity Appraisal of the study revealed that data about financial business performances are very limited and preventing the extent and depth of productivity analysis. Therefore only limited productivity analyses were performed a) on the farm level, b) in terms of revenue per worker and b) on the on the processing industry level (based on growth rate of sectors‘ output). The limited productivity appraisal shows that the general productivity of both sub-sectors has been increased over the last years, but despite positive trends and developments, productivity fall behind productivity in neighboring countries and thus remains one of the main problems of the analyzed sectors.

Farm Level Productivity for the dairy sub-sector increased productivity at farm level over the period of 2005 to 2010 in FBiH by 11.9% % to 2,178 l/cow. However, yield is still low in comparison with EU-15 2007 average production on specialized farms of 7,018 l/cow and also slightly lower than in Serbia (2,976 l/cow) and Macedonia (2,920 l/cow) who have the highest yields among the Western Balkan countries. Fruit and vegetables productivity at the farm level is still very low, despite of yields‘ increase in majority of product groups from 205 to 2010. The most significant yield increase can be noticed in raspberries and strawberries where yields doubled.

However, except in raspberry and strawberry production all other fruit and vegetable productions have significantly lower yields than EU and Slovenia. The same is true also for Serbia, with the exception of beans, cucumbers and gherkin, tomato and raspberries and strawberries. Low productivity is reflection of unfavorable farm size structure and has implications for prices. Therefore food and vegetable processing industry is also focused on imported raw material.

In terms of **Worker Level Productivity** that was calculated in study as a ratio of revenue per worker, **i**n FBiH was the highest in dairy sector. In RS revenue per worker was also the highest in dairy sector, but it was despite of increase compared to 2009 lower than in FBiH. While fruit and vegetable sub-sector had higher revenue per worker in 2010 compared to 2007, though on average also lower than in FBiH, dairy sector has the highest level of revenue per worker in both entities. However, the revenues are lower than in 2007 in both entities, despite their increase in 2010 compared to 2009 (especially significant in RS, but from a lower level). Some subsectors of fruit and vegetable production have significantly better performances than the rest of the analyzed (sub) sectors. It is to be assumed that difference in revenue per worker is due to differences in capacity size and product assortment combination. Fruit and vegetable juices processing, that has good export performances and strong increase in FBiH (65% increase in 2010 compared to 2007), had recorded one of the highest decreases of revenue per worker in RS - in 2010 it was only 36% of revenues in 2007. Compared to 2009 situation improved in 2010 and is in line with the rest of vegetable and fruit processing industry in both entities that increased revenues per worker in 2010.

In relation to the **Processing Industry Level Productivity,** dairy sub-sector had the second largest output with processing of milk and cheese being far the most important (its output has increased by 65% at BH level, by 123% at RS level and by 36% at FBiH level in the period of 2005 to 2010).

Employment

Employment Analysis of the study reveals that the sub-sectors‘ contribution to overall employment in BH is important, and much larger than agricultural contribution to overall GDP. Agriculture contributes to the GDP by less than 10%, but around 20% of labor works in agricultural production. Between 2007 and 2010 in dairy sub-sector in FBiH as a whole experienced increase in employment. Fruit and vegetable sub-sector employs far the highest number of employees 63% in RS in 2010, but employment was decreasing in 2007-2010 period for 10% in FBiH, with the exception of spices production and growing fruits.

Investment

For **Investment Analysis** in the study data about investments in selected subsector were not available, so general data about investment (in food industry) were used in order to enable at least rough insight into investment activities. Total investment in fixed assets in BH economy has decreased by 11.2% in the period 2007-2010. In the same period investments in agriculture increased by 14.3%, while investment in whole industry and food industry decreased by 39.5% and 32.3% respectively. In the same five year period around 4.6 million of BAM has been invested. The support from the state has been decreasing by 42% over the last five years. The share of agriculture and food industry in total BH investment is very low less than 2% and 5% respectively in 2010. Share of food industry in total industry investment has steadily increased from 26.1 % in 2007 to 29.2% in 2010. BH is not so attractive for FDI as Albania, Croatia, Serbia, Slovenia and FYROM despite of improvement in comparison with previous year. According to the World Bank‘s Doing Business Report 2012, BH‘s rank is 125, which is an improvement of 2 places, but still much worse than in 2005 when BH was 87. The selected sectors managed to attract approximately 7 % of FDI in the period 1994-2010. The dairy sectors attracted 3.4% and 2.4% respectively. The BiH food industry is not the most attractive sector to invest. The share of food industry in total FDI is modest and decreased from 10% in 2006 to 7% in 2010. Growth rate of FDI inflow in food industry is lower than average FDI growth rate in BH. However, growth rate of 40% suggest that food industry will remain attractive area for investment.

FUTURE PERFORMANCE ANALYSIS

Future Performance Analysis was performed according to the same criteria as recent performance (exports, productivity, employment, investments) and it reveals following:

Export

Future Export Performance Analysis Inputs Global markets are saturated with low growth rate and it is expected that global product demand will follow the economic recovery and quality of life increase. Export value grew between 2005 and 2010 in both sub-sectors sectors, but growth levels of subsectors differ. Fast and strong growth rate of milk and dairy products exports has been recorded over the last decade, especially over the 2005-2010 period - 276 index points in FBiH. In 2009, year of economy contraction, sector production and export increased, which prove sector vitality and growth potential. Dairy sector share in total agribusiness export is around 15% and increasing each year. Fast and strong growth rate of fresh vegetable fruit exports has been recorded over 2005-2010 period (407 index points vegetable and 301 index points fruits at FBiH level)**,** while processed fruit and vegetable export decreased in FBiH (for 20 percentage). Sector total share (fresh fruit and vegetable and processed fruit and vegetable) in total agribusiness export was around 20% in FBiH in 2010, where the most important is fresh fruit subsector, then fresh vegetable subsector and finally processed vegetable and fruits with 8%, 5% and 3% share in total agribusiness export. Producers from Croatia, Serbia and Slovenia are the strongest competitors of the sector.

Other issues with potential influence on future export performance is an increase of living standard in development countries (especially China and India) drive change in consumption patterns towards bigger consumption of dairy products. Global economic crisis had a negative impact on all sectors. It is expected that with economic recovery global and especially Eurozone market will recover and export opportunities will be batter, as according to 2012 WB report SEE export will be shaped by Eurozone recovery. Global crisis, especially increase of food prices, has had decreases aggregate demand, which had negative impact on product demand. According to WB report there are strong link between export performance and GDP growth. **A big risk is lose of market access to Croatia, the most important BH trade partner**, since Croatia became full member of EU. The main reasons are institutional weaknesses (food quality and safety system) and infrastructural problems (border crossings capacities). This business shock can limit future development within the sector.

Requests regarding environmental protection will require new investments at farm level but also at processing and logistic level and will increase total production costs. Especially important are the ones connected with water protection (Nitrate directive) and with regulation of CH4 emission, in the dairy sector also regarding manipulation of packaging material (plastic bottles). The fruit and vegetable production are water demanding cultures and in the conditions where in the last decade extreme weather conditions and increase in average temperature has been recorded, there is a strong need to apply different measures to mitigate consequences of climate change such as to invest into irrigation, and protection from icy hail. To improve environmental performances of fruit and vegetables production and processing as well as that heavy investments at processing, waste management, everyday maintenance and logistic are required, all of which will increase total production costs.

There are shifts in consumers' preferences towards less processed and "healthy" products. Having in mind low dairy sector capability to innovate, this can decrease competitiveness of sector. At the same time, majority of this milk processing companies are parts of MNEs, so innovation spill-over is expected. The processed fresh fruits sector assortment is very traditional focused on traditional fruit types (like apple and apricots) and on low cost products with high amount of sugar added (jams). Such products are not following changed consumer preferences which are shifted towards ―natural, low processed fruit and vegetable products ‖. In addi
able to apply voluntary quality standards like GLOBAL G.A.P, integral production or organic production in order to increase value added. But, bad image of BH as a country of origin decrease capability of dairy and fruit and vegetable producers to send clear message about quality and to get premium prices.

Future exporting performance will be driven by improvements in supply chains, including creation of stable value chains and increasing productivity. The increase in farm level productivity (both per animal / tree and per ha) will be important driver of future performance. There are some positive trends in farm level productivity (more in RS than in FBiH). The fact that close to 50% of arable land is out of use suggest that there is a lot of space for production increase, but unfavorable sector structure is strong obstacle to future growth. In fruit and vegetable sector investments in cooling, freezing, packaging and storage capacities will be needed as due to sector's logistic weakness value chains are very short. **The export** (in dairy and fruit and vegetables) **is currently dominated by a few of the biggest companies (and cooperatives) and shaped by its ownership connections to the country of export destination**. This can be a problem for export performance improvement if they decide to produce in BH only products with low value added (decision-making is often regional-based). But, in the same time, new trend of new modern middle size specialized dairies has been noted.

There are no trends, even attempts within BH sector to cooperate, to raise joint actions to share scarce human resources, or to share logistic (capacities and knowledge) or capacity of human resources or information. All mentioned had been a key to for example Irish dairy industry and Austrian processed meat industry success. The sectors will need to become better in following market trends. BH has big agri-food trade deficit driven by high and steady level of imports and there is a lot of potential for substitution of current from imports.

Productivity

According to the **Limited Productivity Appraisal,** in relation to the inputs, very unfavorable farm structure according the cow herd size is the main factor behind low productivity and relatively high milk prices. This cannot be changed over the night, which suggests that problem with productivity at farm level will remain. In dairy sector consequence of farm structure is low milk yield per cow (1/3 of EU-27 average). But, significant improvement in yield per cow has been recorded. So, there are positive trends. It is expected to see faster improvement in this area. Fruit and vegetables sub-sectors are also facing low investment in irrigation and plastic green house, which is additional factor behind low productivity. Unfavorable sub-sector structure (dominated by small companies) is behind low level of productivity, too. For example economy of size is very important in dairy industry (especially for fluid milk assortment).

Underutilized capacities have additional negative effect on productivity. The level of capacity utilization is around 50% in dairy, and 16.5% in fruit and vegetables sub-sectors. However, some positive trends in evolution, increase in general productivity can be spotted. Over period 2005 to 2010 dairy production has been increased (around 32% in BH and in RS around 41%) without increasing processing capacities (number of dairies decreased from 43 in 2005 to 33 in 2010). Export trends increasing in some and decreasing in other subsectors show that only part of fruit and

vegetable sub-sectors have been able to ensure evolution, increase in general productivity, or better to say, assure positive trends in production. Other parts of fruit and vegetable sub-sector which try to gain price competitiveness producing —old type || of produ
follow consumer preference and change toward —low-processed food || atBH and SE

Other issues with potential influence on future productivity is that current starting point for **strong diversification at the market place is not good as product assortment is very „classical** ‟, one and the same capabilities to innovate are limited. Dairy sector is dominated by UHT milk production. Current product assortment of fruit and vegetable processing industry is very similar to one that was produced in pre-war BH, to one that was produced before 30 years. Processors are trying to be price competitive with low quality products, but such a strategy only works with at least twice bigger companies. Products with geographical indications and traditional specialties could represent one of the possibilities to differentiate at the regional as well as the EU market also in other sectors.

The supply chain is very costly. The first reason is small farm size. In average each dairy is buying milk from 700 farms, but there are dairies that are buying milk from more than 3000 farmers. There is high risk of purchasing low quality milk, which in turn increases costs of production and manipulation. In order to overcome such issues, fruit and vegetables processing industry dominantly use imported raw material. Fruit and vegetable sector faces poor logistic so companies have to process all raw materials in shortest time, meaning that around six months during the year they have decreased activity. In addition, supermarkets are usually not paying in time. Some of them are paying purchased dairy product after six months only. Additionally, there are high costs connected with distribution through main supermarkets chains. **There are no strong market investment incentives to increase value added**. Still, it has to be outlined that significant investments opportunities will be opened up when BH will start to use IPARD funds. There are many factors that can decrease efficiency of IPARD utilization, but it opens up —window of opportunities || .

Employment

A significant change in agricultural employment in the next decade is not expected, despite of potential risk that increase in agricultural productivity which could lead to decrease in employment. It is not expected to see any labor bottleneck as generally speaking, food industry requires middle level of labor skills. Still, it has to be underlined that there is no strong research or educational departments that could provide highly skilled experts necessary for new products introduction and innovation. **The sector growth can induce higher employment in sectors providing "smart services"** like marketing, design, and new product development **and in „supporting** ‟ sectors providing packaging material, logistic services and waste management services. But, due to fact that sector contribution to overall employment is very low, its indirect impact on supporting sectors will be very moderate.

Investment

High potential of food industry to attract FDI is expected. At the same time according to FAO average FDI in agro-food industry per capita (76 EUR in 2007) is lower than in Croatia and Macedonia (240 EUR and 98 EUR in 2007 respectively) and higher than in Serbia and Albania (16 EUR and 10 EUR in 2007 respectively). But it should be noted, that the high potential of food industry to attract FDI is feasible only if the business environment in BH is significantly improved and similar or better than the business environment of the main competitors/neighbors.

Dairy sub-sectors have been the most successful in attracting FDI. Dairy got 2.4% and meat 3.4% of all FDI in companies with capital bigger than 1 mio in period 1994-2010.[81] This is a good result having in mind the fact that major part of FDI investment went to water and beverage industry (46 %), trade (7%) and other supporting industries (32%). But the overall increase of FDI in food sector (40% in 2006–2010) is lower than BH average (107%). Over the last two decades investments in dairy sector have been growing, but in last five years they stagnate.

Almost non-existent investment incentives to incentivize investments in post-harvest infrastructure and aggregation.

LATENT COMPARATIVE ADVANTAGES

Potential of both sub-sectors is underlined with the latent comparative advantages of FBiH arising mostly from:

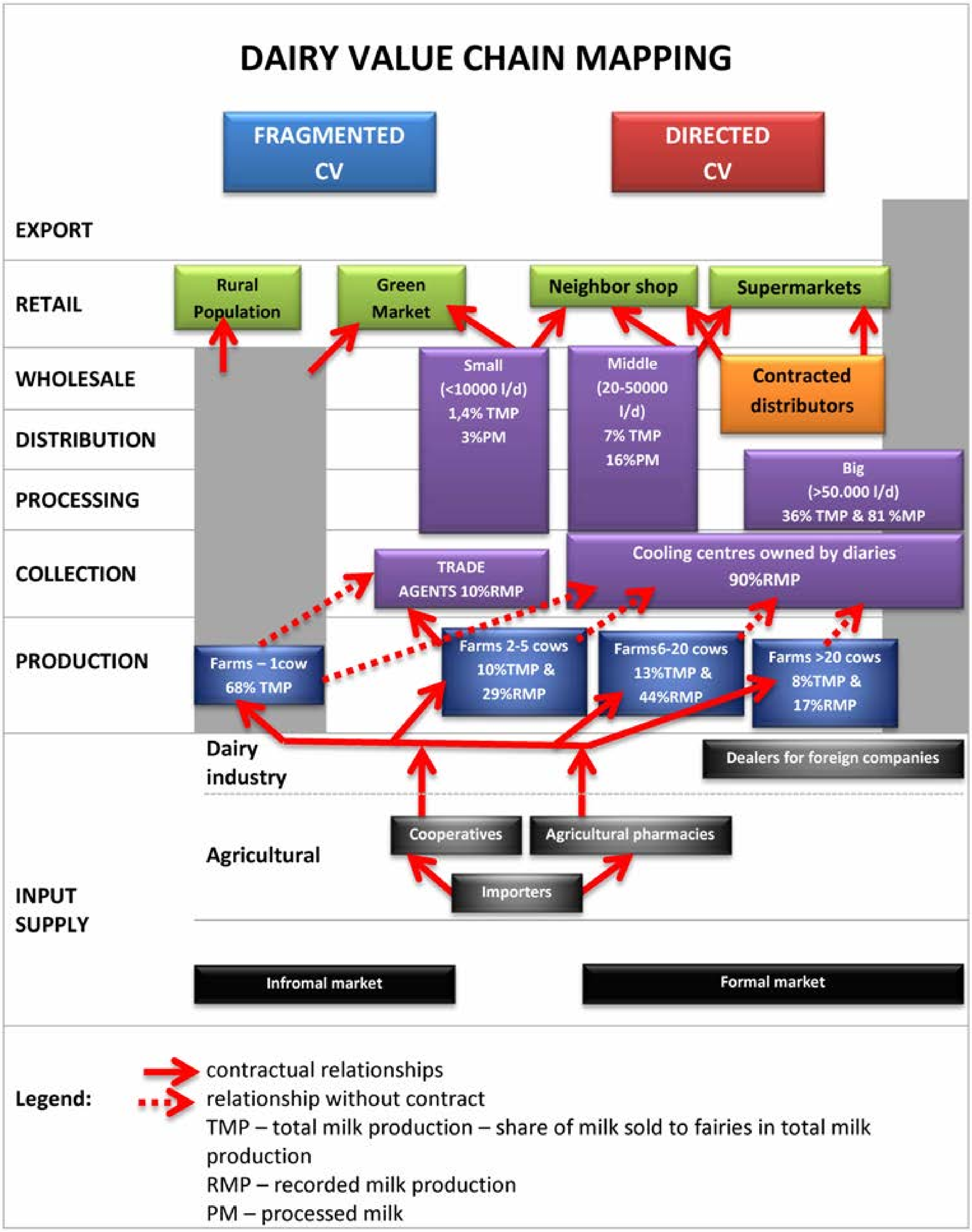
- favorable natural conditions, where abundance of agricultural land, availability of uncultivated land, soil quality, favorable climate conditions, clean water resources and relatively low level of pollution of natural resources are the main factors which could be turned into a competitive advantage of the selected VCs in FBiH,
- skilled labor force (engineers, technicians, skilled workers) and their availability at competitive prices compared to the EU-27 due to high unemployment rate of 27%.
- relative favorable geographic position and the proximity of main markets (EU-27).

These latent competitive advantages can be turned into a manifest competitive advantage.

1.5. MEDIUM-TERM PRIORITIES

Dairy Value chain

Figure 4: FBiH Dairy Value chain



As presented in the Figure 4: FBiH dairy value chain, agricultural **inputs** are mostly imported (from neighboring countries), and sold through network of contracted dealers, ―agricultural pharmacies‖ and cooperatives. A few major importers influence farmers‘ access to modern inputs, maintain high prices (higher than in neighboring countries) for lower quality, and impact productivity, quality, as well as farms‘ financial performances and motivation/capability to invest and to grow. Major part of animal fodder is prepared at farms or purchased locally at unofficial market, while dairy industry supplies are mostly imported by dealers of foreign companies. FBiH produces 46% of cow milk in BH, despite of bigger stock of animals (53%), with lower milk yield per cow in RS (for 22%).

Milk production in FBIH faces many problems:

(i) unfavorable structure of farms resulting in duality of sectors production – farms with less than 5 milk cows represent around 82% and there are only some bigger, modern farms;
(ii) unfavorable breed structure of livestock - Simmental is dominant, while Holstein Friesian breed accounts for 8.5% only;
(iii) low feed conversion rate;
(iv) still low yield per cow despite positive trends;
(v) high transaction and quality (control) costs;
(vi) problem with (EU) standards adoption;
(vii) improper stables, rooms for milking, milk storage and manipulation.

The stated problems are more present on small farms. In addition, subventions are not the same in FBiH and in RS (the premium in 2010 was 0.16 BAM/l in FBiH, and in RS in a rage 0.10 to 0.22 BAM/l), causing and unequal position of milk producers. Also, focus on subsidies is on quantity and not quality, which is an issue if aligning with EU.

Majority of **produced** milk flows thru informal market, and only one third is sold through collection network to the dairies (much lower than in neighboring and especially developed countries). Major part of farmers selling to diaries have signed contract with them, and dairies are also opening their own big modern farms, both in order to develop stable supply chain and decrease risk of milk shortage, of price increase, costs of quality management as well as costs of transport/logistic (which are very high due to milk gathering area of more than 300 km). Dairies have develop a net of lacto-freezer, cooling milk buy-off centers (at farms), and provide cooling trucks (cistern) to pick up the milk. In addition trading agents equipped by cooling trucks (usually farmers‘ cooperatives or associations formed by development project) are buying milk at farm gate, but according to FAO, 2012 only 4% of milk is sold through this channel. The less developed part of VC also lacks modern equipment.

Milk **processing** is done at farm level (very small amount) and in 20 dairies (out of 30 in BH). Total installed processing capacity in FBiH is 275 million of liters (around 65% of BH‘s capacities). Dairies put a lot of effort to upgrade their quality systems by introducing different standards, but still have been facing many problems:

(i) lack of economy of size due to unfavorable sector structure;
(ii) low level of capacity utilization (in FBiH it is slightly lower than in BH (52% vs. 55%) is causing higher costs per unit of processed milk;
(iii) very traditional product assortment – mainly products with short shelf life and few value added products;
(iv) low ability to innovate and to follow market trends;

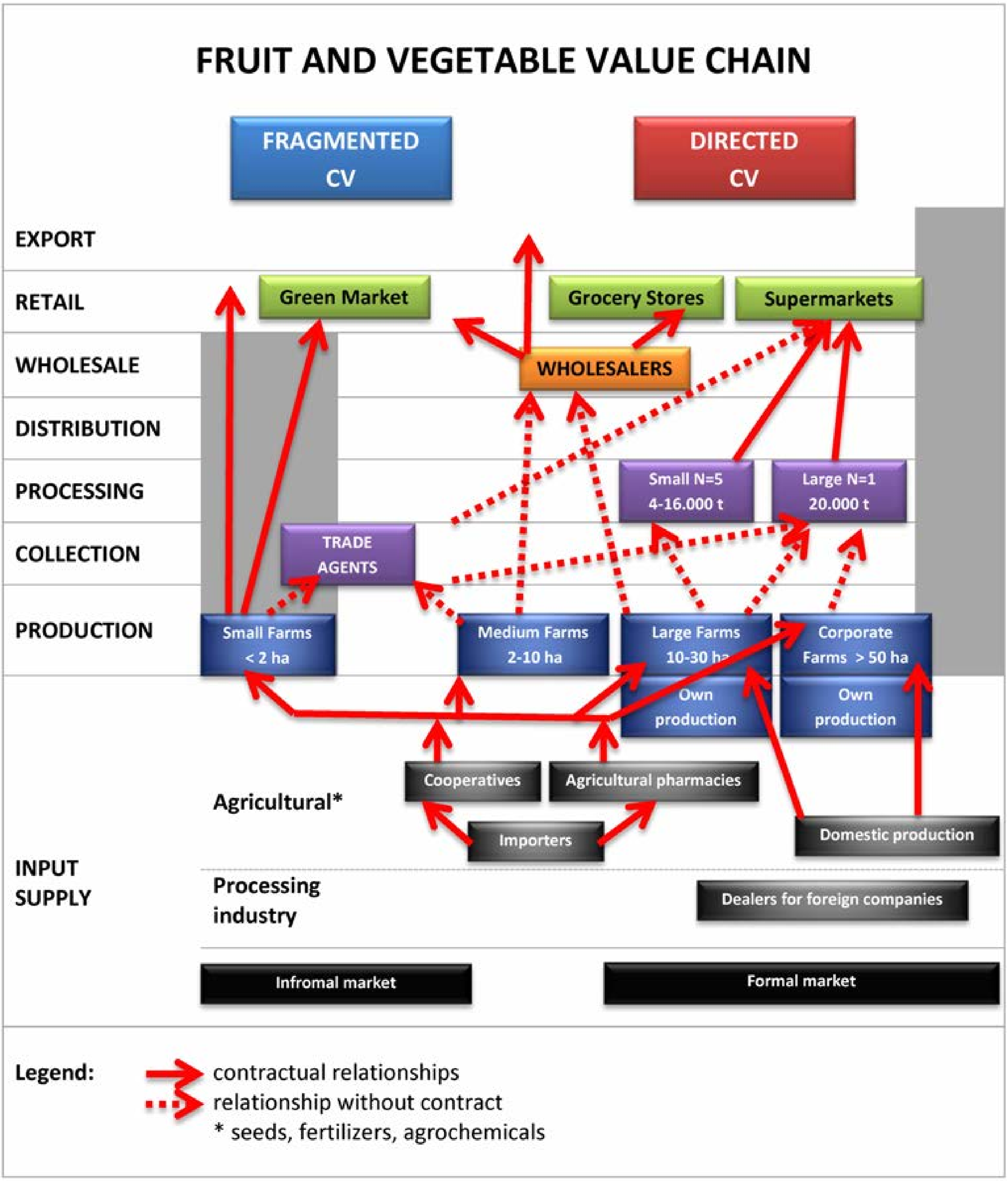
(v) very limited marketing and promotion activities
(vi) high costs and complicated administrative procedures to fulfill legal requirements.

Generally speaking **distribution** is under control of dairies. It is organized in two ways: (i) ambulant (direct) distribution organized mainly by small and part of middle sized dairies, and focused on local market; (ii) long-term contracted distributors that are focused on BH regional market; (iii) direct sale at the dairy gate (customers are mostly small retail shops and food services). The main constraints are: (i) high transport costs; (ii) it is hard to keep control over distribution and on-spot manipulation.

Retailing is organized as (i) informal market in rural and periurban areas - very important for small farms selling fresh milk and on-farm processing products (such as cheese and kajmak); (ii) green markets in town, usually well organized, equipped with cooling facilities and under control of inspection; (iii) retail small ―neighbor shops‖ offering well-known local and regional brands; (iv) food services (including hospitality industry and catering); and (v) supermarkets as main retail channel for medium and big dairies. Producers are facing the following problems with retailers: (i) entry fee and fee to sale products usually need to be paid; (ii) high price discounts are requested; (iii) very strict policy about products' return - retailers are not willing to share these costs; (iv) payment after 90, 120 days at a minimum; (v) retailers' policy to sell strong regional brands.

Fruit and Vegetable Value chain

Figure 5: FBiH Fruit and Vegetable Value chain



As presented in the Figure 5 FBiH fruit and vegetable value chain, **inputs** for production are mostly imported, and sold through network of contracted dealers, 'agricultural pharmacies' and cooperatives. Some seed materials are also of domestic origin, while equipment and irrigation systems are completely imported. The main problems are related to:

(i) sometimes unknown or inadequate quality of seed material due to lack of import and quality control and
(ii) consequently prices not always being in line with quality.

The **production** of fruit and vegetables is extremely important because it provides food security (primarily vegetables) and income (primarily fruits) to rural agricultural holdings. Duality is present in this sector, too. Small subsistence and semi-subsistence farms are the most dominant form. Majority of their products are offered at the local markets or in the neighborhood due to (i) lack of long-term contractual connections with processors/traders; (ii) lack of storage facilities and organized logistics; (iii) low level of achieved price not enabling to invest into modern production technologies assuring sufficient quantities of higher quality products that could be commercialized and integrated in the existing VC; (iv) lack of skills and knowledge, also to recognize market needs and adapt products; (v) short-term perspective prevails.

Market oriented medium size producers (2-10 ha), which often constitute the main driving force for the development of fruits and vegetables sector in competitive countries (EU-15, EU-12, Serbia, Croatia) are not present in significant number, but have developed to some extent better participation in the VC by having contractual relationships with middlemen. However, they are mainly lacking storage capacity, equipment and human resources. There are also some large family farms and corporate farms with better machinery and equipment, human resources and marketing activities. These farms are already supplying supermarkets and are exporting part of their production. Developments in vegetable and fruit production differ. The vegetable production in FBiH (as well as in BH) has had a noticeable negative trend in sown areas for all major crops. Reduced interest in vegetable production is primarily a result of lack of support (subsidies) from all levels of government, but also in insufficient competitiveness of domestic production compared with imported vegetables due to low productivity which is one of the major problems in this sector, too. In recent years increased interest of domestic producers in indoor vegetables production (greenhouses) can be noticed, but there is no official information about it yet.

Unlike vegetable production, FBiH fruit production is characterized by increase of bearing trees numbers for all fruit types and sown area for raspberry, while strawberry sown area decreased. The highest rate of production increase have been recorded in plum, apricots and apple production, while decrease in production has been recorded in pears and cherry production.

Collection of fruit and vegetable (from smaller farms) is mostly done thru trading agents, while bigger producers supply processor or wholesalers and retailers directly, too. The main problems in the collection process are:
(i) lacks modern storage facilities;
(ii) lack of modern distribution centers with modern technology for handling and standardizing the offered products;
(iii) insufficient transport due to lack of proper transport capacities and underdeveloped (road) infrastructure;
(iv) high collection costs due to dispersed location of small farms;
(v) lack of legal contracts enabling growers who have received support from one processor to supply another if a better price is offered;
(vi) strong presence of gray economy.

There are some rare exceptions that managed to overcome the main problems and organized supply chain to meet buyers requirements in terms of quantities and quality provided.

Most of fruit and vegetables **processing** industry capacity is concentrated in six large companies, all of them located in RS and privately owned. In FBiH, there aare only some smaller processors, and one bigger who recently restarted processing after some serious problems. Processing companies are generally not vertically integrated. In term of supply of inputs, some of them have contractual relationships with small farmers, while in terms of retail, they usually do not have their own shops and their bargaining power toward large retailers is quite low, particularly in situation of strong competition from neighboring countries. In addition, processors are facing the following problems:

(i) inadequate quality and quantity of domestic inputs;

(ii) obsolete technology;

(iii) low level of capacity utilization; (iv) increasing input costs;

(iv) high level of organic waste and increasing environmental requirements;

(v) limited and traditional assortment – ‘primary‘ processing prevails;

(vi) very limited marketing and promotion activities.

Although large **retailers** are dominating the market, their share in fruits and vegetables is still relatively low (around 10%) and is lower than in meat, fish, or dairy. Large retailers have more important market share in the case of processes fruits and vegetables, but domestic producers are underrepresented, as imported products dominate and represent strong competition to producers from FBiH. According to the HBS 2007 the main point of purchase of fruits and vegetables to customers is still a corner shop. Corner shops are usually supplied by wholesalers, or they purchase these products every day from an open market. Also, open markets are important, particularly in urban areas, while in rural areas majority of trade takes place in an informal manner.

Way forward
Future competitiveness of the two agribusiness subsectors featured will depend on their ability to adjust their performance to the actual market conditions. There is a big risk of further losing market access to Croatia, the most important FBiH trading partner, given EU membership. FDI is needed to strengthen the aggregation and post-harvest infrastructure.

Consequently, the main issues which must be effectively addressed include:

- Increasing the productivity of both sectors along the value chain – there is a direct and proven correlation between certain types of FDI and increasing productivity[2] – therefore FDI has a role to play a different points along the value chain;
- Fortifying the components and linkages along the respective value chains – the priority should be to enable indigenous companies to strengthen the weaknesses and fill any gaps – where this is difficult to achieve then specific types of FDI should be targeted to strengthen the chain and maximize value added;
- Bring FDI at aggregator or post-harvest infrastructure level
- Improve effectiveness and efficiency of investment incentives in agri infrastructure investments (cold storages, standards, certification, production upgrades)
- Improve effectiveness and efficiency of investment incentives to incentivize aggregation (incentivize farmers to aggregate or to sell to aggregators)

For dairy, and fruit and vegetable sub-sectors to profoundly improve, the competitiveness of each segment the value chain must be analyzed holistically. It is only through a cohesive and coordinated combination of investment policy, sharper strategic direction, investment in infrastructure, alignment with EU food safety norms and a fully enabled business climate conducive to growth will:

1. Sector competitiveness improve
2. FBiH can more competitively meet the needs of food and agribusiness investors considering Central and Southeast Europe.

Essentially, there is a policy-related action required for each element of the value chains, while FDI can play a more prominent role in developing the infrastructure, specialist services and food-park type initiatives to underpin the growth of the segments and benefit both local and international companies. Therefore, in the midterm period following is needed:

Dairy:

- Action plan/way forward for quality infrastructure in the country has to exist; Improvement of quality control and compliance with standards – increase efficient administration, establish accredited laboratories for regular laboratory analysis of milk (from each supplier); ensure that laboratories can perform these tasks; improve sampling and efficiency of veterinary authority.
- Alignment with EU regulation, and with BH level EU aligned regulation; alignment with RS is also needed, to ensure level-playing field for investors, since large investors will not come to invest in parts of BiH, but for entire market potential/resource base.
- Introduce systematic enforcement of standards by veterinary inspectors; improve training of inspectors for better inspection controls

[2] Verified by several studies including by McKinsey, World Bank, UNCTAD, GIZ, the Economist, and others.

- Introduce official controls in a proper manner prescribed by the EU, with State Veterinary office and Federal Administration of inspection affairs leading the way
- Harmonize legislation and practice, together with comprehensive milk system Introduce/establish cooling facilities
- Update technology, equipment and procedures for assuring consistent quality of products especially among farmers, small producers and processors; Improve milk transport and testing (from each supplier).
- Reduce costs of inputs (cost of feed)
- Revise investment incentives framework to enable aggregation and agri infrastructure investments, focusing on quality and not quantity,
- control of laboratories by competent authorities to determine that they are able to perform tests for which are certified,
- Rigorous criteria for certification of laboratories to control milk, and ensure that only those who actually meet the requirements be certified for certain tests.

Fruit and vegetable:

- Action plan/way forward for quality infrastructure in the country has to exist
- Increase efficiency phytosanitary and hygiene authority (concerning people and procedures mainly) and introduce services and support needed (information, education and training, consultants, certification bodies) for the standards certification process
- Alignment with EU regulation and with BH level EU aligned regulation; alignment with RS is also needed, to ensure level-playing field for investors, since large investors will not come to invest in parts of BiH, but for entire market potential/resource base.
- Ensure sufficient and properly organized collection, classification, labeling, calibration, storage and transport of fruits
- Establish cooling / storing facilities and modern distribution centers
- Ensure access to quality financial resources
- Introduce Integrated Pest Management (IPM) or national plan for this area within policy / regulatory
- Harmonize the sort list with EU sort list; introduce better quality of seeds to be imported; Reduce costs of inputs of fertilizers, seeds, etc
- Ensure services and support needed for the standard certification process including provision of information, consultants and certification bodies.
- Revise investment incentives framework to enable aggregation and agri infrastructure investments, focusing on quality and not quantity,
- Educate producers about new production techniques
- Problem with labor shortage in the harvesting season

1.6. RECOMMENDATIONS TO REMOVE BOTTLENECKS TO INCREASE COMPETITIVENESS OF DAIRY AND FRUITS AND VEGETABLES SUB-SECTORS

Upgrading of Quality Infrastructure – improved quality infrastructure system with EU accredited laboratories, certification system, technical controls, etc. There is a need to simplify the quality control organizational structure and systems. Overhaul the system by adhering to best international practices in food quality control and food safety while streamlining administrative processes and up-skilling staff through effective training to boost efficiency. It is vital to improve horizontal and vertical dialogue and coordination within and between entities and state. More specifically, activities within this pillar common for both sub-sectors should be focused on:

- Adopt a BiH wide framework for national quality infrastructure. This is a top priority.
- Ensure efficient and effective official controls for dairy, with state BiH veterinary office and Federation Inspectorate leading the way. This is in accordance with EU recommendations. Amend FBH Inspection Law, as well as other laws, to ensure this.
- Ensure better laboratory testing of raw milk, to ensure proper traceability
- Ensure adequate oversight by Federation BiH inspectorate of certified veterinary professionals that are supervising dairy companies on a daily basis.
- Ensure that accredited laboratories can actually perform tasks for which they are accredited.
- Establish system for certification of fruit planting material and reduce costs of certification
- Support technical control agencies involved in international trade to introduce risk-based control systems to achieve reduced inspection and sampling rates, and for the issuance of phyto-sanitary certificates and SPS permits as they relate to fruits and vegetables, and dairy products
- Aligning requirements and inspection check-lists for compliance with the EU hygiene requirements for selected value chains
- Assist accreditation institutions to become internationally accredited; increase number of accredited laboratories and enable greater private sector participation; increase number of laboratories that can do fruit and vegetable residue tests, to enable greater exports

Policy/regulatory improvements - The main problems in this area are related to comprehensive agricultural policy system, which is not efficient enough to help the stakeholders of these sectors to meet very demanding quality standards. However the identified policy / regulatory constraints influence also other CSF, mostly on quality of products, quantities needed and competitiveness of prices. Therefore following would lead to improvements:

- Align all relevant legislation with the BiH level, and amend FBiH regulation that is 1) overlap to state legislation or contradict with BiH/EU legislation
- Introduce seed varieties and sort lists; ensuring more seed varieties are imported and thus reduced price; ensure better quality of fertilizers are imported. Secure adequate border control for imported goods to prevent import of inadequate raw material, other inputs and products to BH
- Agree on ways to establish IPARD operational and institutional structure in BiH aligned with EU requirements
- Introduce support services (information, education and training, consultations, certification bodies), i.e. comprehensive network of agricultural extension services capable of disseminating information and providing consultancy to help stakeholders introduce quality standards and obtaining certificates thus complaining with international standards

- Improve capacities of technical staff in terms of reliability, responsiveness and problem-solving capabilities of key public institutions (veterinary, phytosanitary, laboratories) that will augment the institutional capacity in FBiH, relevant to the selected agribusiness sectors,
- Introduce integrated Pest Management regulation aligned with EU
- Revise Law on cooperatives to enable aggregation and open possibilities for another access to finance option, creating equal opportunities for producer groups and other associations and link with FDIs in processing/aggregation segment of value chain.
- Streamline regulations for road cargo transport to enable greater efficiency of trucks
- Revision of PPP law (to facilitate greater private sector participation in horticulture micro location water irrigation)

Infrastructure improvement

- Improve effectiveness and efficiency of investment incentives to incentive aggregation and agri infrastructure investments
- Ensure investment into improvement of milk transport and testing
- Establish cooling / storing facilities and modern distribution centers
- Reduce costs for construction permit to build modern multi-span green houses or polyhouses
- Secure equipment for calibration and packaging
- Introduce computerized stock and inventory controls
- Update processing lines and storage facilities with low productivity

Improvement of Access to Finance - Lack of access to finance for investments into quality and quantity improvements modernization of technologies, equipment and processes as well as funding of research activities and investments into irrigation and similar systems, which would stabilize availability and constant quality of feed is noted in both sub-sectors, therefore following should be done:

- Ensure favorable commercial loan conditions,
- Regulate overly indebted industry,
- Introduce different modalities for financing for farmers, cooperatives
- To establish a system of "matching grants" incentives to support manufacturers in order to implement standards, new technologies, or to invest in value chain infrastructure

Fruit and vegetable

- Ensure that the existing insurance support scheme is affordable for framers
- Ensure access to capital to invest in new equipment

1.7. ACTION PLAN FOR REMOVING BOTTLENECKS

In order to ensure export of fresh milk and dairy products to EU countries, including export of fruits and vegetables, three key objectives with supporting measures of the strategy are determined (listed in the table below):

OBJECTIVES and measures	Period	Institution
I. UPGRADING OF QUALITY INFRASTRUCTURE:		
1. Agree with the RS and BiH authority level and prepare a common framework for development of quality infrastructure in BiH for milk, fruits, vegetables, as well as the quality standards - grading of fruits and vegetables	2015	FMPVŠ in cooperation with MVTEO, MEOiRS, MPŠV RS, OP BD, BATA, Institute of Metrology BiH
2. Implementation of „Roadmap“ for facilitating export of agricultural products adopted by the Council of Ministers, which implies:	2015-2017	MVTEO, Agency for Food Safety, Veterinary Office, FMPVŠ, MPŠV RS
2.1. Synchronization of key state-level law (Law on Agriculture, Food and Rural Development, Veterinary Law and the Law on Food Safety)	2015	FMPVŠ in cooperation with MPŠV RS, OP BD, MVTEO, Food Agency BiH
2.2. Harmonizing the entity and cantonal legislation with state laws in order to establish a food safety system based on the principle of subordination in accordance with international requirements, including the establishment of institutional capacity for the allocation and control of state aid resources	2015	FMPVŠ, FUZIP in cooperation with MVTEO, MPŠV, OPBD, Veterinary Office BiH, Republic Administration for Inspection RS, Food Agency BiH
2.3. Transformation and strengthening of inspection services in the Federation of Bosnia and Herzegovina according to international standards (certification of inspectors, harmonization of conditions and checklist inspection to meet EU sanitary conditions in selected value chains, risk assessment to control imports and exports)	2015-2017	FUZIP, in cooperation with cantonal inspections Veterinary Office BiH, Republic Administration for Inspection RS, MVTEO
2.4. Strengthening laboratory capacity and determination methods that will be accredited (agreement on the allocation method between laboratories)	2015	UZZB, FMPVŠ, MPŠV RS, OPBD, BATA, Institute of

		Metrology BiH, FZP, FAZ, authorized cantonal offices, inspections, laboratories
2.5. Provide support to the implementation of international standards in the manufacture of fruit and vegetables seedlings (EPPO, OECD and other schemes)	2016-2017	MVTEO, FMPVŠ, MPŠV RS, OPBD, UHKSP
3. To establish a system of "matching grants" incentives to support manufacturers in order to implement standards, new technologies, or to invest in value chain infrastructure (increase the capacity of cold storage / warehouse facilities, packing, sorting and modern distribution centers, etc)	2016-2019	FMPU, cantons, municipalities
4. Reduce costs and reduce the time period for issuing building permits for the construction of buildings in agriculture and simplify administrative procedures	2016-2018	FMPVŠ, FAPPRR
5. Adopt and implement the FBiH Rural Development Programme, which is in accordance with Article 95 of the SSP, support measures for competitiveness 5. 1. Co-financing: - Investments in facilities and equipment along the value chains, new crops, irrigation, hail and antifrost protection, etc. - knowledge - Development of new products - The adoption of international standards and establishing brands	2015-2019	FMPVŠ, FAPPRR
5.2. Marketing support	2015-2019	FMPVŠ
6. Establishing the necessary registry databases on production (phyto register, register of producers of seeds, planting material producers registry, registry of organic producers, beekeepers registry etc.)	2015-2019	FMPVŠ
7. Implementation measures of technical support within FBIH Rural Development Programme (training, technical literature, etc.)	2015-2019	FMPVŠ
II. ALIGNMENT OF REGULATIONS WITH EU ACHIEVEMENTS AND CREATING CONDITIONS FOR AGGREGATION IN VALUE CHAINS:		
1. Adopt the Law on FBiH Agricultural Cooperatives , and enable the establishment of agricultural associations and organizations of producers with a network of agricultural producers with "mechanical rings" (exchange equipment between members of the association). Facilitate the establishment of producer groups and clusters in order to consolidate and joint performance in the market.	2016	FMPVŠ, Vlada BiH, economy
2. Harmonization with EU varietal list	2016-2018	FMPVŠ to initiate, in cooperation with UZZB,

		MPŠV RS, MVTEO, UIO, Inspections
3. Strengthen agricultural expert and advisory services (information, education and training, consulting, certification bodies)	2016-2019	FMPVŠ
4. Adopt the amended law on the protection of consumers, to give a greater role to consumers in products for general use control	2017	FMPVŠ to initiate MVTEO, in cooperation with MPŠV RS
5. Establish operational and institutional structure of IPARD in BiH in line with EU requirements	2015-2017	FMPVŠ to initiate MVTEO, in cooperation with MPŠV RS, OPBD, UHKSP
6. Introduce legislation on the system of integrated pest management (IPM Eng.) harmonized with the EU	2016-2017	FMPVŠ to initiate MVTEO, in cooperation with UZZBFood Agency BiH
III. ATTRACTING INVESTMENT IN KEY PARTS OF THE VALUE CHAIN IN ORDER TO STRENGTHEN COMPETITIVENESS:		
1. Speeding up the process of obtaining work permits for foreigners	2015-2016	Vlada FBiH, FMPVŠ, FMRSP, FZZZ and cantonal employment bureau
2. Finding new and more favorable ways of financing projects in this sector and the establishment of credit schemes through commercial banks and credit organizations	2015-2019	Vlada FBiH, FMF, Parlament FBiH
3. Provide favorable conditions for obtaining commercial loans and establishing credit lines of foreign investors for the purpose of agricultural production for their market	2016-2019	Vlada FBiH, FMF, Parlament FBiH
4. Introduce various modalities of financing for farmers and cooperatives	2016	Vlada FBiH, FMF, FMPVŠ
5. Finding modalities to regulate excessive charge industry	2016	FMF, FMPVŠ
6. Under the Program RR, Ministry of Agriculture to plan allocating funds for promotional activities, visiting investors in cooperation with the FIPA.	2015-2019	FMT, FMPVŠ, FBiH Government, FIPA, cantons, municipalities
7. Giving support to the creation of investment support system ("aftercare") and servicing investors in cooperation with the FIPA and the FBiH Government	2015-2016	FMPVŠ, FBiH Government, FIPA
8. The campaign promoting / establishing relationships with investors at international events in strategic sectors	2015-2016	FIPA, FMPVŠ
9. Preparation of promotional materials, presentations to potential investors, etc. in cooperation with the FIPA	2015-2016	FIPA, FMPVŠ
10. In cooperation with the FIPA, visiting certain number of potential investors on annual base	2015-	FIPA, FMPVŠ

	2019	
11. In cooperation with the FIPA, ensuring an increase number of investors interested in targeted investment sector	2015-2019	FBiH Government
12. Establishing of the Committee for monitoring the Strategy implementation	2015	

FMPVŠ - Federal Ministry of Agriculture, Water and Forestry
MPŠV RS- Ministry of Agriculture, Forestry and Water Management RS
MEOiRS – Ministry of Economic Relations and Regional Cooperation RS
MVTEO – Ministry of Foreign Trade and Economic Relations BiH
UHKSP - Office for Harmonization and coordination of payment systems in agriculture nutrition and rural development BiH
FMPU – Federal Ministry of Urban Planning
FMT – Federal Ministry of Trade
FMRSP – Federal Ministry of Labour and Social Policy
FMF - The Federal Ministry of Finance
FUZIP – Federal Administration for Inspection
FZZZ – Federal Bureau of Employment
FAZ – Federal Agro-Mediterranean Institute
FZP – Federal Institute for Agriculture
OPBD – Department of Agriculture Brčko Distrikt
FAPPRR – Federal Agency for Payments in Agriculture and Rural Development
UZZB – Directorate of Plant Protection BiH
BATA – Institute for Accreditation BiH

2.0 OUTREACH STRATEGIC PLAN FOR FBIH FOR DAIRY AND FRUITS AND VEGETABLES SECTORS

I. Strategic Objectives, goals and targets

Attract Euros 50 million of FDI over next 4 years in Fruits, Vegetables and Dairy investment projects, mainly in production, packaging/logistics and processing.

II. Market Opportunity: products, project types, companies and markets

Common framework of priority areas and measures of strategic development of the Federation of Bosnia and Herzegovina in the area of rural development is to raise the quality and safety of domestic products with a competitive advantage in the production, processing and trade. To attract investment and crate meaningful solutions, it is necessary to identify the top products of fruits, vegetables and milk. Detailed statistical analyzes were done according to official statistics published in statistical yearbooks and monthly bulletins of the Statistical Office of the Republika Srpska and the Federation of Bosnia and Herzegovina, as well as data submitted by the Indirect Taxation Authority of BiH and the BiH Statistics Agency. To make statistical analysis comparable with global statistical indicators, collection of data form FAOSTAT and UN ComTrade web sites.has been done as well.
Detailed analysis is performed for the following agriculture products: plum, apple, pear, raspberry, strawberry, apricot, cherries, potatoes, cabbage, cucumber, green peppers, carrots, onions, garlic, tomatoes, beans, milk, yogurt, milk cream, cheese, skim milk, as well as processed fruits and vegetables juice concentrated / non concentrated , mar rmalades and jams , fruit distillates and fruit brandy, , deep frozen fruits and vegetables and dried fruits and vegetables.

The selected products meet several of these key criteria:

- Large or growing international and/or domestic demand
- Good production tradition in the Entity
- Large or growing production in the Entity/country
- Large or growing exports from the country
- Growing exports to sophisticated markets such as Germany, Austria or The Netherlands
- Good potential for processing
- Favorable interest from both the public and private sectors
- No impeding barrier.

FRUITS	VEGETABLES	DAIRY SECTOR
Plums	Potatoes	Milk & cream
Raspberries	Cabbages	“Yellow“ Cheese
Strawberries	Green peppers	
Apples	Cucumbers	

For instance, Plums is the country’s #1 fruit, with strong tradition, support by MoFTER, +42% export growth to sophisticated demanding markets (Germany, Austria, Russia), important room to grow (still exporting only 3% of total production) and boasting the world’s #15 production rank in

2012 (142892 t/yr, which was a bad year), and #3 in the Balkans. Finally, producer's Price in BiH ($289/t) is below that of Competitors Serbia (307), Romania (736), Turkey (930).

Project types

Investment for the above products could happen through the following links of the value chain:

- Agricultural production of fresh fruits and vegetables with better irrigation and hale/freeze protection. This would include organic production and environmentally friendly agricultural production.
- Aggregation, preparation, packaging, cold storage and freezing, and logistics for fresh fruits and vegetables
    - Preparation and packaging facilities of fresh fruits and vegetables
    - Wholesale centers with large cold storage capacity
    - Logistics, transportation, distribution centers
- Processing of:
    - Dried fruits (all of the chosen and more)
    - Fruit jams and jellies
    - Fruit concentrates
    - Small pickles (Cornishons)
    - Chopped cabbage
- Potato preserved or canned Inputs:
    - Production of improved, certified seed of the major types of vegetable crops
    - Construction of appropriate irrigation system

Processing depends on sufficient and sustained productions of fruits and vegetables at competitive prices, good water, energy, labor, and logistics. These would develop as the country builds its aggregation and cold/frozen storage. Inputs strengthening would also follow negotiations for aggregation. Eventually, frozen and canned fruits and vegetables could play a role.

Product Summary Table

<table>
<tr><th>Segment Product</th><th>SIC NAICS</th><th>Key Strategy Project Type</th><th>Target company Profile</th><th>Value Proposition</th><th>Target Markets A, B, C</th><th>Main Competitor</th></tr>
<tr><td>FRESH FRUITS & VEGETABLES</td><td>017999</td><td>Focus on aggregation, which should pull production</td><td></td><td></td><td></td><td></td></tr>
<tr><td>Plums</td><td></td><td rowspan="7">1. Attract Aggregation companies that would include preparation, packaging, cold storage or freezing, and export logistics for fresh fruits and vegetables, especially at Tuzla
2. Support expansion of current producers and organize in cooperatives
3. Induce Joint Ventures between foreign and local producers</td><td rowspan="7">1. Tier 2 and 3 aggregators and wholesalers
2. Food logistics companies
3. With sales above Euro 30 millions
4. Supermarket chains?</td><td rowspan="7">Complement production of fresh fruits and vegetables x % more profitably with longer production cycles and lower overall production costs</td><td>Germany
Russia
Netherlands
Turkey</td><td>Turkey
Serbia
Romania
Macedonia</td></tr>
<tr><td>Berries</td><td></td><td>Germany
Austria
Croatia
Russia</td><td>Serbia
Bulgaria
Turkey
Poland</td></tr>
<tr><td>Apples</td><td></td><td>Russia
Germany
Serbia
Croatia</td><td>Turkey
Poland
Serbia
Macedonia</td></tr>
<tr><td>Potatoes</td><td></td><td rowspan="4">Croatia
Germany
Russia
Netherlands</td><td rowspan="4">UK
Romania
Serbia
Ukraine</td></tr>
<tr><td>Cabbages</td><td></td></tr>
<tr><td>Green peppers</td><td></td></tr>
<tr><td>Cucumbers</td><td></td></tr>
<tr><td>FRUIT</td><td>3114</td><td>Focus on dried fruits and jams/jellies</td><td></td><td></td><td></td><td></td></tr>
</table>

<table>
<tr><th>Segment Product</th><th>SIC NAICS</th><th>Key Strategy Project Type</th><th>Target company Profile</th><th>Value Proposition</th><th>Target Markets A, B, C</th><th>Main Competitor</th></tr>
<tr><td>PROCESSING</td><td></td><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td>Dried fruits</td><td></td><td>Attract private label/bulk producers with focus on Plum, Apples, Pears for regional market</td><td>Small and medium bulk producers</td><td rowspan="3">Processing of fruits x % more profitably due to more sustained fruit production and lower overall production costs</td><td>Germany
Russian Federation
France</td><td>US
Turkey
Germany
France
Chile</td></tr>
<tr><td>Jams and Jellies</td><td></td><td>Attract processing companies from the region</td><td>Artisanal producers</td><td>Germany
Russian Federation
Netherlands</td><td>Belgium,
Germany,
France</td></tr>
<tr><td>Fruit concentrates</td><td></td><td>Support expansion of VITAMINKA, ESAROM and similar</td><td>Small and medium bulk producers</td><td>Netherlands
Germany
UK</td><td>US
Netherlands,
Germany</td></tr>
<tr><td>VEGETABLE PROCESSING</td><td>3114</td><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td>Cornichons</td><td></td><td rowspan="3">1. Attract private label/bulk and artisanal producers
2. Support expansion of VITAMINKA, and similar</td><td rowspan="3">Small and medium bulk and artisanal producers</td><td rowspan="3">Processing of fruits x % more profitably due to more sustained fruit production and lower overall production costs</td><td rowspan="3">Germany
Russian Federation
UK
Netherlands</td><td rowspan="2">Romania
Albania
Serbia
Macedonis</td></tr>
<tr><td>Chopped Cabbages</td><td></td></tr>
<tr><td>Dried Potatoes</td><td></td><td>Bulgaria
Serbia
Romania</td></tr>
<tr><td>DAIRY PROCESSING</td><td>3115</td><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td>Milk & cream processing</td><td></td><td>1. Attract another dairy producer
2. Support expansion of current producers and organize in cooperatives
3. Induce Joint Ventures between foreign and local producers</td><td>Tier 1 and 2 dairy company: Milk, cream and other dairy processing for Local market in BiH.</td><td rowspan="2">Underutilized potential with a regional (Western Balkans, excluding Croatia) market demand for 150,000 metric tons of fresh milk.</td><td>Turkey
Serbia
Croatia
Slovenia</td><td>Turkey
Serbia</td></tr>
<tr><td>Cheese processing</td><td></td><td>Attract processing companies from the region to produce for local market</td><td>Artisanal producers</td><td>Turkey
Serbia
Croatia
Slovenia</td><td>Turkey
Serbia</td></tr>
</table>

In terms of project size, cold storage and processing would be capital intensive, with employment between 20 and 500, for projects of Euro 500,000 and 15,000,000, most likely from the major markets. Artisanal processors would be in the Euro 100,000 and 200,000 range with 5-10 employees, most likely domestic or from the region.

IDENTIFYING SOURCE FDI (foreign direct investment) MARKETS

The focus should be on target markets that converge for most of the products. This is done by understanding where most investors of target products come from. Top FDI source markets work well with

- Cultural, language and commercial affinity
- Free trade agreements
- Geographic proximity with easy transport
- Large consumers of the products the location offers

For instance, export destination markets could become FDI source markets. “The most important export destinations for Bosnia & Herzegovina fruit and vegetables sector are:

- Croatia: 22% of total fruit and vegetables export value (but 5% decline in 2011, mainly vegetables)
- Serbia: 17%, leading subcategories are apples, pears and quinces, fresh and frozen fruit and nuts
- Austria: 11% mainly frozen fruit and nuts
- Germany: 8% mainly frozen fruit and nuts, dried vegetables and apricots, cherries, peaches, nectarines, plums & sloes, fresh.

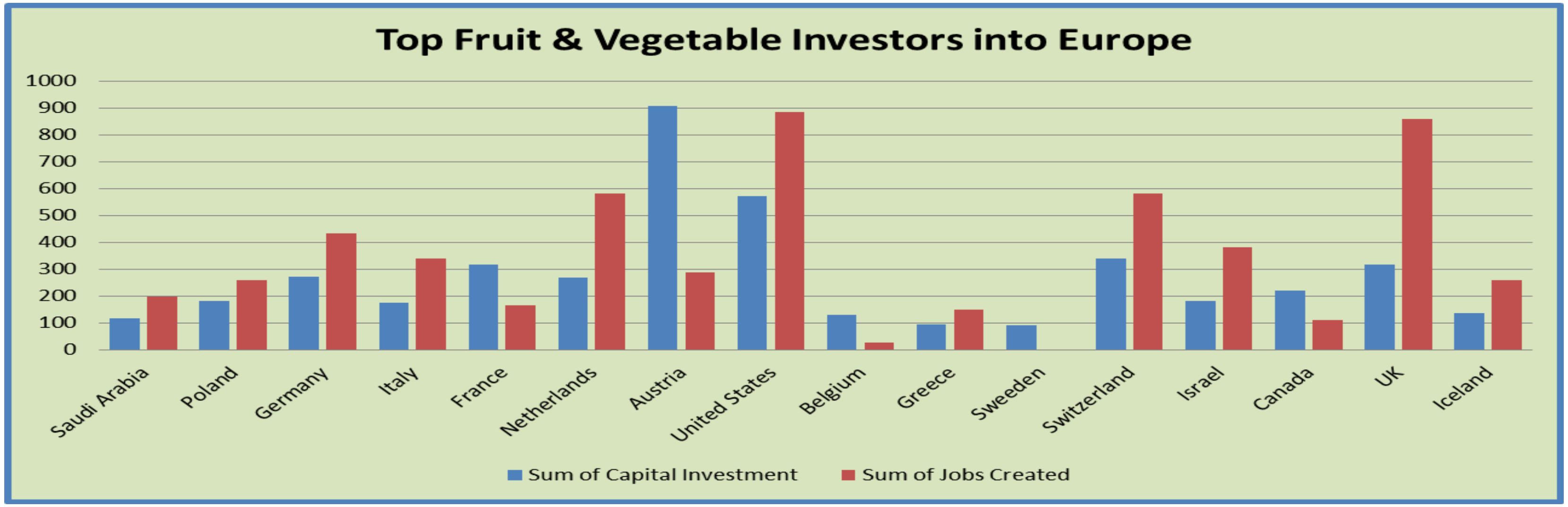
Source: Report on Competitiveness

Interestingly, the top-10 source countries for FDI (amounts of investment and jobs) since 2003 are US, Canada, Switzerland, Germany, Japan, France, UK, Netherlands, Italy and Spain. Top investor countries in Europe are: Austria, US, Switzerland, UK, France, Germany, and Netherlands. Closer still, top investor countries to Eastern Europe: Austria, UK, Italy, Netherlands and US; and for the Balkans: Austria, Netherlands, Greece, Italy and Israel. (source: fDi Markets/Financial Times).

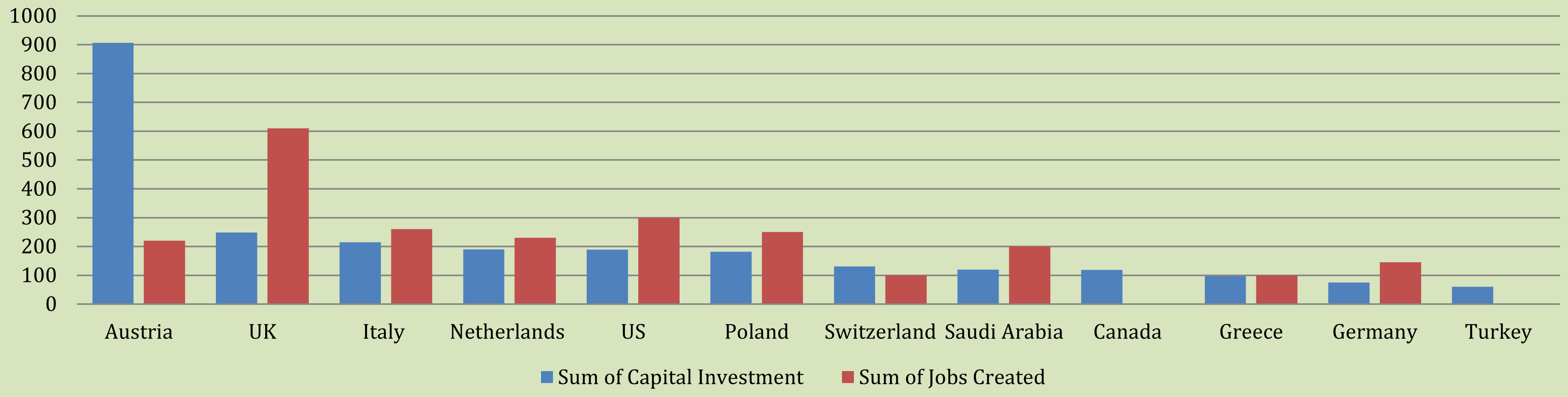
The UK and US seem to be the source of more labor-intensive investment projects in Eastern Europe. And the US, Italy, Greece and Austria are the sources for the Balkans. (Source*: FDI Markets*)

Fruit & Vegetables FDI trends by source country - Worldwide

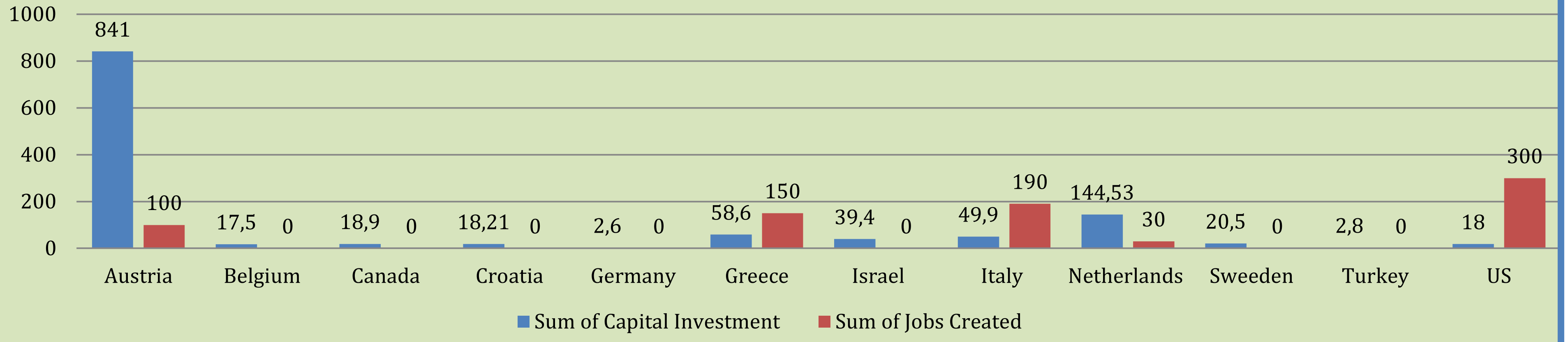
Source country	No of projects	No of companies	Jobs Created		Capital investment	
			Total	Average	Total (USD m)	Average (USD m)
United States	222	112	14,419	158	7,510.40	33.80
Canada	42	17	2,157	143	1,557.30	37.10
Switzerland	40	20	1,231	94	1,529.80	38.20
Germany	30	18	684	68	532.00	17.70
Japan	27	19	61	15	562.20	20.80
France	26	19	1,003	143	621.40	23.90
UK	24	14	1,277	116	906.00	37.80
Netherlands	23	19	582	97	358.00	15.60
Italy	19	18	375	53	307.30	16.20
Spain	15	14	715	143	188.60	12.60
Other source countries	187	159	6,067	129	5,021.90	26.90
Total	**655**	**426**	**28,571**	**132**	**19,095.00**	**29.20**

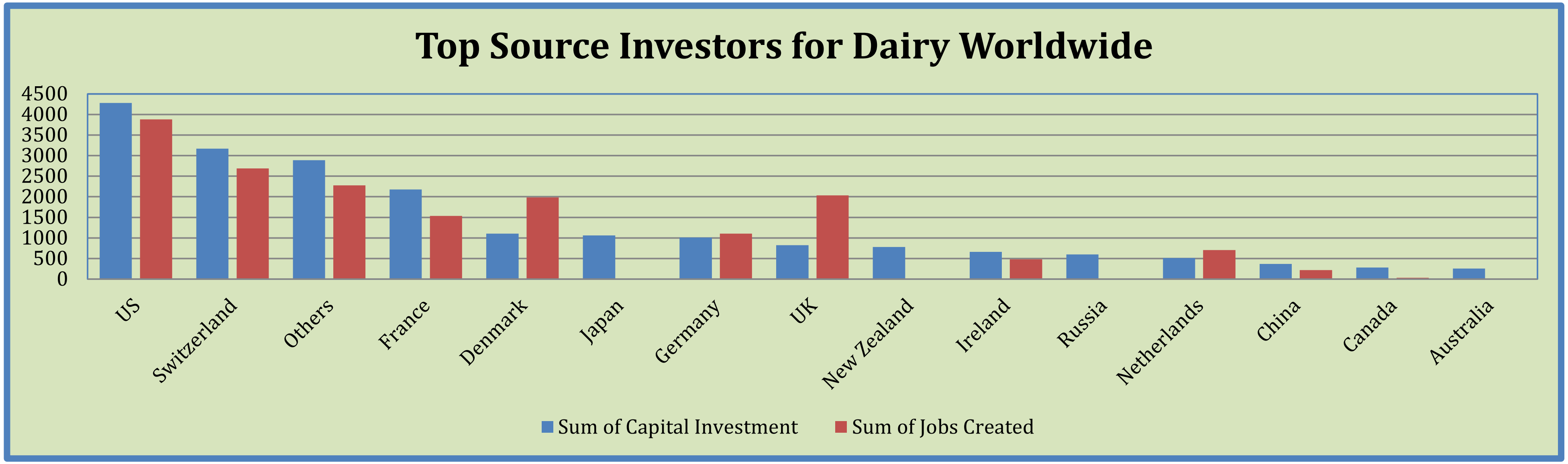


Top Fruit & Vegetable Investors into Eastern Europe

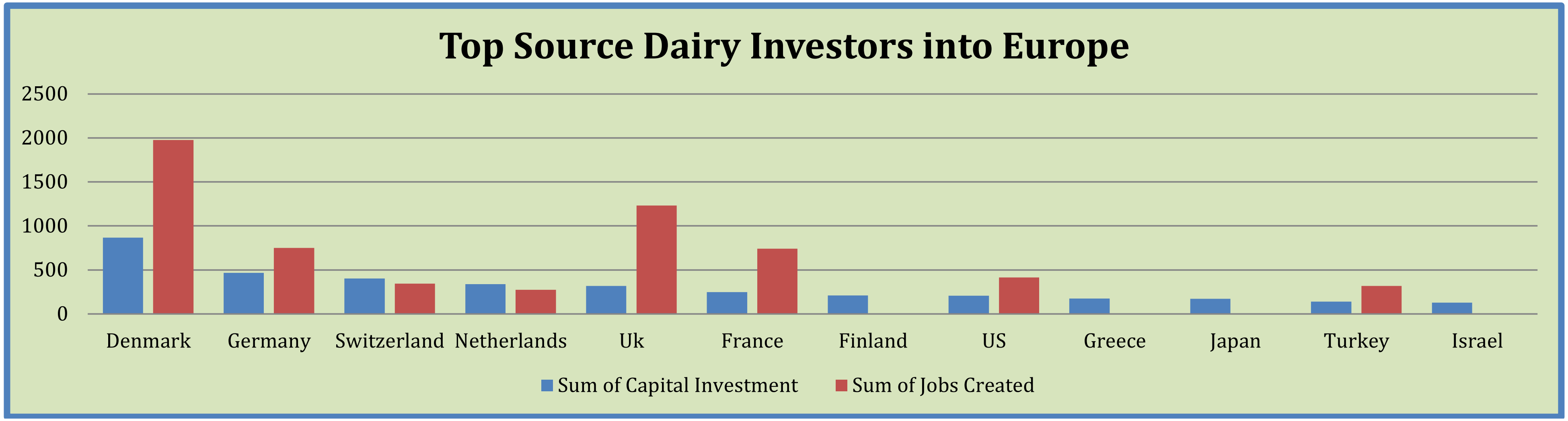


Top Fruit & Vegetable Investors into Balkans

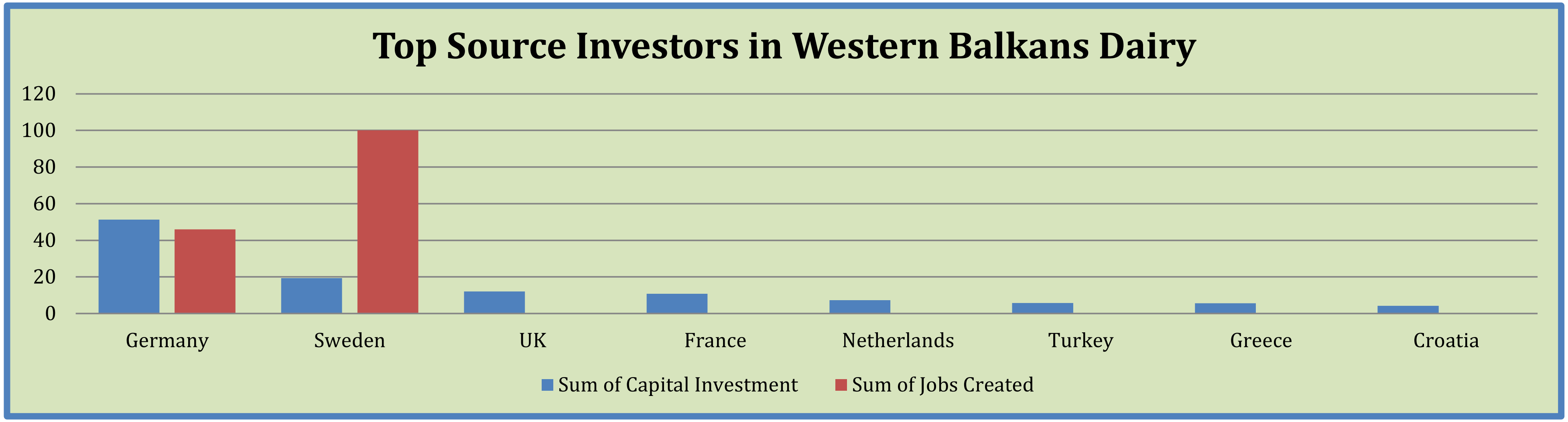




Top Source Investors for Dairy Worldwide
4500
4000
3500
3000
2500
2000
1500
1000
500
0
US
Switzerland
Others
France
Denmark
Japan
Germany
UK
New Zealand
Ireland
Russia
Netherlands
China
Canada
Australia
Sum of Capital Investment
Sum of Jobs Created



Top Source Dairy Investors into Europe
2500
2000
1500
1000
500
0
Denmark
Germany
Switzerland
Netherlands
Uk
France
Finland
US
Greece
Japan
Turkey
Israel
Sum of Capital Investment
Sum of Jobs Created



Source: FDI Markets/Financial Times

SOURCE MARKETS BY STRATEGIC PRODUCT
Fruits & Vegetables

<table>
<tr><th>Segment/Product</th><th>Top consumer countries</th><th>Top importer from BiH</th><th>Top producer country</th><th>Global Top Source FDI countries*</th><th>Top Source FDI countries in Europe+[3]</th><th>Top Source FDI countries in the Balkans[4]</th><th>Key companies</th></tr>
<tr><td></td><td colspan="7">FRUITS</td></tr>
<tr><td>Raspberries</td><td rowspan="2">USA
Canada
Germany</td><td rowspan="2">Austria 39%
Croatia 18%
Russian Fed. 16%
Slovenia 10%[5]
General importers:
#1 Austria
#2 Croatia /
Russian Fed.</td><td>Russian Federation
Poland
USA
<u>In Balkans</u>:
Serbia, Bulgaria</td><td rowspan="4">US
Canada
Switzerland
Germany
Japan
France
UK
Netherlands
Italy
Spain</td><td rowspan="4">Austria
US
Switzerland
UK
France
Germany
Netherlands
Israel
Poland
Belgium</td><td rowspan="4">Austria
Netherlands
Greece
Italy
Israel</td><td rowspan="2">Driscoll (US)
Sun Berry International (NETH)
Podgorina Frucht d.o.o. (SER)</td></tr>
<tr><td>Strawberries</td><td>USA
Spain
Turkey
<u>In Balkans</u>: Serbia, Bulgaria</td></tr>
<tr><td>Plums</td><td>Russian Federation
United Kingdom
Germany
Netherlands</td><td>Germany - 44% and growing
Russia 22%
Austria 9%
General Importers:
#2 Netherlands
#3 Germany</td><td>China
USA
Turkey
Poland
Romania
<u>In Balkans</u>: Serbia,</td><td rowspan="2">Nestle (SWITZ)
Mccain Foods (CAN)
Agrana (AUSTRIA)
ÇEKOK GIDA SAN VE TIC. AS (Turkey)
Zuegg (Italy)</td></tr>
<tr><td>Apples</td><td>Russian Federation
United Kingdom
Germany</td><td>Serbia[6]
Croatia
Austria
Germany
Slovenia</td><td>China
USA
Turkey
Poland
Italy
<u>In Balkans</u>: Serbia, Macedonia, Croatia</td></tr>
</table>

[3] These have been selected from FDI Markets based on value of capital investment.
* Countries with the highest number of projects.
[4] These have been selected from FDI Markets based on value of capital investment.
* Countries with the highest number of projects.
[5] In 2013 Croatia reduced considerably raspberry imports from BiH.
[6] Before 2012, Russia was the largest importer but not so in the last two years.

Segment/Product	Top consumer countries	Top importer from BiH	Top producer country	Global Top Source FDI countries	Top Source FDI countries in Europe+	Top Source FDI countries in the Balkans	Key companies
VEGETABLES							
Potato	Russian Federation, Netherlands, Belgium	Croatia 52% Serbia 17% Norway 11% Montenegro 10%	China, Russian Federation, Ukraine In Balkans: Serbia, Bulgaria, Albania	US Canada Switzerland Germany Japan France UK Netherlands Italy Spain	Austria US Switzerland UK France Germany Netherlands Israel Poland Belgium	Austria Netherlands Greece Italy Israel	Agrico BV (NETH) UNIVEG Group (BEL)
Cabbage	China, Russian Federation, USA,	Croatia 68% Slovenia 15% Romania 8% Serbia 3%	China, Russian Federation, Japan In Balkans: Serbia, Macedonia, Bulgaria, Montenegro				
Green peppers	USA, United Kingdom, Germany	Croatia 80% Slovenia 12% Serbia 5%	China, Turkey, Mexico In Balkans: Macedonia, Serbia, Bulgaria, Albania				
Cucumbers	USA, Russian Federation, Germany	Croatia 64% Germany 15% Slovenia 14% Hungary 2%	China, Turkey, Iran In Balkans: Albania, Serbia, Bulgaria, Macedonia				

Segment/Product	Top consumer country	Top importer from BiH	Top producer country	Top Source FDI country Worldwide	Number of countries with FDI in the region	Key foreign investors in the region	Foreign Investors in BiH companies
DAIRY							
Milk & Cream	Italy, Germany, Belgium	Croatia Serbia Macedonia Montenegro Albania[7]	USA, China, Brazil	US Switzerland Denmark UK France Japan Germany	Germany France Netherlands Sweden Turkey Greece Croatia and UK	Meggle (Ger) Danube Foods (Neth) Lactalis (France) Salford Continental (UK) Podravka (CRO) Sutas Sut Urunleri (TUR)	Meggle (GER) Zott SE & Co. KG (GER) Danube Foods (NETH) Lactalis (FRA) Podravka, Dukat (CRO) Prerada i promet mlijeka d.d. Tuzla (SLO)
Cheese	Italy, Germany, United Kingdom	Croatia 91% Montenegro 6% Macedonia 2% Serbia 1%	USA, France, Germany				
	VALUE CHAIN						
TBD							

Source: WITTS, Trade Databases, UNCTAD, OECD, FT’s fDi markets

[7] The order here varies depending on whether it is just fresh milk or fresh milk cream but the same markets apply to both.

From the following table, the top 3 markets for investment outreach should be selected.

SOURCE FDI MARKET CHARACTERISTICS

Key markets	Fruits	Vegs	Fruit Processing	Vegetables Processing	Dairy	Key FDI Segment/Product	Total Number of companies[8]	Top 3 markets per # of cos.	Proximity	Cultural & language affinity
REGIONAL										
Croatia	✓		✓		✓	Cheese, juices	2 / 1		✓	✓
Serbia	✓	✓	✓		✓	Plums, Berries, Pepper & Cabbage	0 / 8		✓	✓
Slovenia	✓				✓	Cheese and milk	0 / 1		✓	✓
Key markets	Fruits	Vegs	Fruit Processing	Vegetables Processing	Dairy	Key FDI Segment/Product	Total Number of companies[9]	Top 3 markets per # of cos.	Proximity	Cultural & language affinity
EUROPE+										
Germany	✓	✓	✓	✓	✓	Potatoes, cabbage, gherkins, dairy	26 /7			
Russian Federation	✓	✓				All fruits & vegetables	6 / 1			✓
Austria	✓		✓	✓		Fruit juices, fruit concentrate and purees	6 / 3		✓	✓

[8] The first number, represents the number of companies from that country with investment projects in FDIMarkets in the fruits & vegetables and specialty foods and dairy industries. The second number represents the number of identified potential leads so far.
[9] Ibid.

Netherlands	✓	✓	✓	✓	✓	All fruits & vegetables, integrators, logistics	19 / 9			
Greece			✓	✓			5 / 0		✓	
Turkey	✓					Dried fruits, fruit juices	11 / 4		✓	✓
Italy	✓		✓	✓		Fruit juice, purees, ingredients	16 / 2		✓	✓
Key markets	**Fruits**	**Vegs**	**Fruit Processing**	**Vegetables Processing**	**Dairy**	**Key FDI Segment/Product**	**Total Number of companies[10]**	**Top 3 markets per # of cos.**	**Proximity**	**Cultural & language affinity**
WORLD										
Israel	✓	✓	✓	✓		Fruits & vegetables & irrigation	4 / 0			
US	✓	✓	✓	✓		All fruits, vegetables and value chain (cold, packaging, logistics, inputs...)	146 / 3			

Sources: fDi Markets analysis of investors by cluster, segment, project activity in the world, region. Company Websites

[10] The first number, represents the number of companies from that country with investment projects in FDIMarkets in the fruits & vegetables and specialty foods and dairy industries. The second number represents the number of identified potential leads so far.

MARKET MAP: Visualize on a geographic map top 3 markets (clusters/cities) with bubbles and their distance (km, hours flight) from Sarajevo

- in number of investors, key cities or clusters to visit
    - Netherlands:
        - Largest number of FDI projects and larger size projects since 2003
        - Well known in Agribusiness and logistics.
        - Imports of fruits and vegetables with a value of Euro 5.000 million in 2013; 70% of imports of F&V come from outside the EU and 85% of exports go to the EU (Source: Eurostat)
        - The Netherlands F&V cluster seems spread out around the country.
        - The Netherlands imports all types of F&V, including the target products for the BiH strategy.
        - Euro 12.000 million dairy market; has the fifth largest dairy products producer in the world; and already has a strong presence in the BiH market through subsidiaries of a Serbian based but Dutch owned Imlek, Mlekara Subotica, Bambi Banat and Knjaz Milos (Danube Foods NV).
        - Existing companies such as VITAMINKA and ESAROM should be contacted to offer additional investment opportunities to them.
    - Germany:
        - Germany is the largest importer of fresh fruit and vegetables in the European Union. Total sales value of fresh fruit and vegetables in 2006 was €6.1 billion.
        - 44% of German fruit imports come from non-European Union countries (2013)
        - Germany is Europe's vegetable market. In total Germany imports around 3 million tonnes of fresh vegetables, with a value of around Euro 3.500 million annually.
        - Germany is Europe´s largest fruit importer with a market value over Euro 4.000 million. Import of F&V for a total value of over Euro 7.500 million.
        - Germany is an importer of most F&Vs selected in the strategy.
        - There are German investors in the dairy sector in BiH: Meggle AG and Zott SE & Co. KG. A few also in the F&V sector but mainly representation and sales offices such as: HiPP GmbH & Co., Döhler Group,

    - A few predominant F&V and dairy clusters in Germany: Nordrhein-Westfalen (Dusseldorf) and Baden-Wurttemberg. (FDI markets – region/state of German investors in F&V and dairy.

- Austria:
    - Imports nearly Euro 750 million in processed fruits and vegetables and Euro 410 million in fruit juice (2012) – Austria has a very strong juice industry and is among the leading importers of fruit juice in the world.
    - The first and second largest capital investments in the F&V sector in the Western Balkans, according to FDIMarkets for the period 2003 - 2013 were Austrian investments: Kolm Pfluger into Serbia for US$ 776 million and Bramburi into Croatia for US$37 million. Though not in F&V nor dairy, Austrian Food industry investors are already present in BiH, such as Agrana (sugar Brcko) and Esarom (food ingredients, Banja Luka)
    - Austria is by far the largest foreign investor into BiH, Euro 1.337 million since 1994 (FDI stock).
    - Proximity and affinity.¡: Austria has been doing business with BiH for a long time.
    - There are at least two Austrian logistics operators with a presence in BiH: Gebrüder Weiss and DB Schenker & Co. AG.
    - Austria is the biggest importer of BiH berries, the highest margin agricultural product targeted in the strategy (nearly 40% of total raspberry exports)

- Serbia:
    - Serbia is the second largest investor into BiH: Euro 959 million since 1994 (FDI stock).
    - Serbia is an important producer of berries, and raspberry in particular (3rd in the world).
    - Synergies and complementarity: berry crops grow in nearby areas of BiH and Serbia; and Serbian investors may be seeking the possibility of increasing production. This synergy and complementarity can be extended to same crops generally speaking.
    - There are various Serbian Food and beverage companies in BiH and in the dairy sector but there are not many Serbian fruit & vegetable investors of a considerable size. There is an opportunity to approach Specific target investors in the F&Vs sector including processing of fruit.
    - Proximity and cultural affinity. Essentially speaking the same language and sharing a common border; Serbia and BiH are no strangers to doing business together.
    - Access the Russian Federation Market more easily.
    - Possibility to access foreign investors in the F&V industry in Serbia to increase their presence in Western Balkans.

<u>Other opportunities to consider</u>:

- Spain overtook the Netherlands as the biggest exporter of frozen and preserved vegetables (Sector Report p. 178).
- Croatia, Turkey and Slovenia: These markets are nearby, share cultural affinity and are important trade partners of BiH for certain products. These countries are also investors in the country and some have expressed interest in receiving a value proposition in the F&V and dairy sectors through their embassies (Turkey).
- Existing local companies seeking JVs or sale.
- Existing foreign investors who could be interest in expanding or opening new activities.
- Russian Federation: Currently there is no free-trade agreement. Worth studying which products may not be impacted negatively by tariffs and costs. In the meantime target countries with access to the Russian Federation market such as Serbia.
- A brief selection of no more than 10 worldwide F&V largest companies from non target markets such as: Dole, Maccain Foods, and other large processors.

Target investor lists are provided in MS Excel format as an appendix to the strategy. These get obsolete rapidly. The entity should contract at least one Market Intelligence/Research source, such as Kompass to obtain company and Industry specific information.

In addition, domestic investors should be considered for all of these products. The entity should procure this list from the local chambers of commerce.

VALUE CHAIN TABLE

Segment/Product	Country / entity is self sufficient	Quality of existing inputs / amenities	Accessible at competitive prices	Public - Private interest PPP	Existing investment projects	Do they fulfill EU / Regional standards?	Are these available near production areas?	Critical need? Is there a strong demand?	Potential for quick win? Which would be easiest to attract?
SUPPLY CHAIN TO ALL 3 SUBSECTORS									
Seeds	No	Poor	No	No	No	No	n/a	Yes	Yes
Certification Labs	Yes	Poor	Yes, but lack EU recognition	Yes	No	No	No		
Cold Storage	No	Average, but limited deep freezing	Yes	Yes	Yes	Some	some	Yes	Yes
Deep freeze	No	No	No	Yes	No	Some	Some	Yes	Yes
Packaging	More-less	Average	More-less	No	Yes	some	Some	Yes	
Logistics / transportation	More-less	Average	More-less	No	Yes	Yes	yes	Yes	

The value chain components have been set against a series of criteria to better determine which are to be prioritized. Seeds, cold storage and deep freeze have been chosen though on two key criteria, whether the country is self sufficient or already has sufficient existing capacity and whether there is strong demand. It is also worth mentioning that beyond these above presented criteria, these identified VC segments have an important impact in the country´s capacity to reach markets competitively: A supply of good quality seeds to be able to export with guarantees and at the required quality level; and cooling infrastructure to make the best of fresh produce´s profit potential, in terms of increased production and generating localized centers of distribution (for export), purchase and / or marketing.

The VC segments have not been set against the same “source markets” exercise / table as the individual products within the identified fruits, vegetables and dairy sectors. The identified VC segments would on their own be very difficult to attract to Bosnia and Herzegovina. The country does not have strong arguments to bring an investor in seed production because BiH has no tradition (and innovation) in this segment and the market, even regional is small. While cool and deep freeze logistics are a top priority, these kinds of investors invest based on acquiring new clients which can provide them with critical mass and enough business to open cold store infrastructure. Nevertheless, these companies should be contacted because they already work with our target investors, at times in the region and may be a great way to identify specific companies who are seeking to increase their business at the very least in the Western Balkans if not beyond.

Potential investors have been identified in these VC segments. Nevertheless, the strategy will concentrate at first on identifying aggregators who could provide investment into the VC priority segments all on their own and / or through their connections to existing business partners within the VC.

III. PRODUCT/PRICING/COSTING

The location has the following characteristics as a “product” to investors:

- Located in the Balkans with access to Europe
- Low cost of labor / and production
- Government and entity-level incentives

To improve the location as a “product”, indicate what steps the Government and Entity are taking.

IV. MARKETING

The current strategy must be considered and framed within the existing capacities of Bosnia and Herzegovina's investment promotion and partner institutions to roll out the different outreach activities. It will be important to consider all criteria as to how the different activities should be implemented. The current document's approach is to provide various alternatives while prioritizing some to ensure a greater degree of success. Nevertheless, the different institutions implementing the strategy should strive to stay focused on activities and specific outreach campaigns that are feasible, meaning that they are well planned and funded, and where the quality of all related work (in preparation for the implementation) of the different outreach campaign is ensured. It is better to do less and well than it is to try to do too much leaving room for improvement. This approach also ensures maximizing the success of the different campaigns[11].

The outreach strategy proposes priority target markets as well as multiple activities to implement the outreach campaign/s. Nevertheless, it is essential that decisions concerning the initial outreach campaigns be made trying to maximize results through combining different activities wherever possible. This will also allow for cost savings of the outreach campaigns. One example of how this can be done is by combining participation at a strategic industry event within one of the selected target markets. In this sense the event would decide the dates for the investor visits to the target markets.

Bosnia and Herzegovina's investment promotion and partner institutions will have to set aside resources, both human and financial towards developing and implementing the different outreach strategies. This document addresses these further down to provide an idea of what is necessary to carry out the different activities. However, all involved institutions must remain flexible as to the potential for varying degrees of collaboration, responsibilities and funding. In this sense, it is essential that all institutions involved in the promotion for investments within the strategic products identified in this

[11] This strategy document is an outreach campaign document in a general sense, meaning that it assembles many different options and "outreach campaigns". Every outreach (direct contact) campaign can be differentiated by a specific target group, in this case, it can be countries, industry events, already established investors, ... So each contact / selling campaign will require a slightly different approach and logistics organization depending on the target group. The strategy also does contemplate specific preparatory activities later in the document which are necessary and common to all campaigns.

strategy discuss and decide together which specific outreach campaigns will be prioritized first. There is no need to do everything at once and it is likely that only a couple of investor outreach campaigns can be carried out successfully within the first year.

Finally, investor outreach campaigns are not as easy to carry out as it would seem. These entail a lot of work which does not get much visibility, especially in the preparatory phase. But this phase is the most important. In this way, this document also contemplates that careful record keeping of all activities and visits be made as well as setting key indicators to be able to track the performance of the campaigns. Every campaign will provide fresh new data, feedback and experiences that should feed into improving successive campaigns.

Promotion Message:

The unique value proposition (UVP) to investors could include elements of the longer growing/production season and lower labor costs. Other potential components of the UVP could be for example supplying to existing investors in the region to allow them to increase their critical mass of the different fruits & vegetables they currently supply and providing them with an additional competitive supply in case of weather or other unpredictable events, if targeting aggregators and / or distributors; or specify the strategic location of a specific site to set up cold logistics infrastructure based on proximity to other regional producers and existing (for example) air cargo capacity within XX Kms of production cluster/s.
The UVP will most likely entail a combination of "competitive solutions" offered by Bosnia and Herzegovina to investors and some of the selected solutions will vary according to the target investors being contacted / prioritized.
The UVP will be developed further with the investment promotion leads in the country and tested and reviewed with partner organization.

See Product table above for more specific UVPs by product. This should be adjusted for the market being visited based on the particular benchmarking for the product and competitive countries, including the target market if also a producer.

Communication strategy:

There should be two key components to the communications strategy; one is concerning the organization among the partner institutions during the development of the promotional messages and UVP; the other, will be for dissemination of promotional messages and materials.

The first component refers to agreeing on the UVP for Bosnia and Herzegovina's fruits & vegetable and dairy sectors and the promoting it internally within the different institutions. This is important because once the outreach campaigns take off, these will immediately raise awareness and most likely generate new non-targeted opportunities. This is a desirable outcome, nevertheless, the promotion and partner institutions must have one clear and unified message. This is essential to avoid confusion to prospective investors.

The second component is dissemination. The message must be transmitted at different levels reaching out to, network contacts (consultants, foreign offices, consulates, and foreign embassies and chambers).

For support, publicity in magazines, press, and radio could be useful. Publicity should be carefully planned and coordinated as it is expensive and has just as much capacity to promote as it can to create confusion.

Trade Shows/events:

Trade shows and events are an excellent opportunity to meet with potential investors as well as an ideal setting to learn more about trends within the industry and promote local products. Following is a list of the most relevant trade shows and events in the strategic sectors in Europe. Europe was selected as the priority region for outreach taking into consideration the importance of the sector in Europe vis-a-vis the world; proximity to Bosnia and Herzegovina; cost considerations for the outreach campaigns and affinity for doing business in the sub-region. It is important to highlight that potential investors from outside Europe participate in these events and that the non-European larger size potential investors in the sector tend to have decision centers in for Europe in European countries.

Brochure and website would include UVP elements. Each product and market would have a specific presentation persuading investors by developing each of the UVP elements for the particular product."

V. DISTRIBUTION/PROMOTION/SALES

Promotion Events Calendar by Market/Product

January	February	March	April	May	June	July	August	September	October	November
	Fruit Logistica / Berlin 4 - 6, 2015	**Dairy and Meat Industry / Moscow, Russia** 17 - 20, 2015	**Global Berry Congress / TBD** TBD, 2016	**Medfeld / Perpignan, France** 13 - 15, 2014 /2015 (TBD days)	**FreshAgroMashov / Tel Aviv, Israel** 10 - 11, 2014	**World Potato Congress / Yanqin, China** 28 - 31, 2015	**Prognosfruit / Istanbul, Turkey** 6 – 8, ,2014	**Potato Europe / Bockerode, Germany (Belgium 2015)** 3- 4, 2014	**Fruit Attraction / Madrid, Spain** 15 - 17, 2014	**World of Milk / Interfood & Drink / Sofia, Bulgaria** 05 - 08, 2014
				Milky Review / Gdansk, Poland 26 – 28, 2015				**Cool Logistics Global / Rotterdam Netherlands** 30th, 2014 Oct. 2nd, 2014		
				Agriculture Fair / Novi Sad, Serbia TBD, 2015				**Macfrut / Cessena, Italy** 24-26 September, 2014	**Anuga / Cologne, Germany** 10 – 14, 2015 (every other year)	
								Eurofruit / Lleida, Spain 25 – 27, 2014	**Agrokos / Prishtine, Kosovo** 8 - 11, 2-14	
								Polagra Foods / Poznan, Poland 29.Sep - 02.Oct, 2014		
								CNR GIDA / Istanbul, Turkey 4 – 7, 2014	**Indagra Foods / Bucharest, Romania** 29.Oct - 02.Nov, 2014	
								WorldFood / Fruits & vegetables logistics /Moscow, Russia 15 - 18, 2014		
								BioBalkans and Fruveg / Belgrade, Serbia 10 - 13, 2014		

- Use of Foreign offices abroad: own vs. Foreign Affairs/Embassies/Consulates vs. consultants
- Network: consulting and law firms, established companies, associations in host and source countries, bi-national chambers
- National/Sub-national: Joint campaigns with other regions, countries
    - Joint strategy for common products/markets
- Sectoral Information package, website, USB, tools
- Promotion/outreach Calendar

VI. SERVICE:

- Follow up strategy: interest groups, sector news newsletter, networking events

VII. PARTNERSHIP

- Which institution needs to be involved
    - Ministries at Entity level
    - Ministries at National level
    - FIPA
    - Institutes
    - Associations/Chambers
- Role splits

VIII. OTHER

- Link with other activities: image building, market intelligence, facilitation, servicing, aftercare, policy advocacy
- Staff TOR, skills building, pilot campaign
- Systems, procedures, targets, M&E, reporting

IX. MONITORING AND EVALUATION

The outreach campaign/s need/s to establish some indicators to track and measure the progress of both, the general promotion activities and the more specific and targeted investor meeting campaigns. These indicators will allow promoters to gain a better understanding of the strengths of campaign/s as well as the areas for improvement. Suggested M&E indicators could be

Lead generation and conversion	Number of Companies visited during outreach
	Number of outreach meetings converted into site visits
	Number of new investment leads (including investor inquiries)
	Total number of leads converted into site visits
Investments and re-investments	Number of companies that decided to invest
	Number of companies that decided to re-invest
	New investments
	New Jobs created through new investments
	Re-investments
	New Jobs created through re- investments

It is important to highlight that this is just a suggested M&E Framework; others may be used, depending on how the campaigns are prioritized and rolled-out. Nevertheless, this model captures the minimum results which should be tracked.

X. BUDGET

The outreach budget should include:

- Missions to target markets

Following is an estimate budget for an outreach campaign to Berlin, three Bosnia and Herzegovina representatives for a week; six days and five nights. This budget is orientative and should be updated according to needs, specific locations and level of participation.

Category	Item	Observations/Assumptions	Units	Unit cost Euro	Estimated Euro
Direct Travel Costs	Air fare	This assumes only three reps should hold any one meeting with one investor at a time. Therefore, it only estimates 3 people traveling. Includes airport taxes. (this assumes Berlin in February buying tickets economy well in advance)	3.0	€ 350	€ 1.050,00
	Travel Insurance	Accident, health and lost luggage insurance bundle	15.0	€ 10	€ 150
	Target market VISA	Most target markets require entry business visa.	3.0	€ 40	€ 120
	Transportation to and from host country airport	This is just the cost of taxis to and from host country airport	2.0	€ 20	€ 40
	Transportation from and to target market airport	This is just the cost of taxis to and from target market country airport	2.0	€ 65	€ 130
	Transportation in target market	Typically, IPI's rent a compact vehicle. Cost includes insurance and taxes OR Taxis	17.0	€ 12	€ 204
	Gasoline in target market	This depends widely on the distances and cost of gasoline in target market. However, a typical scenario is to spend €20 per day.	6.0	€ 20	€ 120
	Hotel	Hotel accommodation 3 people for five nights 6 days.	15.0	€ 100	€ 1.500
	Per diem	Number of days will be the active days in target market, plus 1 day in or 1 day out.Per diems	18.00	€ 90	€ 1.620
	Communications	Rechargeable calling card, or SIM Card to insert in compatible device, used only for local calls.	3.0	€ 10	€ 30
	Miscellaneous	Such as photocopying, printing, internet, mail back left over promotion material, mailing of promotional material to hotel in target market	xx	€ 300	€ 300
	TOTAL TRAVEL COSTS				**€ 5.264,00**

- Travel to key trade shows

The same above budget can be used but would also include:

Category	Item	Observations/Assumptions	Units	Unit cost Euro	Estimated Euro
Direct Travel Costs	Trade Fair / Congress / Event	Participation in Event – registration	3.0	€ 100	€ 300

Of course the budget would increase substantially if the promotion institutions agree to do a promotional event at the trade fair / Congress / event such as renting a room, coffee and snacks for participants and all presentation materials and tools such as a projector, microphone, flip charts, etc… . This would probably be best envisaged to happen maybe upon the third outreach campaign and preferably in one of the top events in the sectors.

- Website, Brochures and presentations

A brief brochure should be printed. This brochure is to provide some basic data on Bosnia and Herzegovina, but most importantly should contain an overview of the business opportunities in the fruits and vegetables and dairy sectors in the country as well as the value proposition/s. These are the promotional materials which will be distributed across government institutions, local foreign embassies and other representations, chambers of commerce, service providers, Bosnia and Herzegovina´s embassies abroad and any other institutions which can act as intermediaries or multipliers of the promotional materials.

FIPA should create a section within its website or a separate site attached to the existing site entirely devoted to investors in the fruits, vegetables and dairy markets in BiH, investment opportunities and product and sector specific data. This site should incorporate all data obtained through the outreach campaign strategy research phases as well as other relevant data from partner institutions for investors in the country. This website could be done on its own (outside FIPA site) to launch the strategy and then for implementation and as a resource to investors. If so, it should be considered to have a site co owned with other partner institutions. No matter what website development modality is chosen, it would be important that the logos of all partners from the working groups and other deemed relevant partners should figure prominently on the site to demonstrate this is a well coordinated strategy.

A powerpoint presentation must be developed to present the sector, the investment opportunities as well as all business environment issues, procedures, and requirements relevant to investors in Fruits, vegetables and dairy. The presentation should also include a few slides introducing the country and some general information. This presentation must be thorough and make sure it includes nearly everything that could interest an investor in these sectors; that includes legislation, taxation, land, costs, support institutions. The objective of such a comprehensive presentation is to provide promoters with all the possible slides necessary to inform investors and which can also be adapted to each type of audience and type of prospective investor. This presentation would be a repository which could be used by FIPA and its partners at any time, including ministers or any other government officials travelling abroad. This is perhaps the most time consuming of all promotional, materials but the most important in terms of impact. One on one interviews with investors are best assisted with tailor made presentations and not brochures nor websites. Websites remain an excellent and cost effective tool to get the word out and to provide early stage investors looking at a long list of potential locations, with reliable and key data. Presentations are the second stage and the best tool when promoters need to make the sell and convince investors of visiting Bosnia and Herzegovina. That is the ultimate and most immediate target of the outreach missions.

XI. ACTION PLAN

	Key Activities	Rationale	Objective	Institution/s	Timeline	Human Resources	Financial Resources
First General Steps to Prepare Outreach Campaigns							
1	**Identify a set of business opportunities to showcase to investors**	While the Ag subsectors have been already identified; so have other determinant gaps/opportunities; i.e. need for infrastructure such as cold storage; specific areas of publicly owned Ag. land...	Promote the different investment opportunities through both, more general value propositions based on competitiveness and demand and specific projects within value chain and/or location.				
2	**Create clear value propositions for each set of identified investment opportunities**	To attract investor interest; investment opportunities must be based on a set of clearly defined parameters that demonstrate investors' capacity to generate profit.	Create the core messages through specific data that will "hook" investors to wanting to know more and more specifically, visit BiH to view opportunities.				
3	**Create Dairy and Fruits and Vegetables Promotional Materials**	The key to the outreach campaign is to present targeted investors with good quality data to be able to assess the location potential as well as calculate the cost and RoI of the project.	Promote the different opportunities in the dairy and fruits and vegetable sectors in BiH with convincing arguments and high caliber data.				

	Key Activities	Rationale	Objective	Institution/s	Timeline	Human Resources	Financial Resources
Direct foreign investor Outreach Campaign							
4	**Identify Target markets for BiH's Dairy and Fruits and Vegetables sectors**	It is key to identify markets currently buying these BiH products & which are importing/demanding greater amounts of these products. Markets already purchasing BiH Dairy and Fruits and Vegetables are an easier "sell" (they know the products and country) and those where demand is growing have a greater chance to be interested.	Target those markets which already have an increased demand (or deficit) for the strategic Ag sectors; and / or may already know the products.				
5	**Research potential target companies within identified target markets to prepare potential visits.**	There very well may be many ag companies in the target markets. So it will be important to select a set of criteria based on the specific investment opportunities to promote (i.e. production, processing, aggregators, quality certification labs; veterinarians, cold storage, logistics, packaging...) and use these (along another subset of criteria i.e.: size, presence in the region, looking to expand...) to target more accurately potential investors who would be most likely interested in the BiH offer.	Promote directly to key potential investors who meet specific criteria that would make them more likely to show interest by the BiH value proposition.				
6	**Identify relevant and**	It is very important to establish contact with	Access key decision makers at target				

	Key Activities	Rationale	Objective	Institution/s	Timeline	Human Resources	Financial Resources
	key decision makers at the identified and filtered target list of prospective investors	decision makers in order to avoid wasting time and to get conclusive feedback on the real interest of the company when contacted later.	prospective investor companies.				
7	**Prepare contacts with identified target potential investors and set the ground for a visit to target market to meet with investors.**	As the agency which has filtered the prospective companies moves to contacting them, to increase likelihood of a positive answer; it is very important that further research is done on each one to be able to write a personalized e-mail / fax / letter that includes a sentence or two on why they have been chosen and recreate the value proposition in function of what the IP team believes the investor will be most likely interested by. Adding to the letter that you will be visiting the city/event/area on specific dates can also help receive a positive answer in case of doubt.	Contact investors with the a personalized letter / fax / e-mail to increase the chance of a positive answer to a visit.				
8	**consult with other high-ranking relevant officials on attending the visit.**	Depending on the target company/ies which have accepted the BiH delegation's visit may require the support of other agencies or departments, however these should be	Include relevant government agencies and departments to better prepare the mission.				

	Key Activities	Rationale	Objective	Institution/s	Timeline	Human Resources	Financial Resources
		decision makers as well. This shows great commitment and given that despite the promise shown by the strategic sectors, Public authorities can already commit and even facilitate the target goal which is the investor visiting BiH.					
9	**Prepare visit to investors - Prepare itineraries, company profiles, powerpoint presentations and materials, reservations.**	Being on time, everyone in the visiting team knowing each investor well ahead of the mission, preparing personalized presentations (based on investor specificity) and materials, and careful planning of the itinerary will demonstrate professionalism and lower any risks of misunderstandings or confusion.	Ensure successful mission				
10	**Carry out Mission visits - carefully document the visits and any additional information required by the investor, including setting dates for a visit to BiH (if possible)**	It is very important that the details of the visits are well documented and that the investor gets the attention it requires. Many investors often need a little extra follow-up to get them to come and visit.	Convince investor to visit BiH and investment opportunities.				

	Key Activities	Rationale	Objective	Institution/s	Timeline	Human Resources	Financial Resources
Internal Outreach Campaign							
11.	**Identify local and foreign firms within these sectors already operational in BiH and with sound financial resources**	As the GoBiH and Entity Governments are undertaking also reforms to improve the sector competitiveness; locally operating investors are just as good a target than attracting foreign ones. In fact, these may be better for they already know the terrain. This would also demonstrate Governments' recognition and appreciation for investors who have already undertaken projects in the country. Depending on the nature of the investors activities within the sector(s) they may be able to recommend certain target companies.	Promote new opportunities for investment in Dairy and Fruits and Vegetables to existing investors.				
Repeat steps 5 through 10 above for Internal Outreach Campaign. It is just as important to research these companies as it is to research those for the international outreach campaign. Check whether they have ever been visited before with different government level agencies; review website if available...							
Promotion / Outreach Campaign at Strategic Sector international Events							

	Key Activities	Rationale	Objective	Institution/s	Timeline	Human Resources	Financial Resources
12	**Identify key (most important) events for the two strategic sectors.**	Important events within specific industries generally attract important companies from the sector and often, decision makers too.	Be present, promote and meet with key decision makers from dairy and fruits and vegetable sectors. Also consider events relevant to the value chain.				
13	**Decide the level of participation of BiH at these events**	Some events are better suited than others (from an impact perspective) to do proactive promotion where BiH could either set a stand or create an event around the event. This is very important and should be assessed in terms impact. All key sectoral events however, are an opportunity to meet with decision makers. The level of participation in the event will also determine the cost and HR resources needed; and even mobilizing different institutional actors!	Maximize meetings and interest by prospective investors at the key international sectoral events.				
14	**Get a copy of the event roster way ahead of time to begin reviewing investors attending (and level of decision-**	The roster of events provides an idea of what kind of participants attend these events. Event attendance, regardless of whether marketing activities are envisioned to promote BiH as a location for Dairy and Fruits and	Meet with key prospective investors and decision-makers				

	Key Activities	Rationale	Objective	Institution/s	Timeline	Human Resources	Financial Resources
	makers).	Vegetables or not; is essential to maximize reaching and meeting with prospective investors. Participation at events can be costly and the potential for meaningful meetings should be the main criteria for choosing participation and level of engagement at the event.					
If roster proves attractive; Repeat steps 5 through 10 above for an Event Centered Outreach Campaign. It is just as important to research these companies as it is to research those for the international and local outreach campaign. Check whether they have ever been visited or contacted before with different government level agencies in BiH; review website if available, as if these investors have been contacted and you contact them again, most likely this will result in confusion, resentment and refusal.							

SWOT ANALYSIS BY PRODUCT:

Plums - SWOT

STRENGTHS	**WEAKNESSES**
• Tradition • Favorable agricultural - climatic conditions • Yield stability • Prevalence • Good product quality • Costs of production are not high (small number of trees per unit of area, do not require a lot of chemical treatment in the course of the production cycle) • Possibility of switching to organic production (plant extracts with insecticide and fungicide properties may be used) • Low labor force costs (workers without adequate professional qualifications) • There is commitment on the part of the line ministry and local self-governance institutions to support this production: primarily by introducing modern technologies of cultivation (irrigation, protection from hale, etc) • Broad spectrum of products made from plums (all the competitive advantages / quality, production, costs, exports)	• Insufficient organization of small producers in cooperatives and clusters • Production for unknown buyers • Fragmentation of crops (low scope of production per farm) • The low level of mechanization • Lack of knowledge about the maker of cultivating, harvesting and business methods • The low volume of production per farm • The relatively high investment and the poor availability of modern inputs • The limited availability of commercial loans • Lack of horizontal and vertical integration • Over-reliance on sales to seasonal markets • Limit the number processing capacity • Poor competitiveness of existing processing capacity • The lack of cold storage and warehouses that have atmospheric control • Bad targeted, low levels of state support • Poor institutional framework and underdeveloped legal system
OPPORTUNITIES • Further growth in exports • Production of traditional products • Options for using this group of products in the condiments industry • In alcohol industry • In the industry of juices • Accessibility of high quality germination material • Combining traditional products made of plums with eco tourism • Large areas suitable for the establishment of orchards; • Introduction of modern technologies • Replace imports on the domestic market • The increased demand as a result of tourism development • +	**THREATS** • Lack of coordination between the entities' policies and support for the sector and Lack of adequate zoning in the fruit production area • Dumping prices in the surroundings • Seasonal fruit has a shelf life (short period of utilization if outside of cold storages) • Introduction of export barriers by the EU • Presence of sharka disease on contaminated areas poses a threat on the establishment of new plantations of plums with healthy and sound germination material. • Lack of coordination on the state level and with the entities, customs services not protecting our interests • Climatic conditions (inflow of harmful organisms as a result of extreme weather – draught and low temperatures) • The high level of informal gray economy • Lack of capital investments in the area of irrigation • Lack of application of modern technologies in production (more intensive cultivation forms, usage of phyto hormones etc) • Lack of long-term policy for incentives and development (rulebooks amended three times per year) • Divergence from strategy (law) for incentives • +

Apples - SWOT

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STRENGTHS
- Tradition
- Favorable agricultural - climatic conditions
- Yield stability
- Prevalence
- Good product quality
- Possibility of switching to organic production of certain varieties – Topas, Prima, etc (plant extracts with insecticide and fungicide properties may be used)
- Law labor force costs (workers lacking any professional qualifications may get involved in the production cycle)
- There is commitment on the part of the line ministry and local self-governance institutions to support this production: primarily by introducing modern technologies of cultivation (irrigation, protection from hale, etc)
- Broad spectrum of products made from apples (fruit juices, brandies, jams, chips etc...)
- The existence of large cities

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WEAKNESSES
- Insufficient organization of small producers in cooperatives and clusters
- Production for unknown buyers
- Fragmentation of crops (low scope of production per farm)
- Insufficient adjustment of the assortment to continuous supply of the market with consumable apples
- Low levels of purchasing prices per harvest
- Insufficiently clear strategy in the development of this sector by the state and total distancing of line ministries concerning the pricing policy
- High production costs (planting large numbers of trees per unit of area, a lot of chemical treatments in the production cycle) Lack of knowledge about the maker of cultivating, harvesting and business methods
- Lack of a stabile marke
- Assortment not adjusted to the EU market
- Limited number of processing capacities: lines for drying and lines for production of juices and broths that ensure the added value chain
- Customs barriers prevent the export of apples due to the lack of the concept of integrated production as the basis for the production of products safe for human health
- In processing, lack of application of the standards that would ensure a place for goods of this type in the EU market
- Weak organization in labor force mobilization

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OPPORTUNITIES
- Production with geographic origin and further growth in exports
- Production of traditional products
- Possibility to use this group of products in the industry of alcohol, industry of juices
- Availability of high quality germination material
- Combining traditional products made from apples with eco tourism
- Introduction of modern technologies
- The increased demand as a result of tourism development;

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THREATS
- Traditional approach to production
- Lack of adequate zoning in the fruit production area
- Dumping prices in the surroundings
- Seasonal fruit has a shelf life (short period of utilization if outside of cold storages)
- Introduction of export barriers by the EU
- Lack of coordination on the state level and with the entities, customs services not protecting our interests
- Climatic conditions (inflow of harmful organisms as a result of extreme weather – draught and low temperatures)
- Lack of capital investments in the area of irrigation
- Lack of application of modern technologies in production (more intensive cultivation forms, usage of phyto hormones etc) Ignoring environmental issues
- Lack of long-term policy for incentives and development (rulebooks amended several times per year)

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Strawberries - SWOT

STRENGTHS	**WEAKNESSES**
• Favorable agricultural and ecologic conditions • Yield stability and increased demand for locally produced fresh food • Prevalence and Increased demand for locally produced fresh food • Good product quality (noticeable organoleptic properties of ripe fruits) • Costs are not high (small number of crops, crops do not require a lot of chemical treatments) • Possibility of switching to organic production (plant extracts with insecticide effect may be used) • Law labor force costs • There is commitment on the part of the authorities to support production and introduction of new technologies (irrigation, protection from hale, etc) (support of the line ministry to improving this production)	• Insufficient organization of small producers in cooperatives and clusters • Production for unknown buyers and The low level of mechanization • Fragmentation of crops (low scope of production per farm) • Insufficient level of adjustment of the assortment to continuous supply of the market with consumable strawberries in the course of the major part of the year • Assortment not adjusted to industrial processing (deep freezing) • Lack of introduction of certification and standards of good agricultural practice which ensure products that are safe for human health – frequent events of strawberry poisoning • Lack of a stabile local market and Over-reliance on sales to seasonal markets • Low purchase price levels by harvest • Excessive reliance on sale in the local market • Lack of capacities for deep freezing • Failure to comply with the long-term agriculture development strategy
OPPORTUNITIES	**THREATS**
• Options for utilization in confectionary industry, industry of juices and jams • Production of traditional products • Production with geographic origin • Availability of high quality germination material • Combining traditional products made from strawberries with tourism options • Introduction of modern technologies • Options for employment of older labor force in the course of picking • Replace imports on the domestic market • Availability of traditional species and genetic bases (gene pool) • Currently low input production methods makes meeting the standards for environmentally friendly and organic production is relatively simple	• Dumping prices in the surroundings • Seasonal fruit has a short shelf life (short utilization period) – if it is not processed, • Climate conditions (problem with precipitation in the course of harvest – onset of rotting) • Failure to apply modern technologies in production (irrigation, protection from hale and frost) • Lack of a long-term approach to incentive policy and development of processing capacities •

Raspberries - SWOT

STRENGTHS	WEAKNESSES
• Favorable agricultural and ecologic conditions • Yield stability and increased demand for locally produced fresh food • Prevalence and Increased demand for locally produced fresh food • Good product quality (noticeable organoleptic properties of ripe fruits) • Costs are not high (small number of crops, crops do not require a lot of chemical treatments) • Possibility of switching to organic production (plant extracts with insecticide effect may be used) • Law labor force costs • There is commitment on the part of the authorities to support production and introduction of new technologies (irrigation, protection from hale, etc) (support of the line ministry to improving this production)	• Insufficient organization of small producers in cooperatives and clusters • Production for unknown buyers and The low level of mechanization • Fragmentation of crops (low scope of production per farm) • Assortment not adjusted to industrial processing (deep freezing) • Lack of introduction of certification and standards of good agricultural practice which ensure products that are safe for human health Lack of a stabile local market and Over-reliance on sales to seasonal markets • Low purchase price levels by harvest • Excessive reliance on sale in the local market • Lack of capacities for deep freezing • Failure to comply with the long-term agriculture development strategy
OPPORTUNITIES • Options for utilization in confectionary industry, industry of juices and jams • Production of traditional products • Production with geographic origin • Availability of high quality germination material • Combining traditional products made from raspberries with tourism options • Introduction of modern technologies • Options for employment of older labor force in the course of picking • Replace imports on the domestic market • Availability of traditional species and genetic bases (gene pool) • Currently low input production methods makes meeting the standards for environmentally friendly and organic production is relatively simple	**THREATS** • Dumping prices in the surroundings • Seasonal fruit has a short shelf life (short utilization period) – if it is not processed, • Climate conditions (problem with precipitation in the course of harvest – onset of rotting) • Failure to apply modern technologies in production (irrigation, protection from hale and frost) • Lack of a long-term approach to incentive policy and development of processing capacities •

Vegetables in general - SWOT

STRENGTHS	WEAKNESSES
• Favorable agro environmental conditions • The prices of some products are competitive • There is an option for environmentally friendly / organic production as well as increased demand • Good availability of labor • Low labor costs • The tradition of Increased demand food processing industry • The existence of large cities • Increased demand for locally produced fresh food	• The low level of price competitiveness • Outdated equipment and technology • Obsolete types • The low level of mechanization • Lack of knowledge about the maker of cultivating, harvesting and business methods • The low volume of production per farm • The relatively high investment and the poor availability of modern inputs • The limited availability of commercial loans • Lack of horizontal and vertical integration • Over-reliance on sales to seasonal markets • Limit the number processing capacity • Poor competitiveness of existing processing capacity • The lack of cold storage and warehouses that have atmospheric control • Bad targeted, low levels of state support • Poor institutional framework and underdeveloped legal system
OPPORTUNITIES	**THREATS**
• Replace imports on the domestic market; • Further growth in exports; • ; • The increased demand as a result of tourism development; • The availability of EU and government support for the production and rural development; • Currently low input production methods makes meeting the standards for environmentally friendly and organic production is relatively simple; • Availability of traditional species and genetic bases (gene pool;) • Options for the development of local production capacity and processing; • Provision of basic services and professional services for research and development will greatly enhance the competitiveness and production efficiency in comparison with the EU countries.	• Lack of coordination between the entities' policies and support for the sector; • Current and future trade agreements will increase the level of competitiveness in the domestic and export markets too quickly, so that BiH producers will not have time to become competitive; • Lack of will to establish cooperation with other producers in BiH • The high level of informal gray economy; • The entry of supermarket chains in the BiH market will rapidly reduce the number of retail outlets and increase demand for wholesale quantity and quality of the products that BiH producers can not meet; • Ignoring environmental issues; •

Dairy sector / milk processing - SWOT

STRENGTHS	WEAKNESSES
• The number of dairy cows, sheep, goats gradually increases; • Milk productivity (yield) every year increase • Export gradually increases • There is a basic knowledge and tradition of milk and livestock on all farms; • There is sufficient capacity in the basic dairies packaging for liquid milk and simple production of dairy products domestic and export use; • Products with higher added value occupy a larger share in the total production of milk and dairy products; • Consumers are increasingly opting for locally manufactured dairy products; • A significant increase in capacity for production; • A higher level of funds that the government allocates for support milk production and animal production.	• A small number of households that have a large number of Cow on how to create economies of scale ; • A large number of small farms which makes collection expensive and hinders the achievement of quality / hygiene ; • Existing breeds have low productivity milk and the low potential for improvement productivity • The existing practice of feeding reduces the quality and milk yield ; • Low levels of hygiene on farms and in dairies in order to ignorance , poor equipment as well as lack of investment ; • Disregard for animal health and welfare ; • Agricultural producers have resistance to changes ; • Inadequate consulting and professional services ; • The low level of capacity utilization for production of milk and dairy products - 30 % ; • High levels of milk left on the farm for their own use or for sharing ; • Processors do not have the knowledge , procedures and capital resources for the development, production without spoiling and the product of the fermented milk having higher market value to achieve competitiveness with imported products ; • Poor quality packaging materials and design Internal systems for hygiene and quality control (eg HACCP) are well below the standards required for exports to the EU as well as in other international markets ; • Government and industry quality standards are not conform with the demanding EU standards • Traceability and control of animal health are not harmonized with the EU requirements for export . • Non-existent official controls in accordance with EU; non-existent control of certified veterinary professionals by Federation BiH inspectorate • Lack of aggregation • Incentives are not structured to support investments in technical upgrade, infrastructure investments or aggregation.

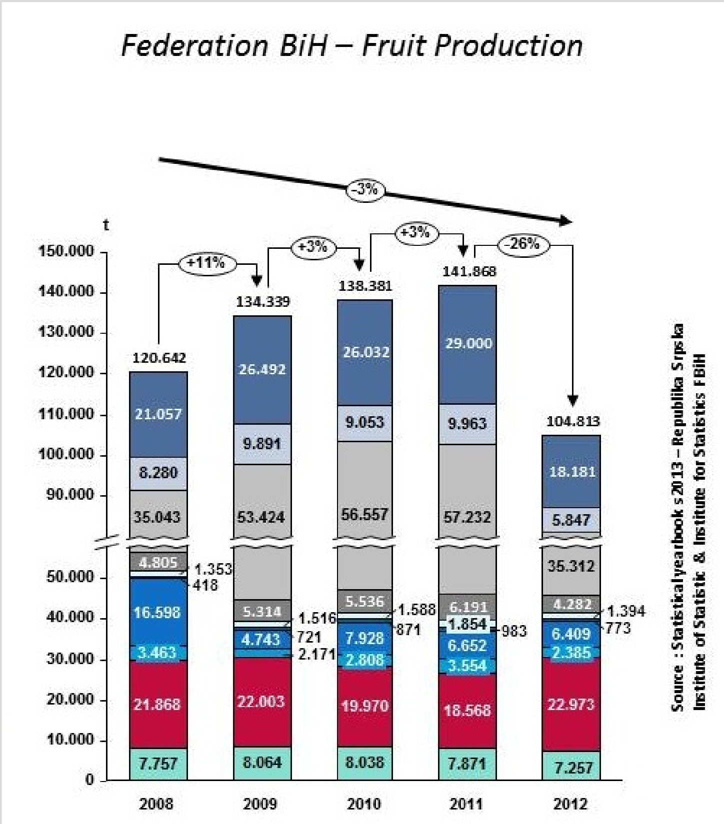
OPPORTUNITIES	THREATS
• The abundance of underutilized pasture • • The existing capacity of the processing that are able to process increasing production milk ; • The labor force in rural areas sufficient to satisfy the additional demand for workforce ; • Trade agreements (WTO / EU) assured of tariff advantages in the South East Europe and regional markets ; • Increasing consumer demand in BiH home produced milk and dairy products ; • The increase in tourism will increase demand ; • Increased political will to provide support to agriculture and rural development with government funds ; • The increase in foreign direct investments in BiH , improving techniques management and the ability to produce products which have a higher value; •	• Quality pasture in the mountains and hilly areas of poorer quality in competitive countries ; • It is necessary to invest resources and time to clearing mines from more productive areas , • Long-term insufficient use production capacity increases the risk of closing drive and loss of rights (for the debts) which leaves • insufficient capacity ; • Trade preferences can not be used works mismatch with the conditions of hygiene and control animal diseases that exist in the country of importation; • Commercial and micro finance loans for farming are still limited by the lack of guarantees and high-risk perception ; • Consumers requiring only imported products which have a high value due to a lack trust in BiH standards of production , marketing and labeling ; • The structure of farms (large number of small the manufacturer , the high cost of collecting small milk) make milk production in BiH • Uncompetitive with milk and dairy products imported from countries that have higher economical farms and dairies • The costs of alignment with the EU harmonized environmental laws and conditions will reduce competitiveness ; • Inadequate investment in research and development for the milk sector , to improve the production and diversity of products . • Poor structure for involvement of industry in the process of establishing priorities and needs for research and development ; •

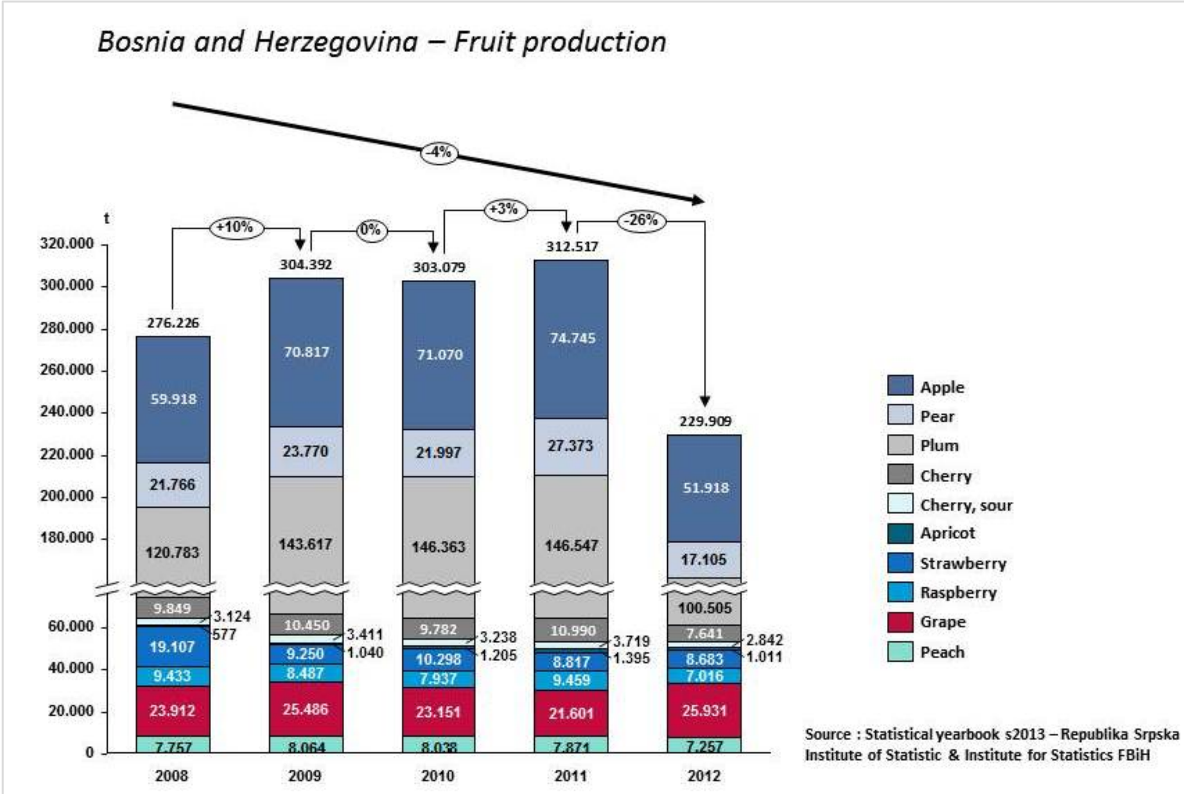
XII. OUTREACH CHARTS & TABLES

FRUIT – GENERAL OVERVIEW

Fruit production in the Federation of Bosnia and Herzegovina and Bosnia and Herzegovina is shown in the two graphs. Production is expressed in tons and per year of production from 2008 to 2012. Growing or falling trend in production is showed for the reference period. The fall in production in the FBIH of -26% in 2012 is a result of dry season and bad weather conditions across the region. The charts are representing the volume of production for apple, pear, plum, cherry, apricot, strawberry, raspberry, grape and peach.

Production

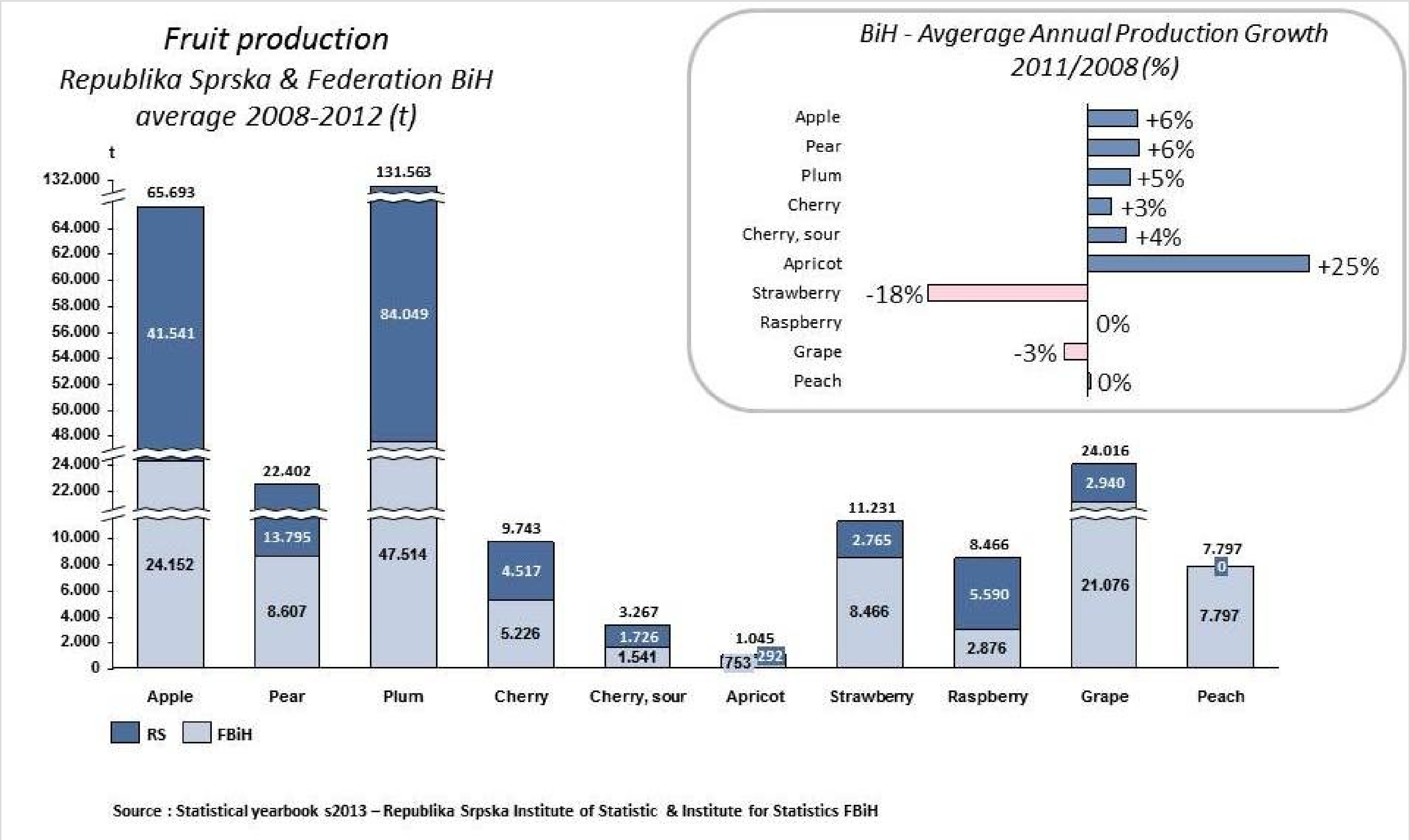




* Fruit production in Federation BiH & BiH in tones based on statistical information published in Statistical Yearbook FBiH & RS for 2013

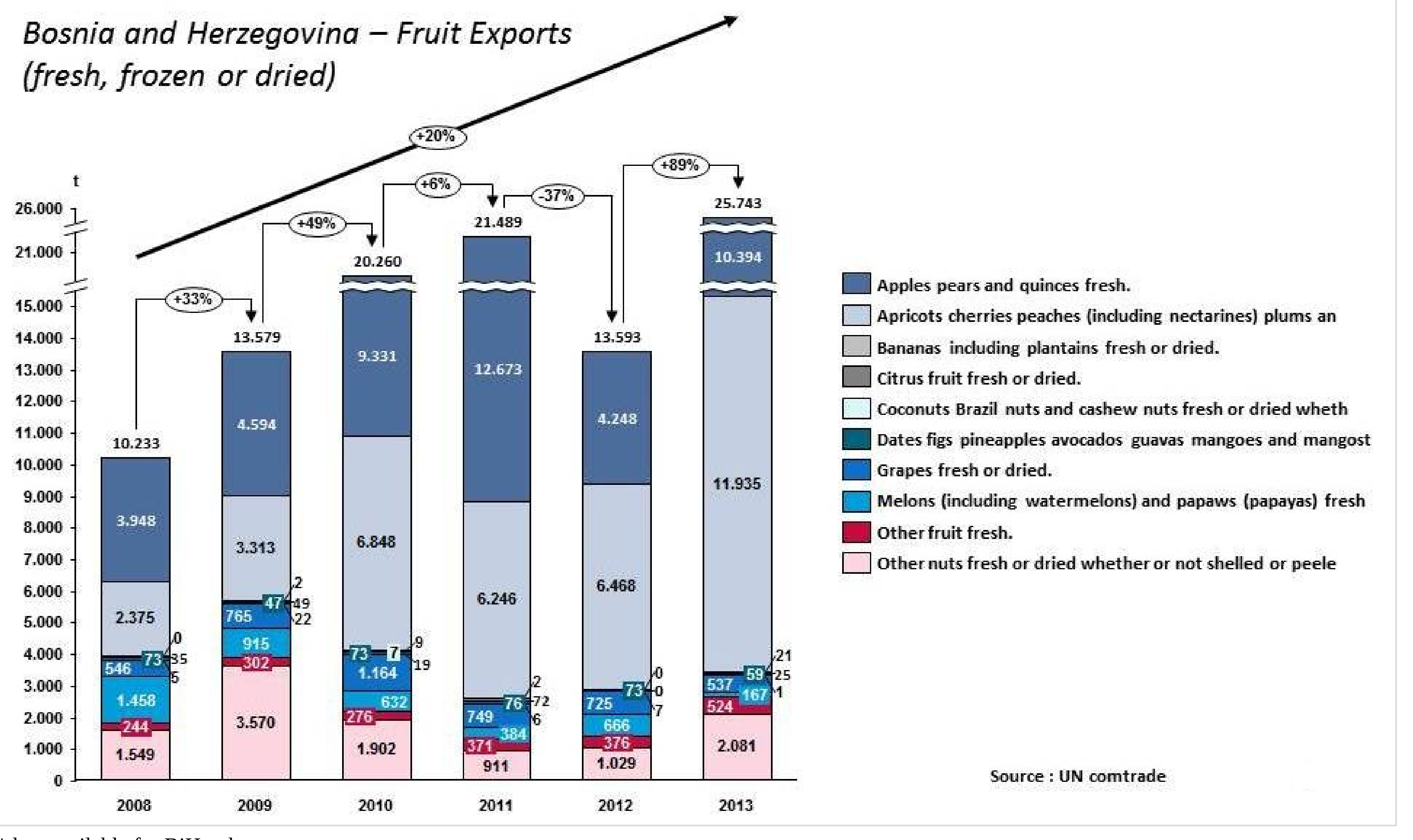
Fruit – Production

Statistical analysis of the average fruit production in tons for the reference period of 2008-2012 showed the highest or lowest production values in the RS and FBiH. The average growth rate for the whole of BiH is given to each Fruit (2011/2008) where positive average growth rate prevailing for the reference period.



Fruit – export of fresh, frozen or dried

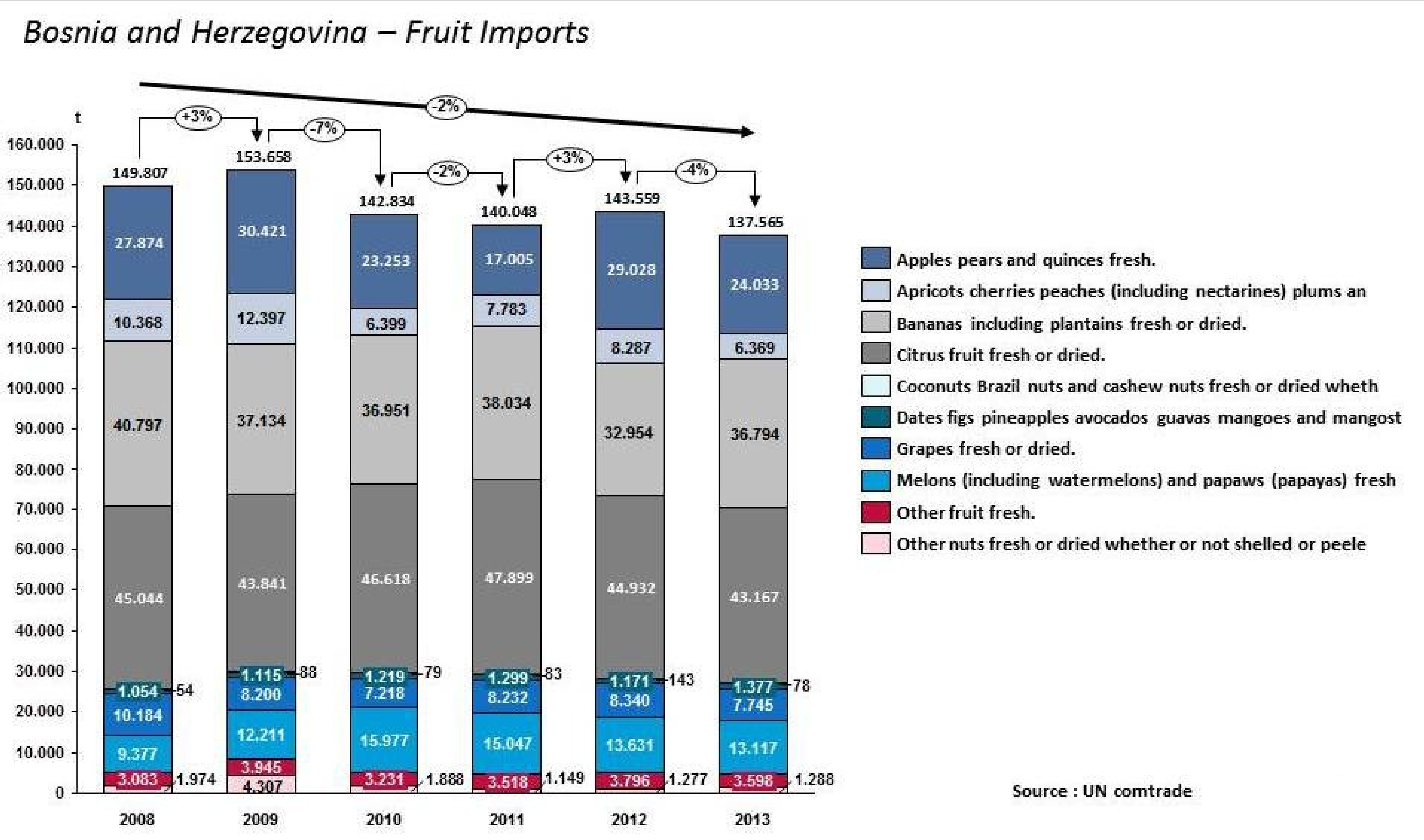
Exports of fruits in BiH is shown the average positive growth rate of +20% (2013/2008). Slightly fewer exports is recorded in 2012 (that is at the same level as 2009 years).



*data available for BiH only

Fruit – import of fresh, frozen or dried

Imports of fruit in BiH is shown in the chart below, with an average decrease of -2% (2013/2008). With the chart shows that the decline in imports is constant and that each year decreases.



*data available for BiH only

PLUMS

Statistical analysis showed that plum is the strategic key product for the FBiH and BiH. Production of plum has an equable production in the reporting period 2008-2012, although in 2012 , due to dry season and disease, production of plums were significantly reduced. The biggest plum production area in the FBiH is in Tuzla Canton, while in RS is in Ugljevik municipality. BiH holds the 15th place world plums producers, while Serbia holds high second place, which gives posibbility for potential aggregation and / or cooperation in terms of meeting international demand. The purchase price of plums is relatively small in comparison with other countries / producers .

Despite the reduction in the production of plums in 2012 and the decline of the average growth rate of -38% (2012/2008) in the RS, export is increasing so that for the same period we have an increase in the average exports growth rate of + 44 % . The situation changes dramatically in 2013 where the average growth rate of exports is rasing up to + 42 % .

The most important markets are: Serbia , Croatia , Austria and Germany which for the reference period 2008-2013 makes 44 % percent of the BiH market. Our biggest competitors in the region are Serbia and Romania with 3.5 times higher production of plums. Serbia and Romania have the decline in production due to bad weather in 2012, while exports of plums is on the rise (similar to BiH).

The largest regional exporter of plums is Serbia, which makes a 68% of total exports of the Balkan countries (Romania, Bosnia, Serbia, Croatia, Macedonia, Montenegro, Albania and Bulgaria) .

International demand for plums is large, while particular interest have Russian Federation, United Kingdom, Germany and the Netherlands .

Plums - market opportunity

Segment/ Product	Production Size[I] -FBIH Year	Tons (000 t)	Growth	Exports[II] -FBIH Year	Euro (000 €)	Growth
Plums	2009/2008	53,4/35	↑ 52%	2009/2008	587/557	↑ 5%
	2010/2009	56,6/53,4	↑ 6%	2010/2009	2711/587	↑ 362%
	2011/2010	57,2/56,6	↑ 1,2%	2011/2010	2216/2711	↓ -18,3%
	2012/2011	35,3/57,2	↓ -38%	2012/2011	2438/2216	↑ 10%
	AVG. 2012/2008		↑ **0,2%**	**AVG. 2012/2008**		↑ **44,6%**

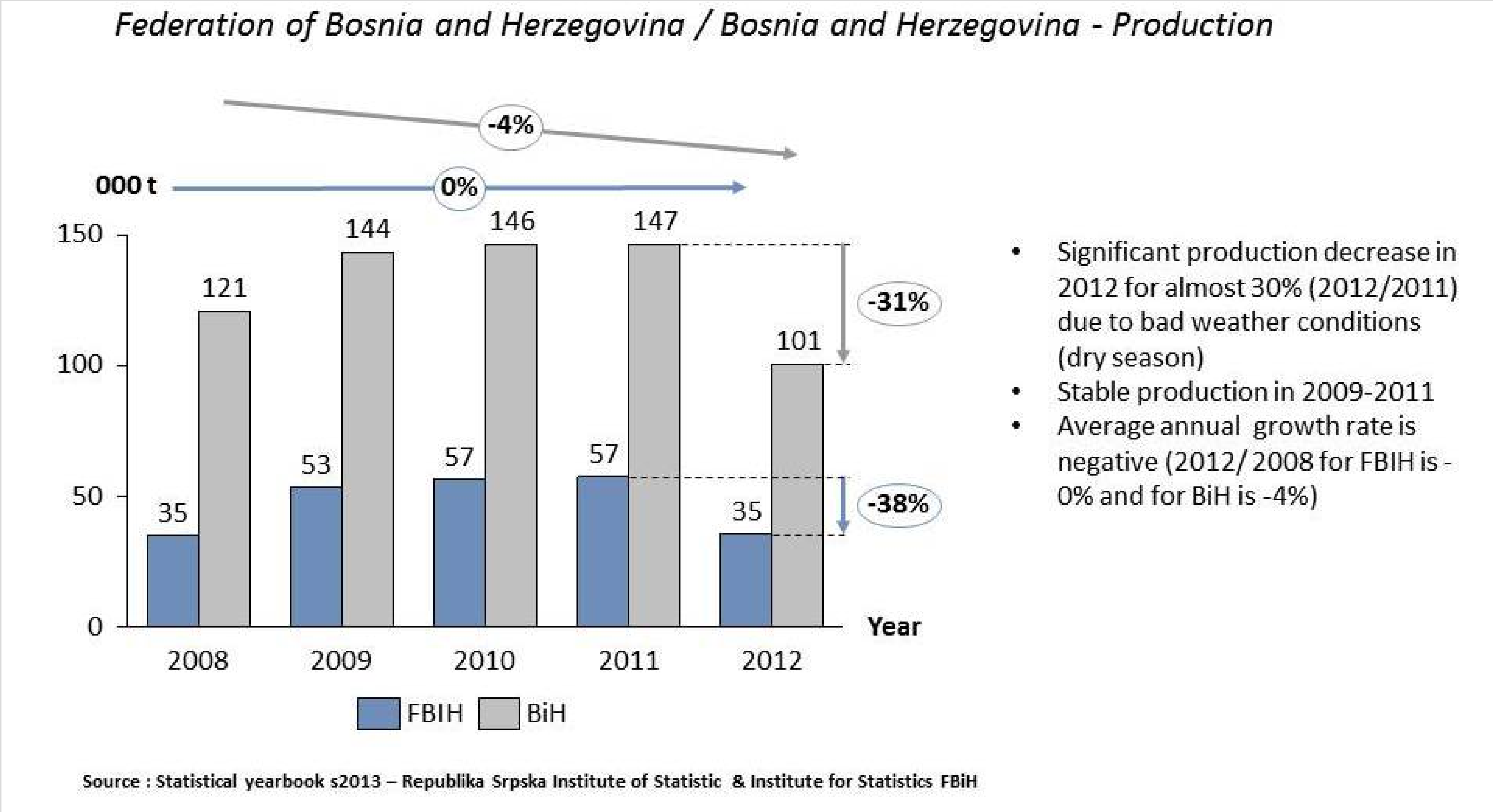
Key markets - name sofictication[III]-FBIH Country	Year	Euro (000 €)	Growth
Serbia	2009/2008	129,4/58,3	↑ 122%
	2010/2009	30,2/129,4	↓ -77%
	2011/2010	62,4/30,2	↑ 107%
	2012/2011	34,8/62,4	↓ -44%
	AVG. 2012/2008		↓ -12%
Croatia	2009/2008	37,3/13,3	↑ 181%
	2010/2009	44,5/37,3	↑ 19%
	2011/2010	89/44,5	↑ 100%
	2012/2011	145,2/89	↑ 63%
	AVG. 2012/2008		↑ 82%
Austria	2009/2008	5,1/24	↓ -79%
	2010/2009	171,3/5,1	↑ 3250%
	2011/2010	76,7/171,3	↓ -55%
	2012/2011	277,6/76,7	↑ 262%
	AVG. 2012/2008		↑ 84%
Germany	2009/2008	76,2/225,5	↓ -66%
	2010/2009	1319,6/76,2	↑ 1632%
	2011/2010	930/1319,6	↓ -30%
	2012/2011	1414,7/930	↑ 52%
	AVG. 2012/2008		↑ 58%
Other countries	2009/2008	338,5/236,2	↑ 43%
	2010/2009	1145,3/338,5	↑ 238%
	2011/2010	1057,9/1145,3	↓ -8%
	2012/2011	565,5/1057,9	↓ -47%
	AVG. 2012/2008		↑ 24%

Competition for production/processing[IV] Country	Year	Size (000 t)	Growth
Serbia	2009/2008	663/607	↑ 9%
	2010/2009	427/663	↓ -36%
	2011/2010	582/427	↑ 36%
	2012/2011	391/582	↓ -33%
	AVG. 2012/2008		↓ **-10%**
Romania	2009/2008	534/475	↑ 12%
	2010/2009	625/534	↑ 17%
	2011/2010	574/625	↓ -8%
	2012/2011	424/574	↓ -26%
	AVG. 2012/2008		↓ **-3%**
Macedonia	2009/2008	36/33	↑ 8%
	2010/2009	38/36	↑ 8%
	2011/2010	35/38	↓ -8%
	2012/2011	35/35	↓ 0%
	AVG. 2012/2008		↑ **2%**
Albania	2009/2008	24/22	↑ 8%
	2010/2009	26/24	↑ 10%
	2011/2010	30/26	↑ 13%
	2012/2011	33/30	↑ 11%
	AVG. 2012/2008		↑ **11%**
Bulgaria	2009/2008	17/14	↑ 21%
	2010/2009	34/17	↑ 95%
	2011/2010	32/34	↓ -4%
	2012/2011	23/32	↓ -29%
	AVG. 2012/2008		↑ **13%**
Croatia	2009/2008	38/49	↓ -21%
	2010/2009	41/38	↑ 7%
	2011/2010	37/41	↓ -10%
	2012/2011	15/37	↓ -61%
	AVG. 2012/2008		↓ **-26%**
Montenegro	2009/2008	10/6	↑ 72%
	2010/2009	7/10	↓ -32%
	2011/2010	12/7	↑ 75%
	2012/2011	9/12	↓ -28%
	AVG. 2012/2008		↑ **10%**
BiH	2009/2008	156/133	↑ 17%
	2010/2009	158/156	↑ 1%
	2011/2010	158/158	↓ 0%
	2012/2011	111/158	↓ -30%
	AVG. 2012/2008		↓ **-4%**

International Demand[V] (avg. 2008-2011) Country	Size (t)	Growth
Russian Federation	71.568	↑ 1%
United Kingdom	64.463	↓ -5%
Netherlands	47.952	↓ -2%
Germany	50.243	↓ -11%
Brazil	27.236	↑ 29%
Kazakhstan	8.167	↑ 280%
USA	28.805	↓ 0%
China, Hong Kong SAR	22.516	↑ 19%
China, mainland	16.217	↑ 44%
Canada	24.714	↓ -3%
Mexico	12.501	↑ 12%
France	17.453	↓ -20%
Italy	14.486	↓ -10%
Belgium	13.661	↓ -9%
United Arab Emirates	8.377	↑ 8%
Saudi Arabia	6.286	↑ 18%
Poland	6.287	↑ 31%
China, Taiwan Province	9.221	↓ -12%
Czech Republic	8.646	↓ -8%
Denmark	7.618	↓ 0%
Switzerland	7.031	↓ -1%
Austria	7.348	↓ -7%
Spain	7.185	↓ -9%
Egypt	2.306	↑ 160%
Portugal	5.441	↓ -3%
Malaysia	4.046	↑ 17%
Sweden	4.970	↑ 3%
Lithuania	6.212	↓ -24%
Singapore	3.554	↑ 10%
Algeria	1.682	↑ 85%

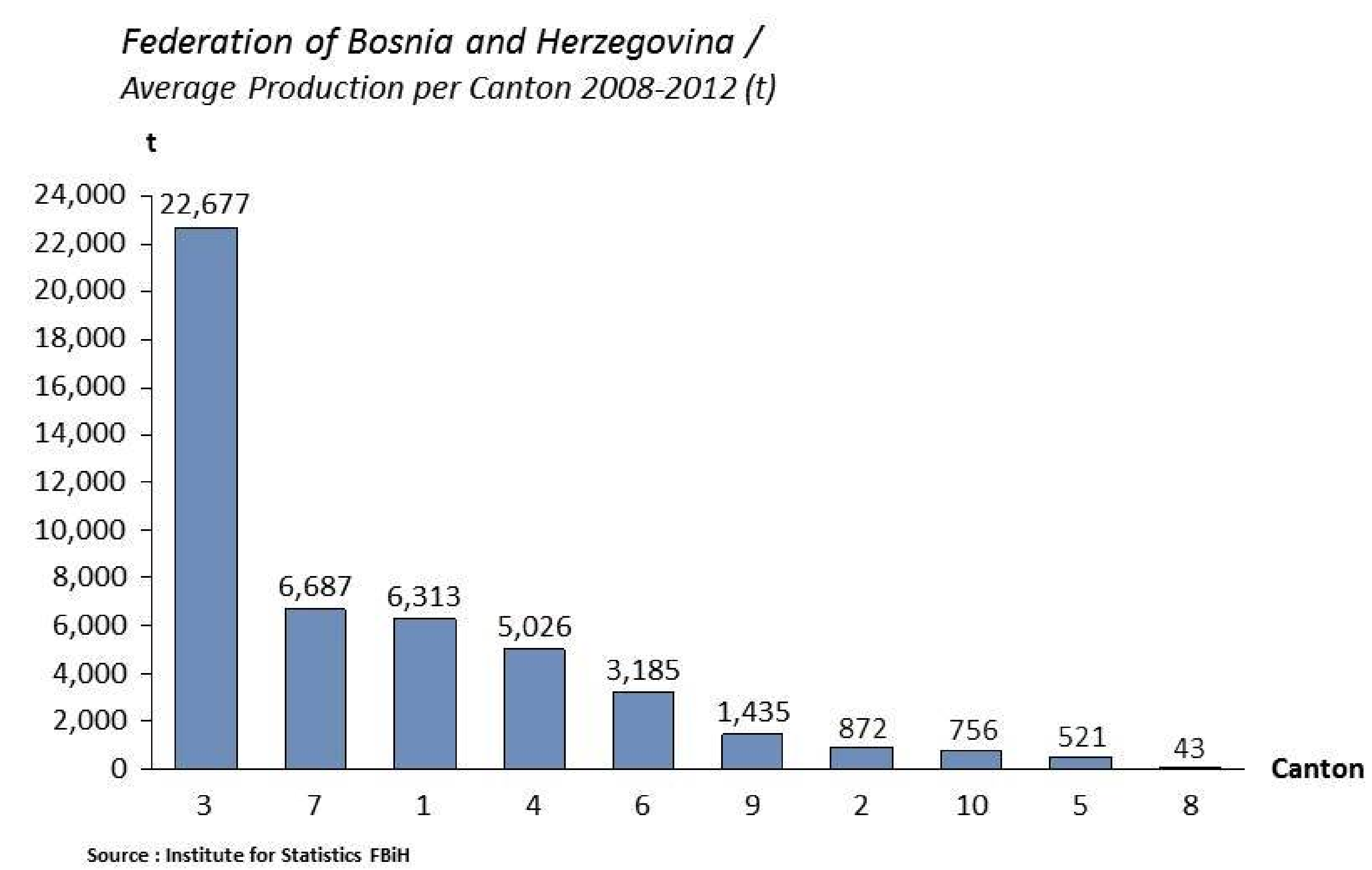
I source: Statistics institute Federation BiH, Statistics institute Republika Srpska / Link - Chart name: *Production of plums*
II source: Indirect Taxation Authority of BiH / Link - Chart name: *Export of plums in 000€*
III source: Indirect Taxation Authority of BiH
IV source: FAOSTAT and Uncomtrade / Link - Chart name: *Competition for production of plums – Regional countries production charts*
V source: FAOSTAT and Uncomtrade / Link - Chart name: *International Demand for plums*

Production of plums

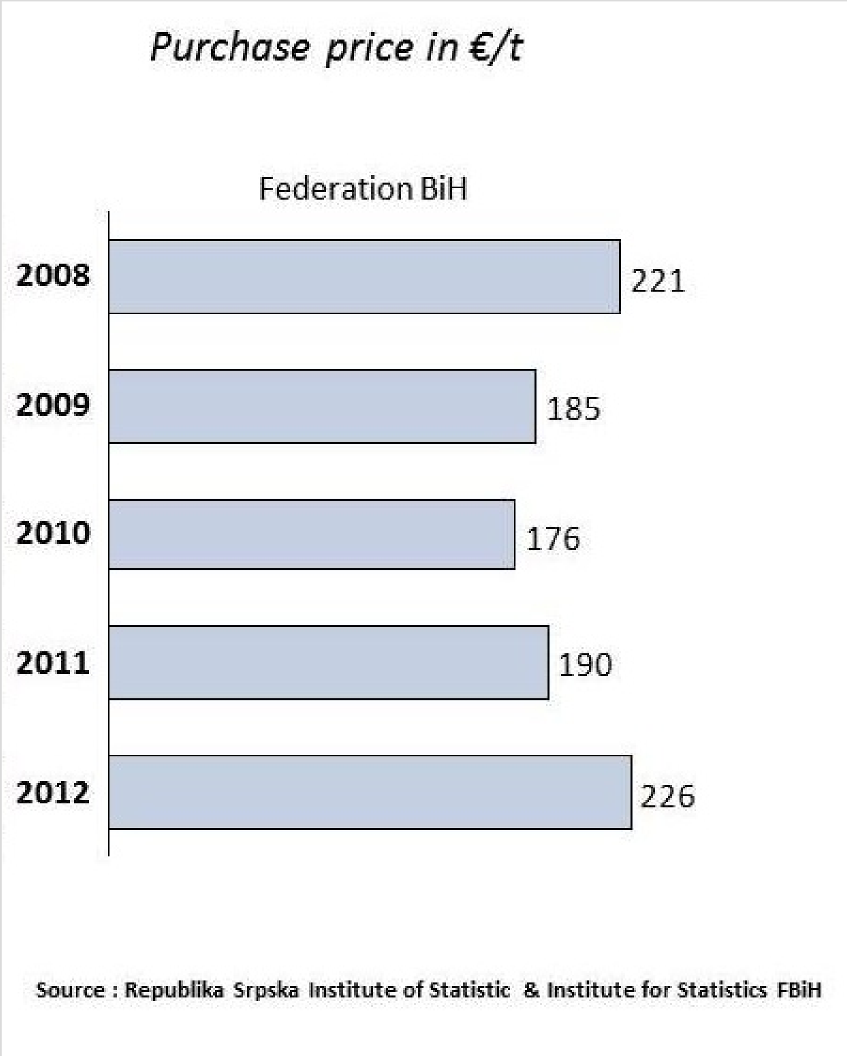


* Production of fresh plums showed in 000 tones

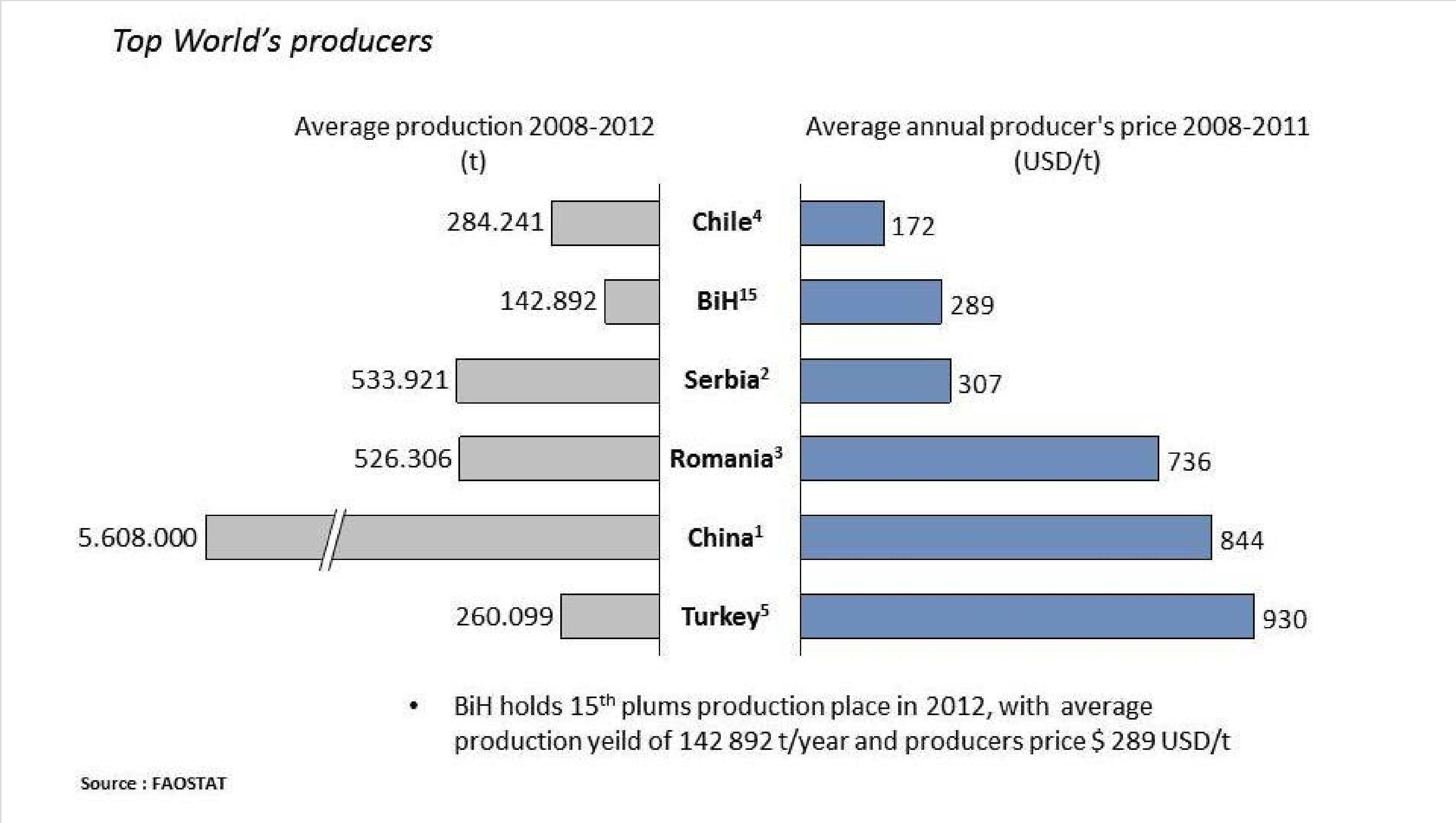
Production of plums per canton



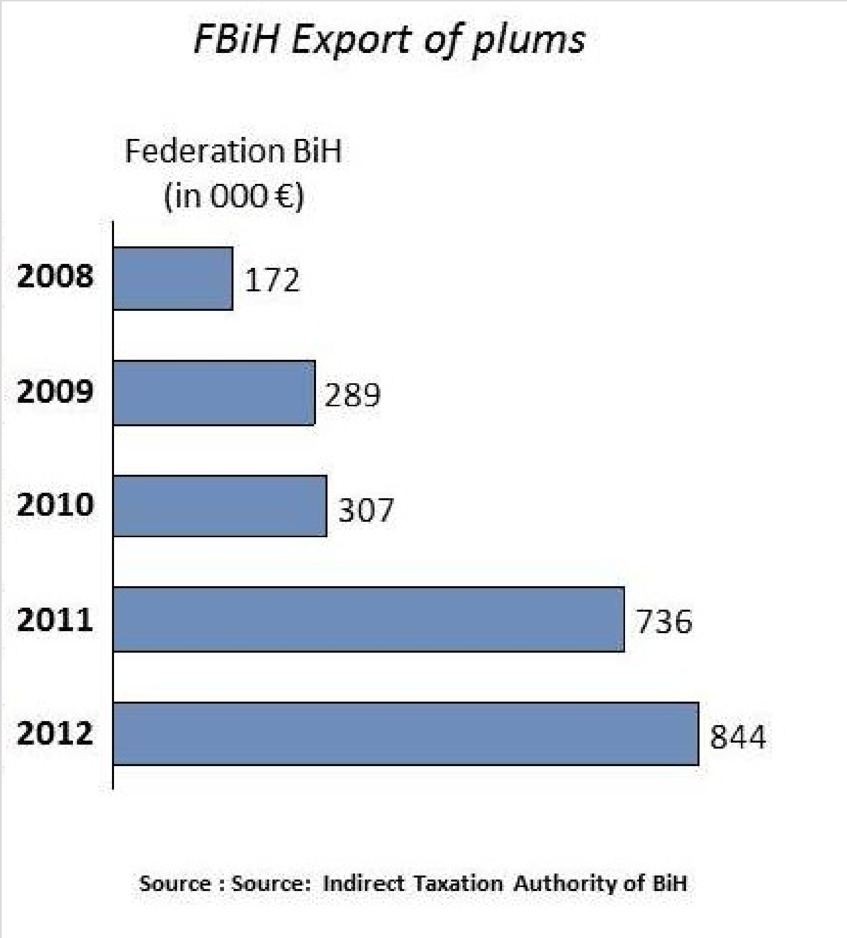
Production of plums – purchase price



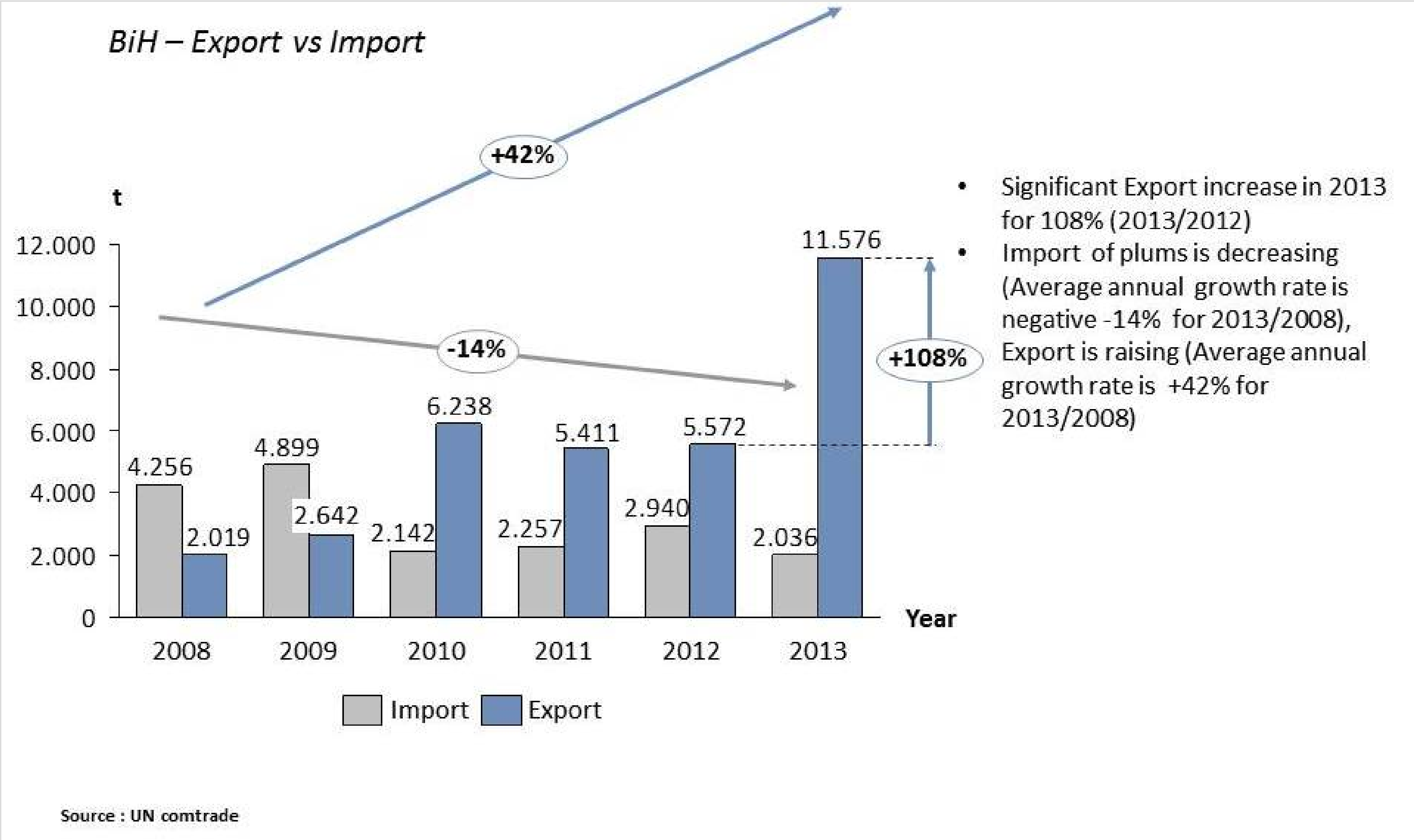
Production of plums – top world's producers



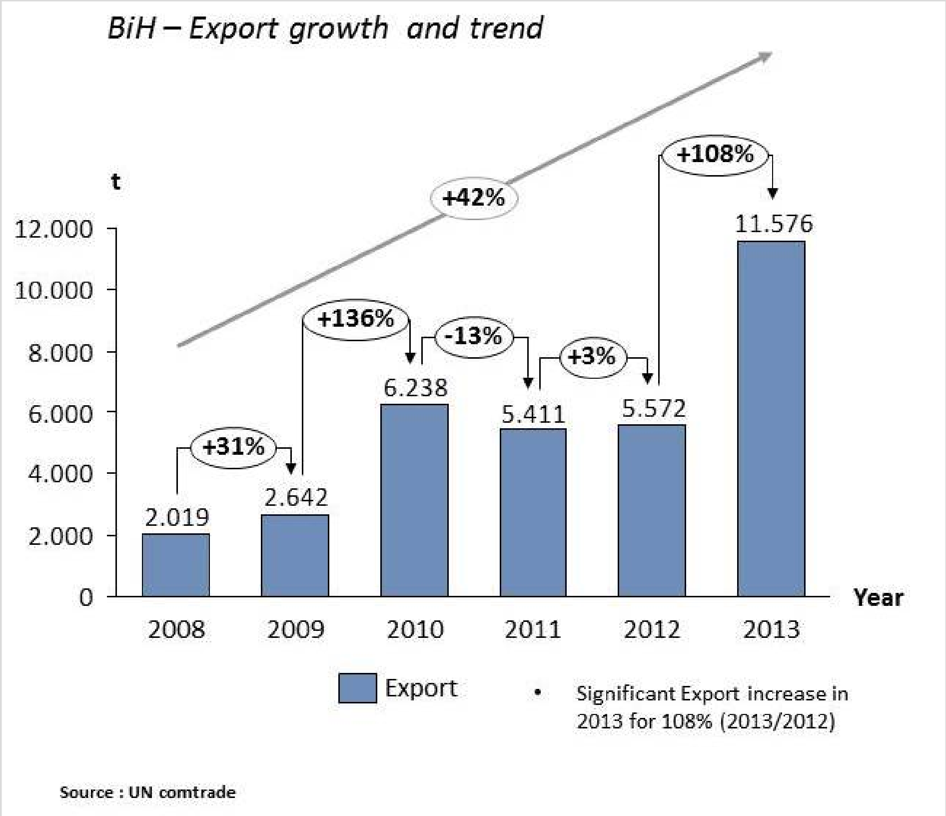
Export of plums in 000 €



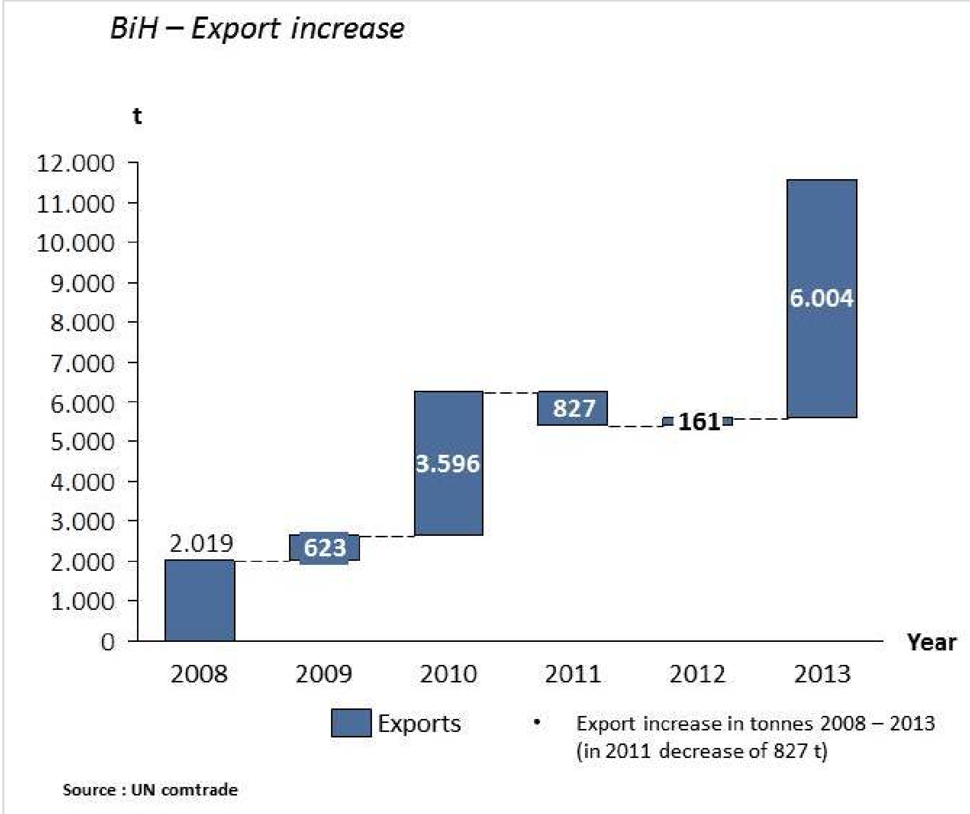
Export vs Import of plums



Export of plums growth and trend

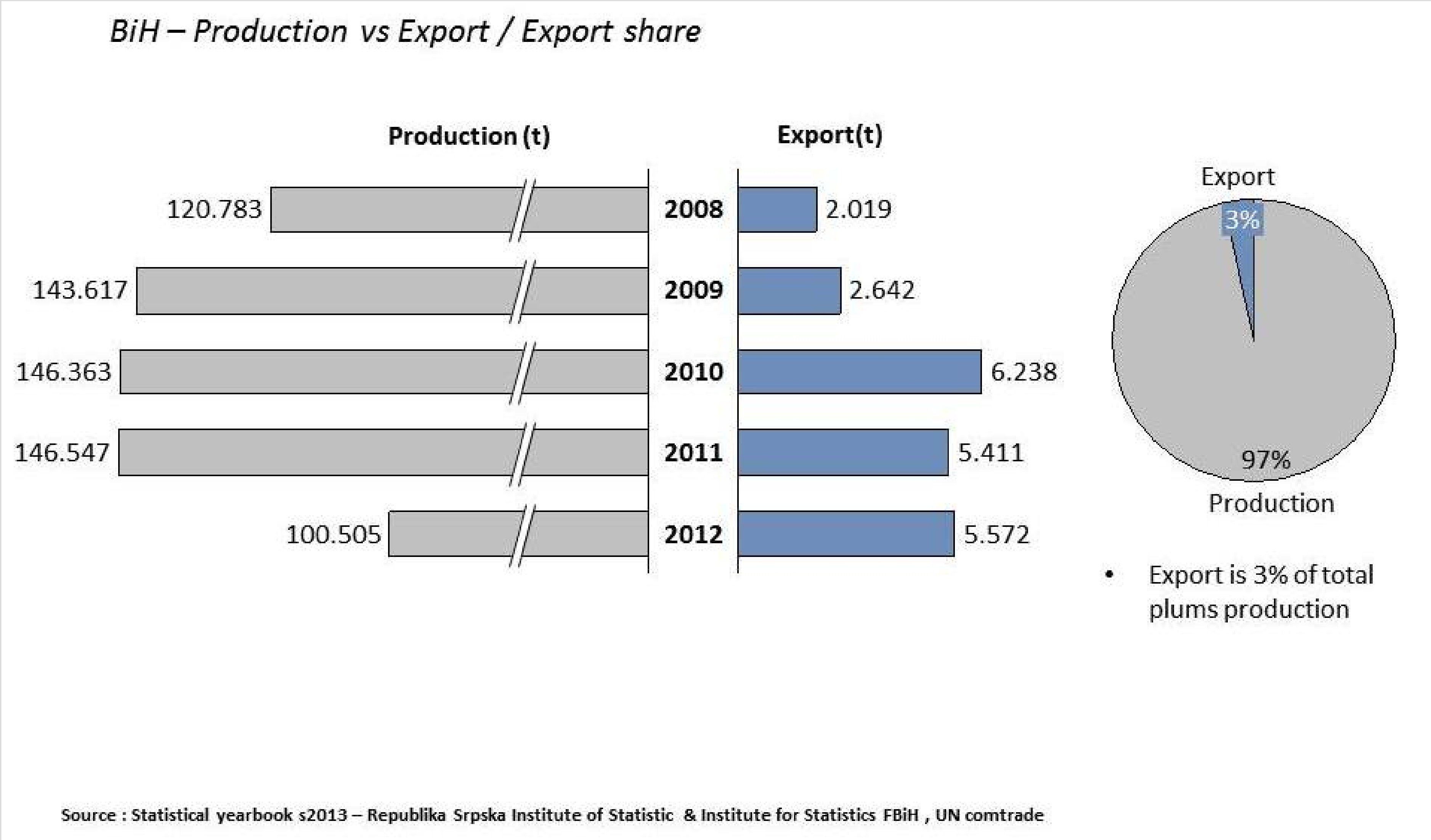


* Export BiH in tones per year is raising

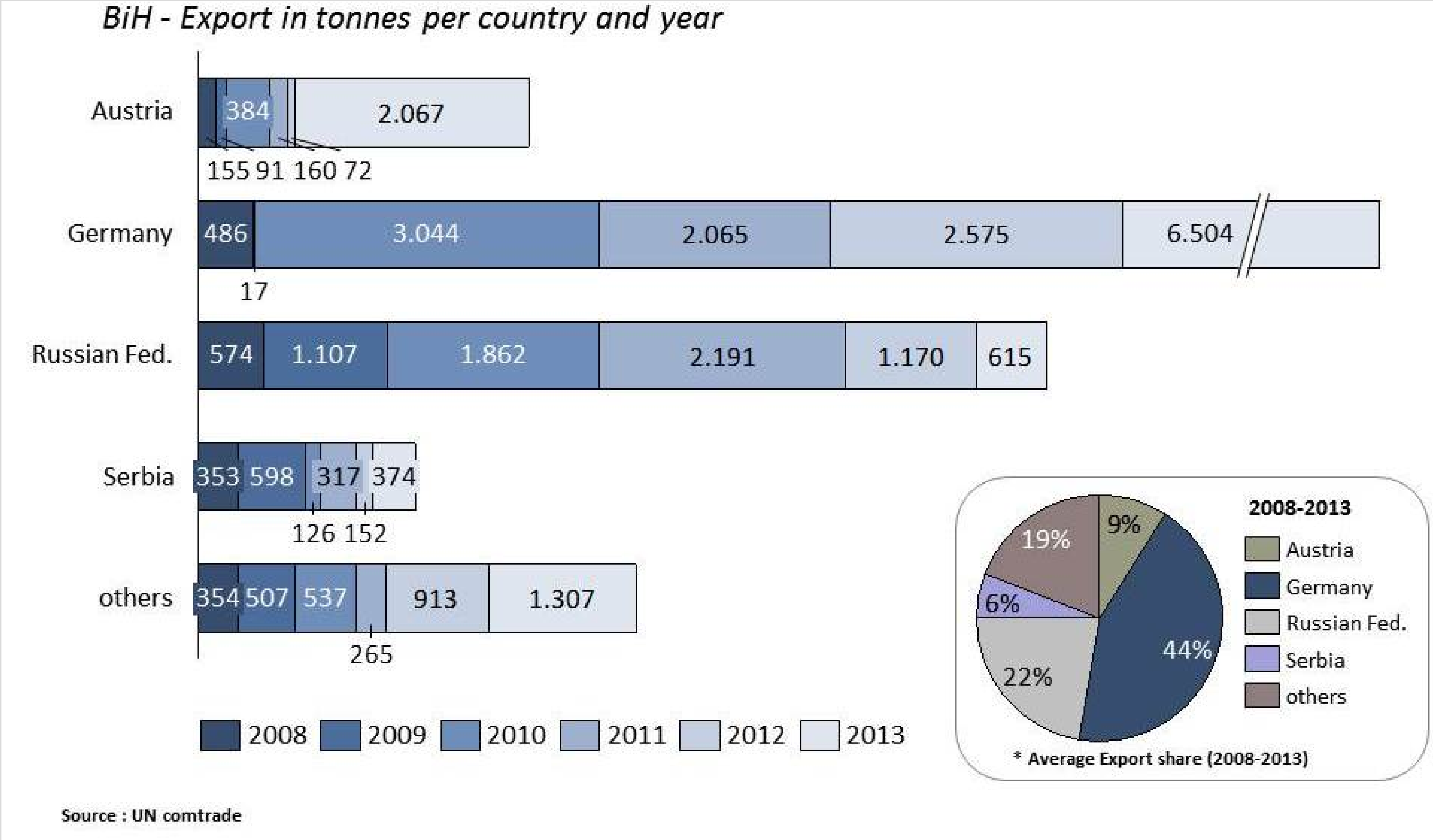


* waterfall chart is showing increase in tones year by year

Export vs Production of plums



Key markets – Export of plums per country



*BiH export per coutry – in 2013 Germany exported 6504 t of fresh plums holding 1st BiH export partner with 44% od total export share (2008-2013)

Competition for production of plums – Regional countries production

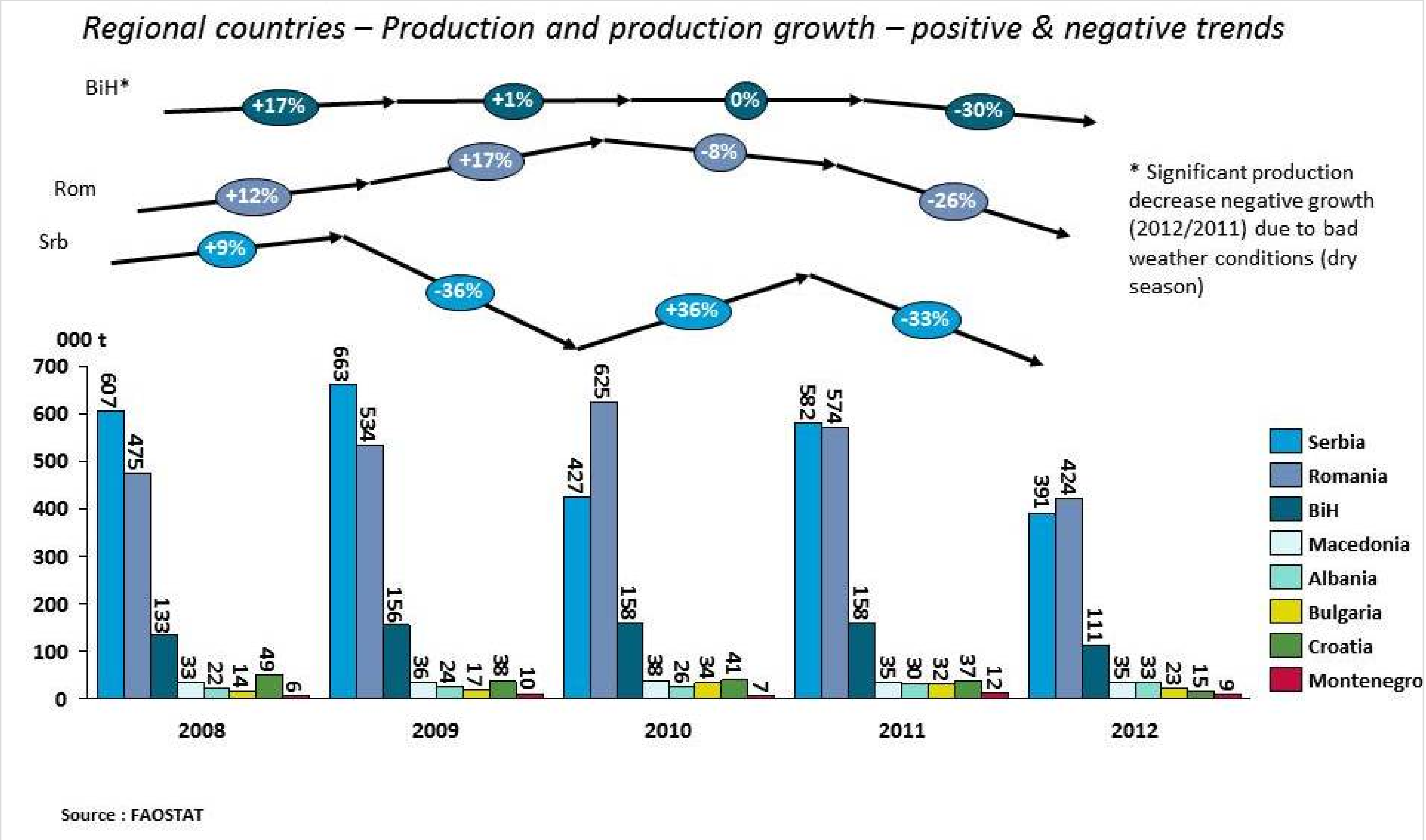
Regional countries – average production 2008-2012 (t)

Regional Country & world's prod. place	Av. Prod. 2008-2012 (t)
Serbia[2]	533.921
Romania[3]	526.306
BiH[15]	142.892
Macedonia[29]	35.552
Albania[31]	26.895
Bulgaria[37]	24.110
Croatia[45]	35.877
Montenegro[53]	8.804

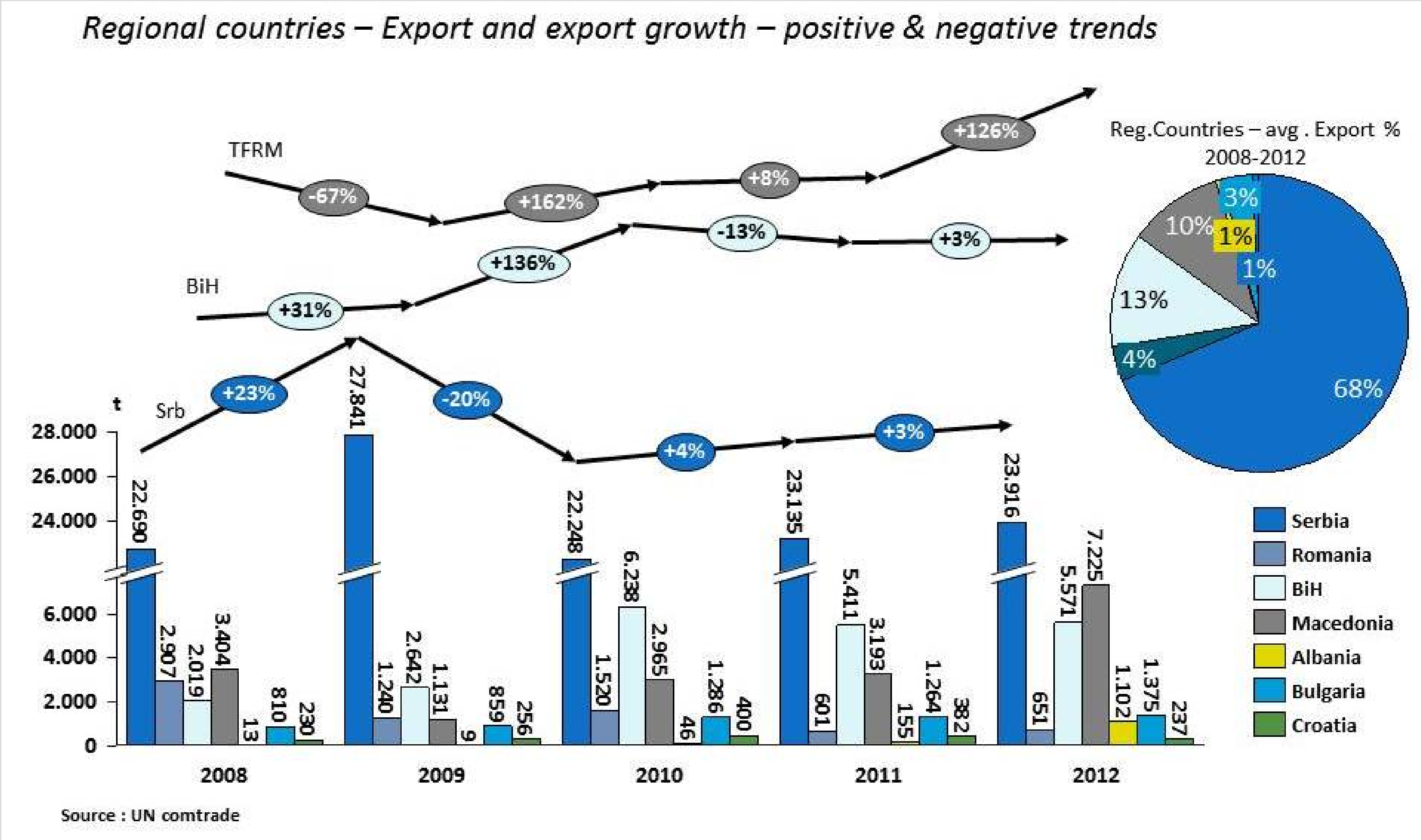
Source : FAOSTAT

*Balkan countries production in tones (arithmetic mean calculation 2008-2012). Serbia and Romania are holding second and third World's production place

Competition for production of plums – Regional countries production charts

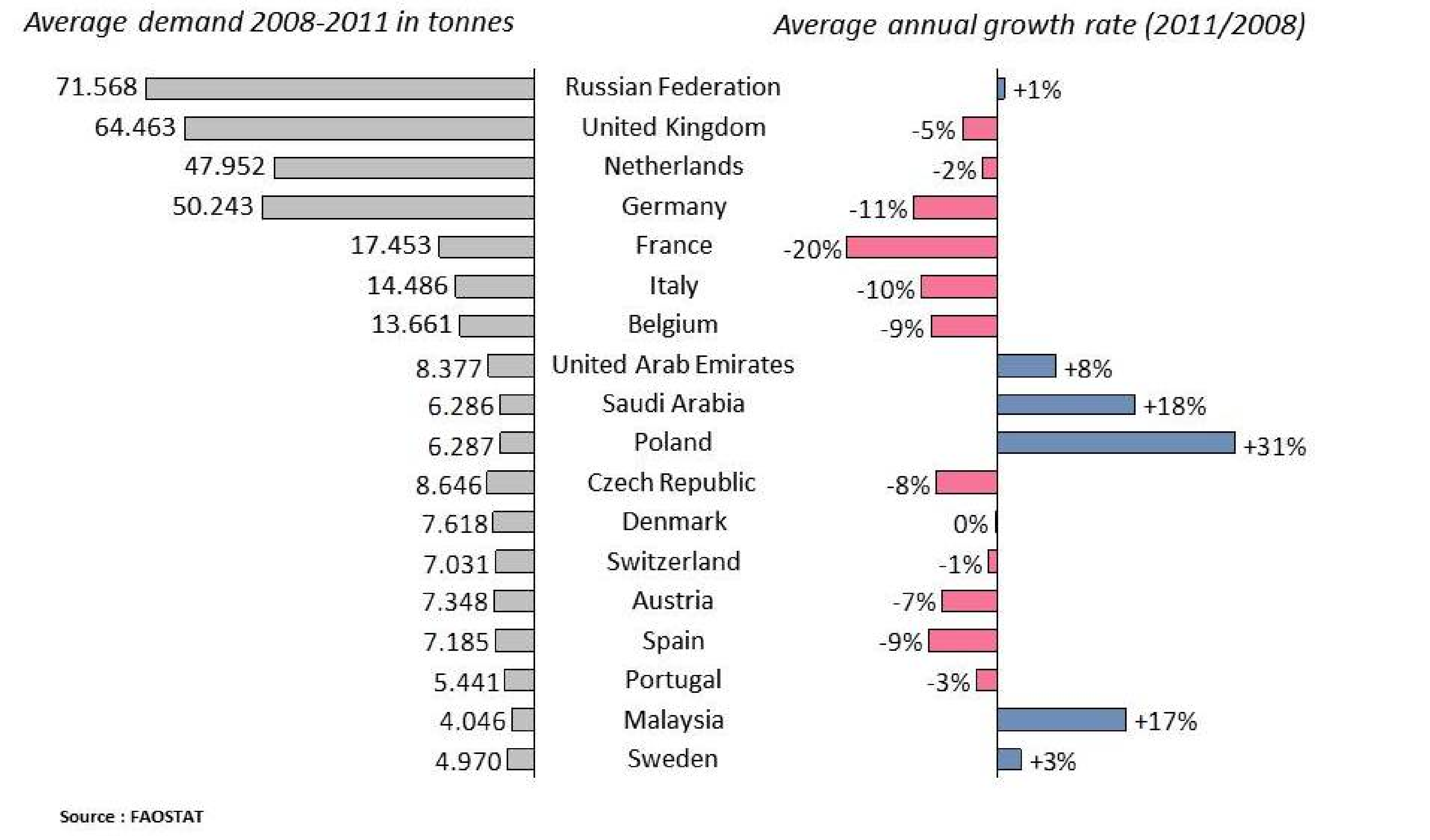


Competition for production of plums – Regional countries export to the World



*The very first Balkan’s export country is Serbia with 68% of total export Balkan countries share. (2008-2012)

International Demand - plums



APPLES

Statistical analysis showed that apple is the strategic key product for the FBIH and BiH. Production of apples has an equable production in the reporting period 2008-2012, although in 2012 , due to dry season production of apples were significantly reduced. The largest apple production area in the RS is in Gradiska municipality, while in FBiH is in Tuzla Canton. BiH holds the 59th world apples producers place. The western parts of Serbia and the Croatian part of the northern border of Bosnia and Herzegovina have a significant production of apples which gives posibbility for potential aggregation and / or cooperation in terms of meeting international demand. The purchase price of apples is relatively good in comparison with other countries / producers .

Despite the reduction in the apple production in 2012 and the decline of the average growth rate of -4% (2012/2008) in the FBIH, export is increasing so that for the same period we have an increase in the average exports growth rate of + 22 % .

The most important markets are: Serbia, Croatia and Russian Federation. In 2013, the BiH market has expanded to three new countries: Austria, Germany and Slovenia. Our biggest competitors in the region are Serbia , Romania , Macedonia and Albania. Serbia and Romania have the decline in production due to bad weather in 2012, while exports of apples is on the rise (similar to BiH).

The largest regional exporters of apples are Serbia and Macedonia with a common share of approximately 80% of the total Balkan countries exports (Romania, Bosnia, Serbia, Croatia, Macedonia, Montenegro, Albania and Bulgaria).

International demand for apples is large, while particular interest have Russian Federation, United Kingdom, Germany and the Netherlands.

Apples – market opportunity

Segment/ Product	Production Size[I] -FBIH Year	Tons (000 t)	Growth	Exports[II] -FBIH Year	Euro (000 €)	Growth
Apples	2009/2008	26,5/21,1	↑ 26%	2009/2008	25/75	↓ -67%
	2010/2009	26/26,5	↓ -1,7%	2010/2009	209/25	↑ 751,4%
	2011/2010	29/26	↑ 11%	2011/2010	793/209	↑ 280%
	2012/2011	18,2/29	↓ -37%	2012/2011	262/793	↓ -67%
	AVG. 2012/2008		↓ **-4%**	**AVG. 2012/2008**		↑ **36,7%**

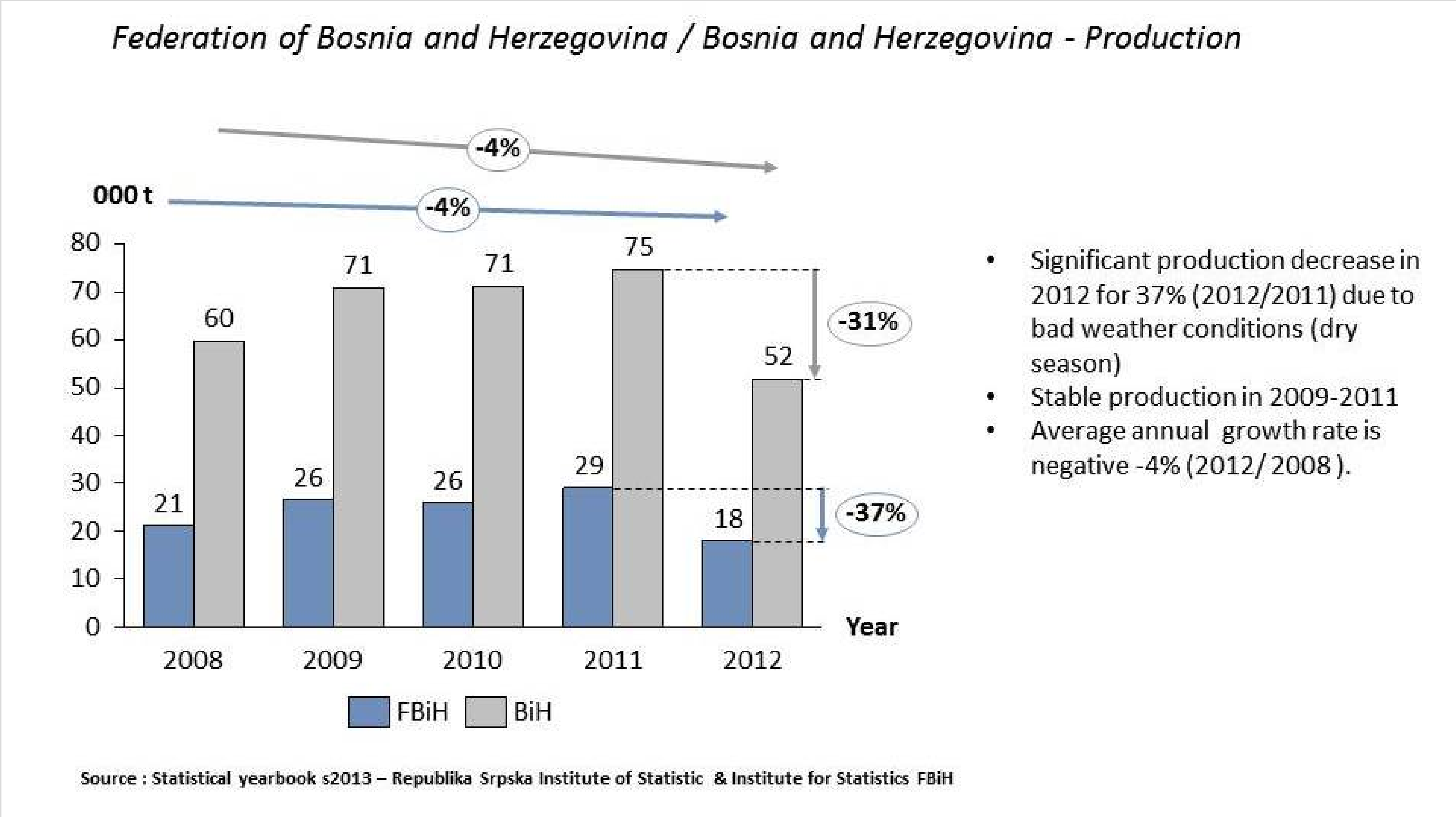
Key markets - name sofictication[III]-FBIH Country	Year	Euro (000 €)	Growth
Serbia	2009/2008		
	2010/2009	47/1	↑ 4500%
	2011/2010	152,9/47	↑ 225%
	2012/2011	35,3/152,9	↓ -77%
	AVG. 2012/2008		↑ **226%**
Croatia	2009/2008	12,8/46	↓ -72%
	2010/2009	108,9/12,8	↑ 752%
	2011/2010	169,2/108,9	↑ 55%
	2012/2011	58,8/169,2	↓ -65%
	AVG. 2012/2008		↑ 6%
Other countries	2009/2008	10,7/22,5	↓ -52%
	2010/2009	52,7/10,7	↑ 390%
	2011/2010	465,8/52,7	↑ 784%
	2012/2011	168,2/465,8	↓ -64%
	AVG. 2012/2008		↑ 65%

Competition for production/processing[IV] Country	Year	Size (000 t)	Growth
Romania	2009/2008	517/459	↑ 13%
	2010/2009	553/517	↑ 7%
	2011/2010	620/553	↑ 12%
	2012/2011	463/620	↓ -25%
	AVG. 2012/2008		↑ **0%**
Serbia	2009/2008	282/236	↑ 20%
	2010/2009	240/282	↓ -15%
	2011/2010	266/240	↑ 11%
	2012/2011	179/266	↓ -33%
	AVG. 2012/2008		↓ **-7%**
Macedonia	2009/2008	106/174	↓ -39%
	2010/2009	121/106	↑ 14%
	2011/2010	125/121	↑ 3%
	2012/2011	127/125	↑ 2%
	AVG. 2012/2008		↓ **-8%**
Albania	2009/2008	47/45	↑ 5%
	2010/2009	55/47	↑ 16%
	2011/2010	64/55	↑ 17%
	2012/2011	71/64	↑ 11%
	AVG. 2012/2008		↑ **12%**
Croatia	2009/2008	93/80	↑ 16%
	2010/2009	107/93	↑ 14%
	2011/2010	113/107	↑ 6%
	2012/2011	42/113	↓ -62%
	AVG. 2012/2008		↓ **-15%**
Bulgaria	2009/2008	35/24	↑ 51%
	2010/2009	43/35	↑ 22%
	2011/2010	40/43	↓ -7%
	2012/2011	31/40	↓ -23%
	AVG. 2012/2008		↑ **7%**
Montenegro	2009/2008	8/5	↑ 60%
	2010/2009	6/8	↓ -26%
	2011/2010	7/6	↑ 25%
	2012/2011	6/7	↓ -24%
	AVG. 2012/2008		↑ **3%**
BiH	2009/2008	72/52	↑ 38%
	2010/2009	72/72	↑ 0%
	2011/2010	75/72	↑ 5%
	2012/2011	50/75	↓ -34%
	AVG. 2012/2008		↓ **-1%**

International Demand[V] (avg. 2008-2011) Country	Size (t)	Growth
Russian Federation	1.133.252	↑ 3%
Germany	630.754	↑ 3%
United Kingdom	464.318	↓ -2%
China	320.402	↑ 6%
Netherlands	347.927	↓ -8%
Spain	243.288	↑ 4%
Indonesia	175.876	↑ 15%
Canada	184.659	↑ 6%
Mexico	207.604	↑ 2%
Saudi Arabia	141.332	↑ 5%
India	110.595	↑ 36%
Egypt	99.191	↑ 33%
Belgium	165.526	↓ -2%
United Arab Emirates	155.499	↓ -2%
United States of America	165.106	↓ -4%
Bangladesh	132.450	↑ 18%
France	154.287	↓ -2%
China, Taiwan Province	133.169	↓ 0%
China, Hong Kong SAR	124.230	↑ 6%
Algeria	112.370	↑ 12%
Thailand	119.778	↑ 5%
Kazakhstan	109.185	↑ 25%
Ukraine	182.202	↓ -17%
Viet Nam	131.479	↓ -9%
Belarus	68.350	↑ 26%
Malaysia	96.899	↑ 3%
Brazil	72.457	↑ 21%
Austria	86.221	↓ -6%
Sweden	87.629	↓ 0%
Colombia	77.374	↑ 13%

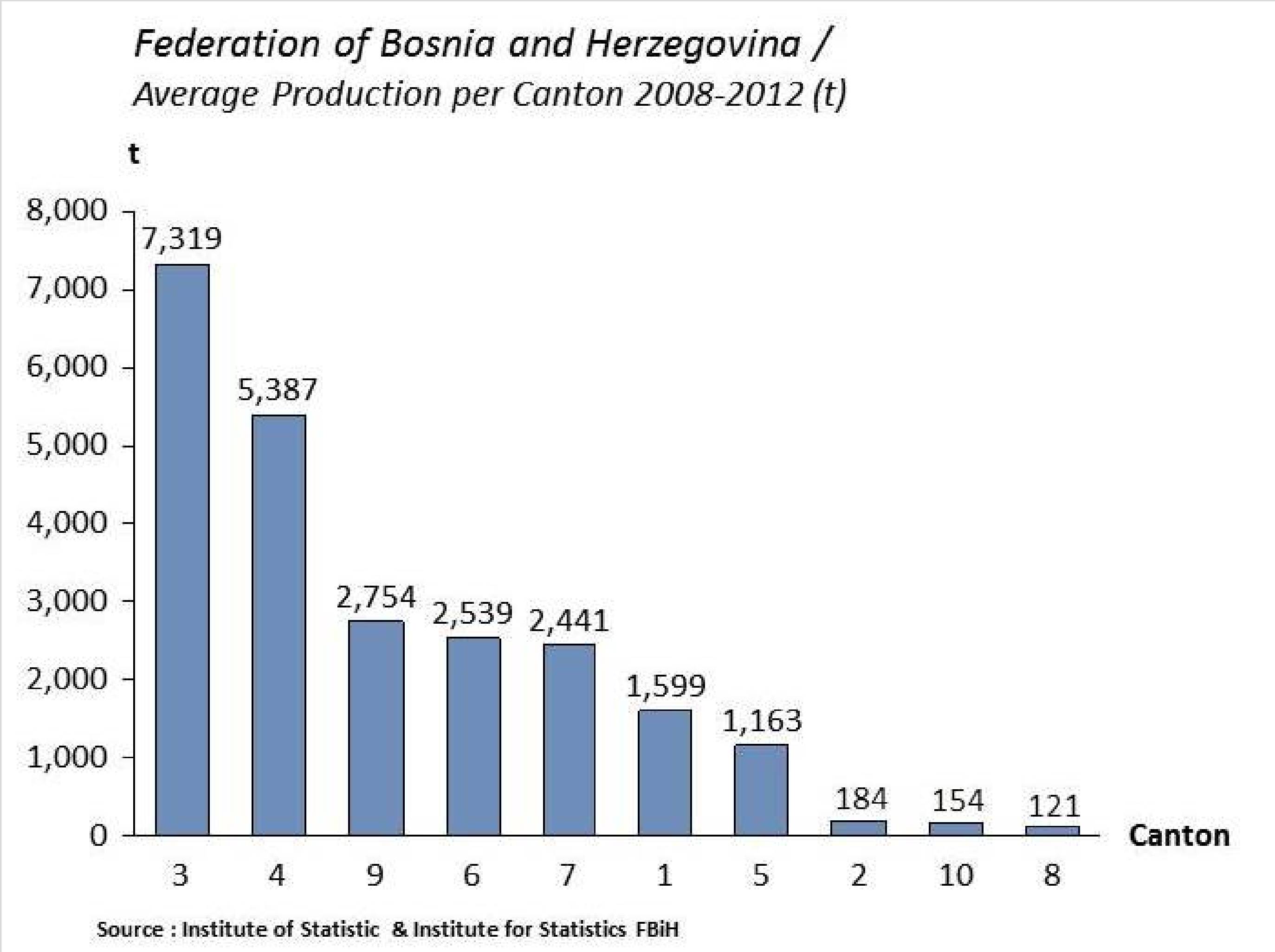
I source: Statistics institute Republika Srpska, Statistics institute Federation BiH / Link - Cahrt name: *Production of apples*
II source: Indirect Taxation Authority of BiH / Link - Cahrt name: *Export of apples in 000€*
III source: Indirect Taxation Authority of BiH
IV source: FAOSTAT and Uncomtrade / Link - Cahrt name: *Competition for production of apples – Regional countries production charts*
V source: FAOSTAT and Uncomtrade / Link - Cahrt name: *International Demand for apples*

Production of apples

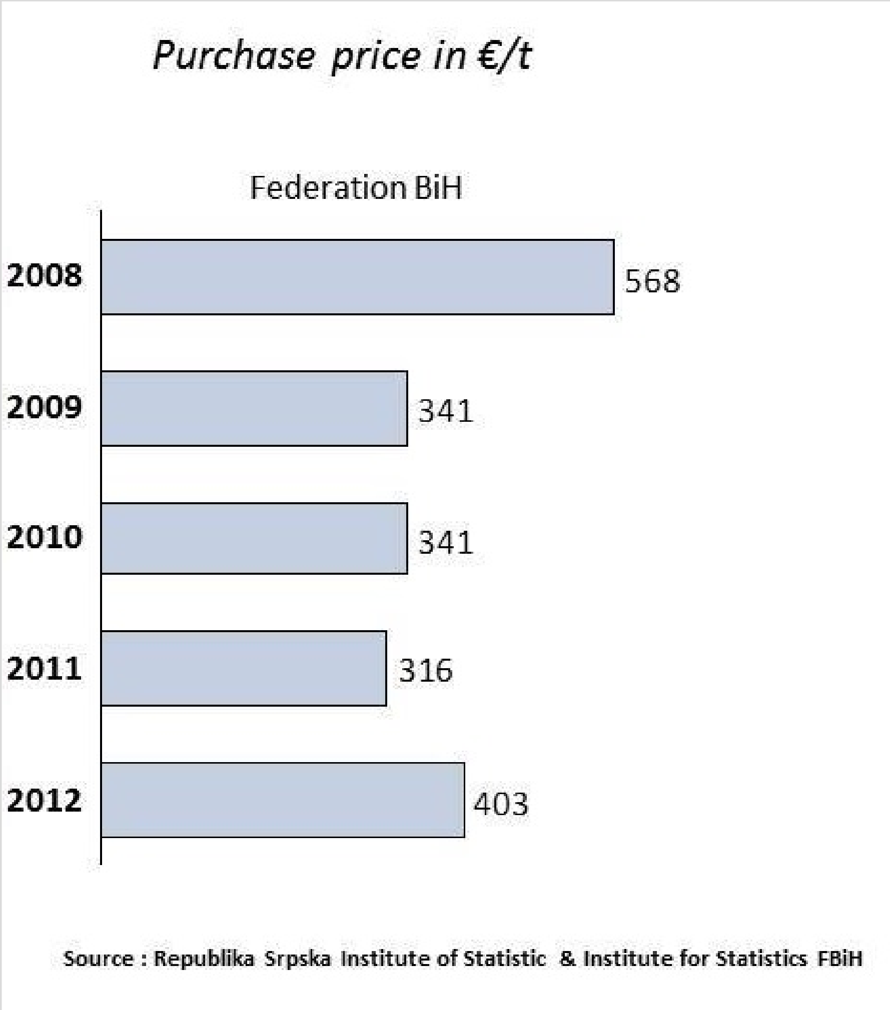


* Production of fresh apples showed in 000 tones

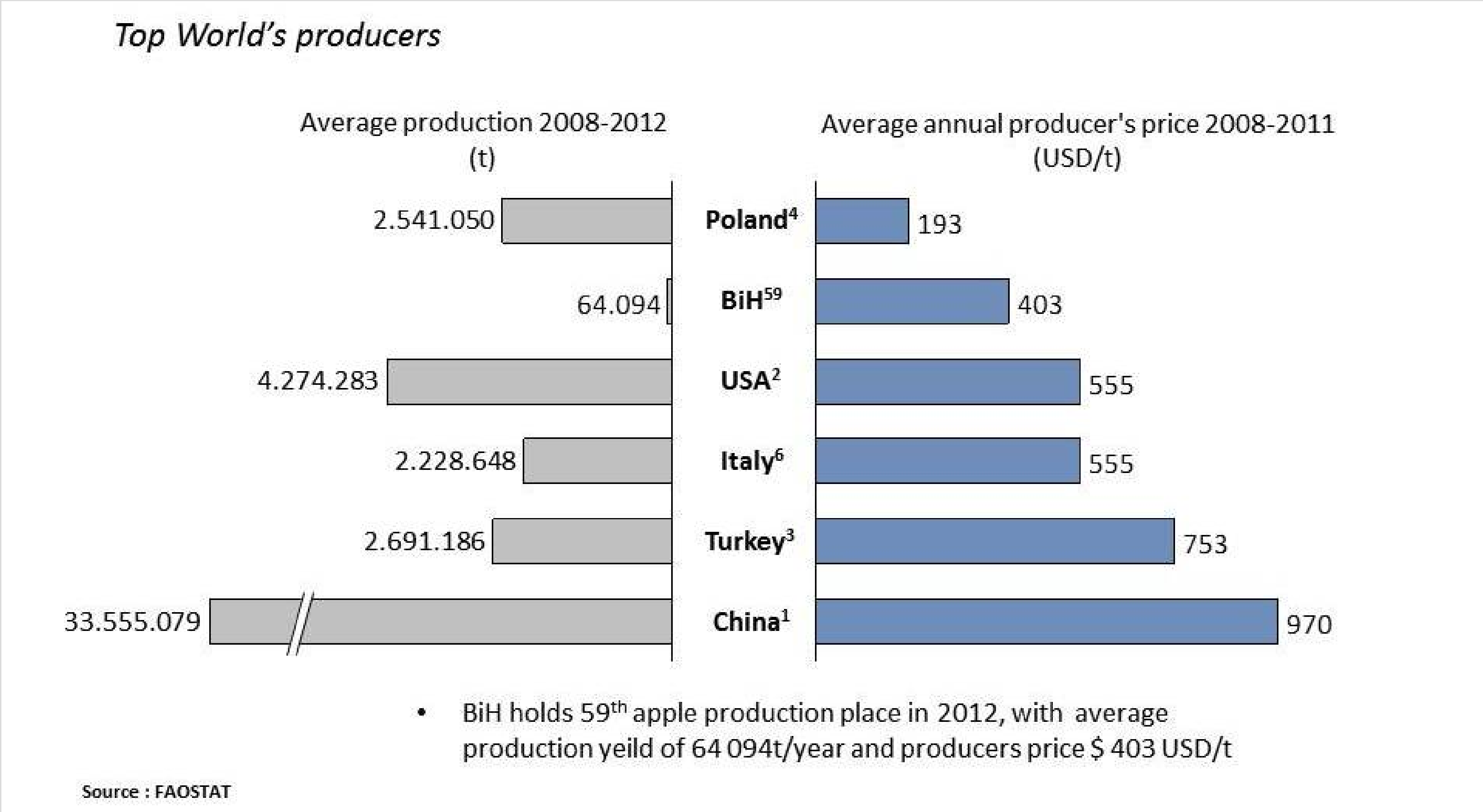
Production of apples per canton



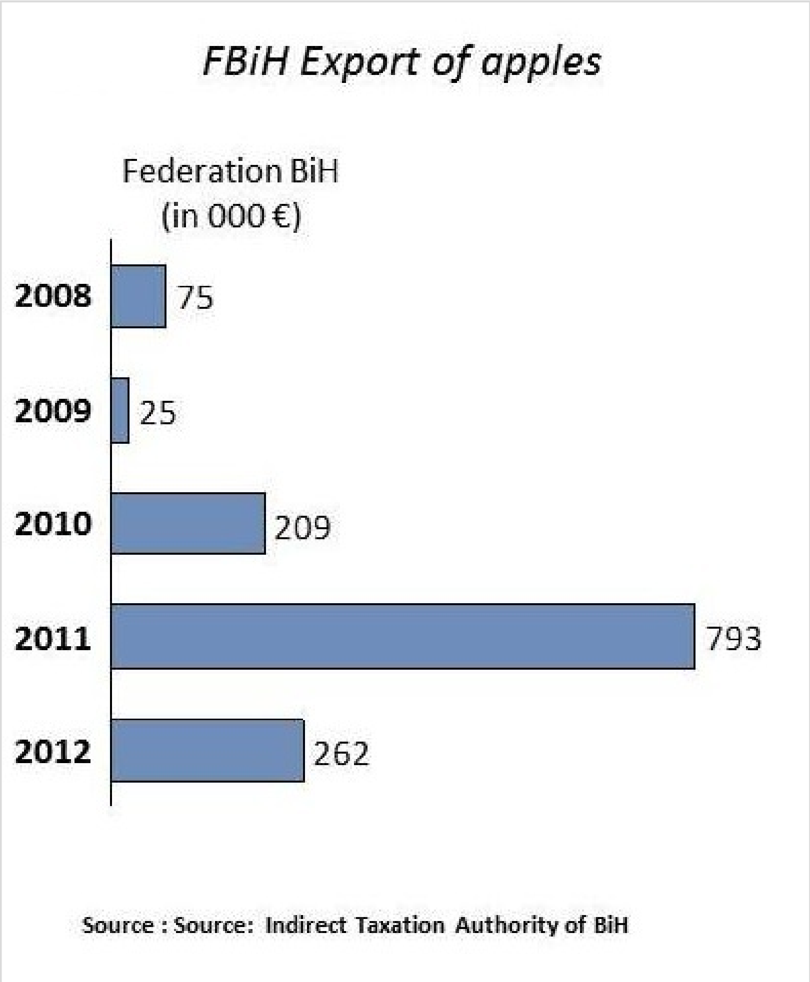
Production of apples – purchase price



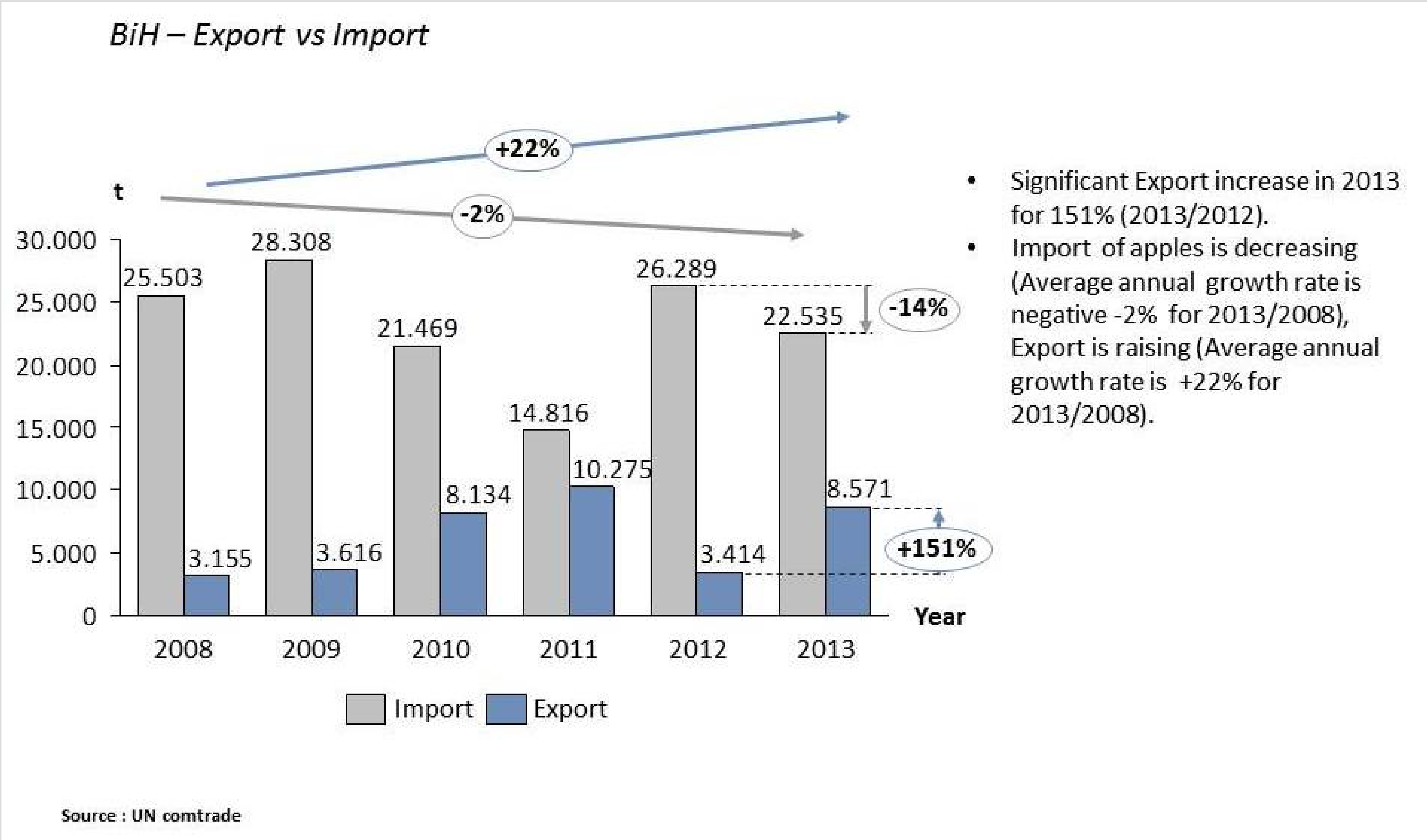
Production of apples – top world's producers



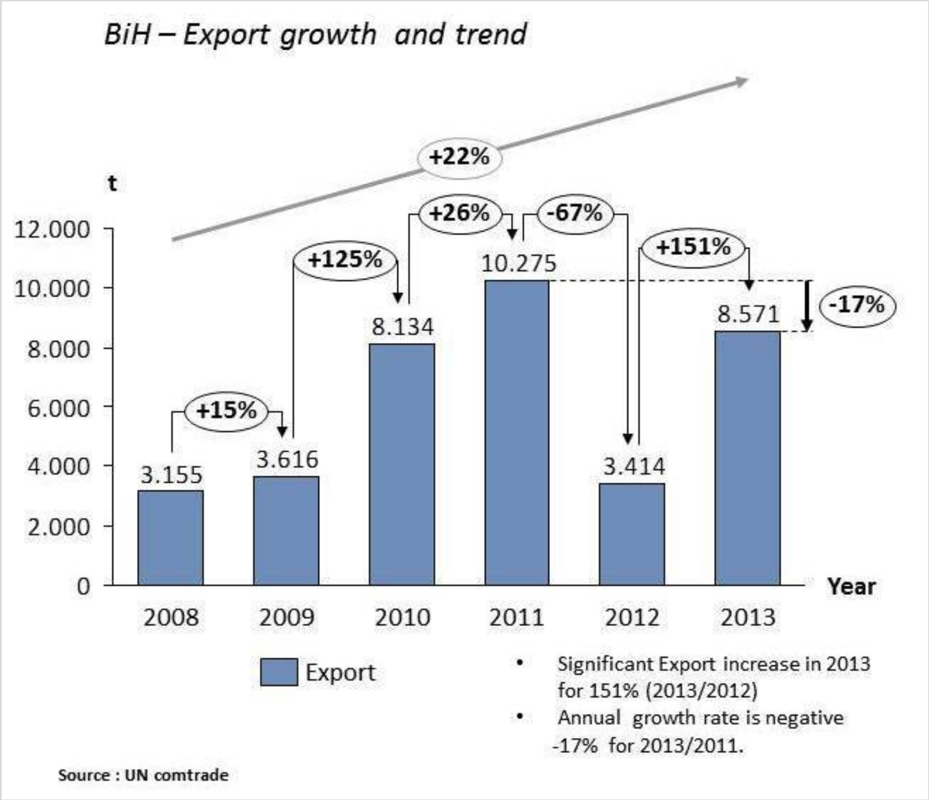
Export of apples in 000€

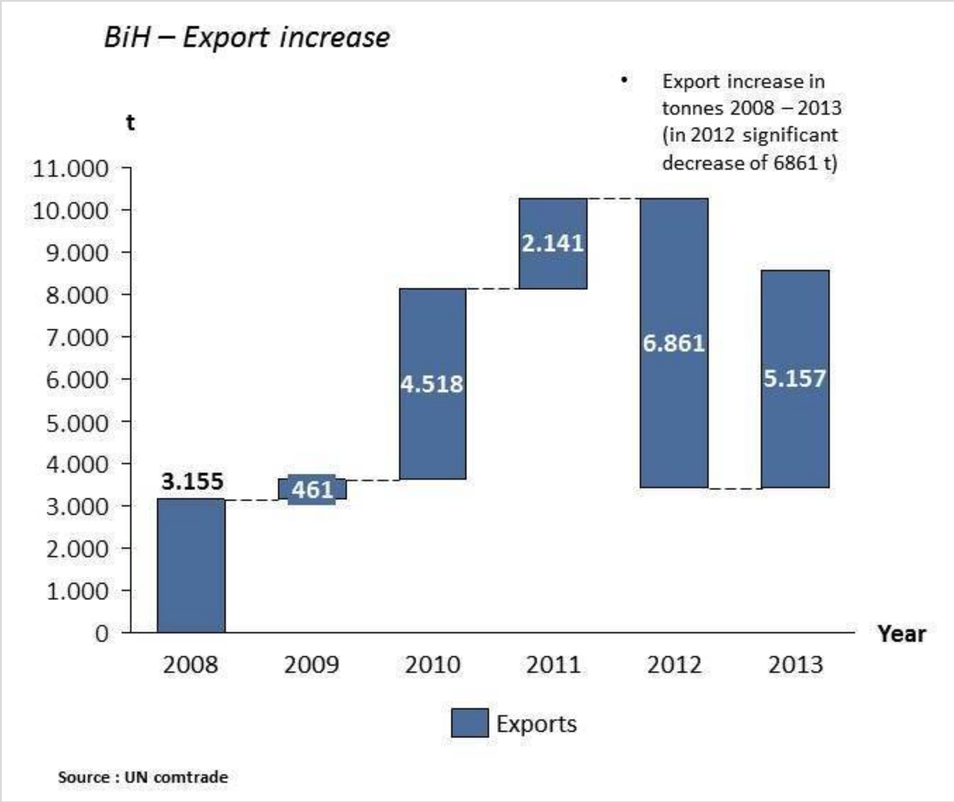


Export vs Import of apples



Export of apples growth and trend

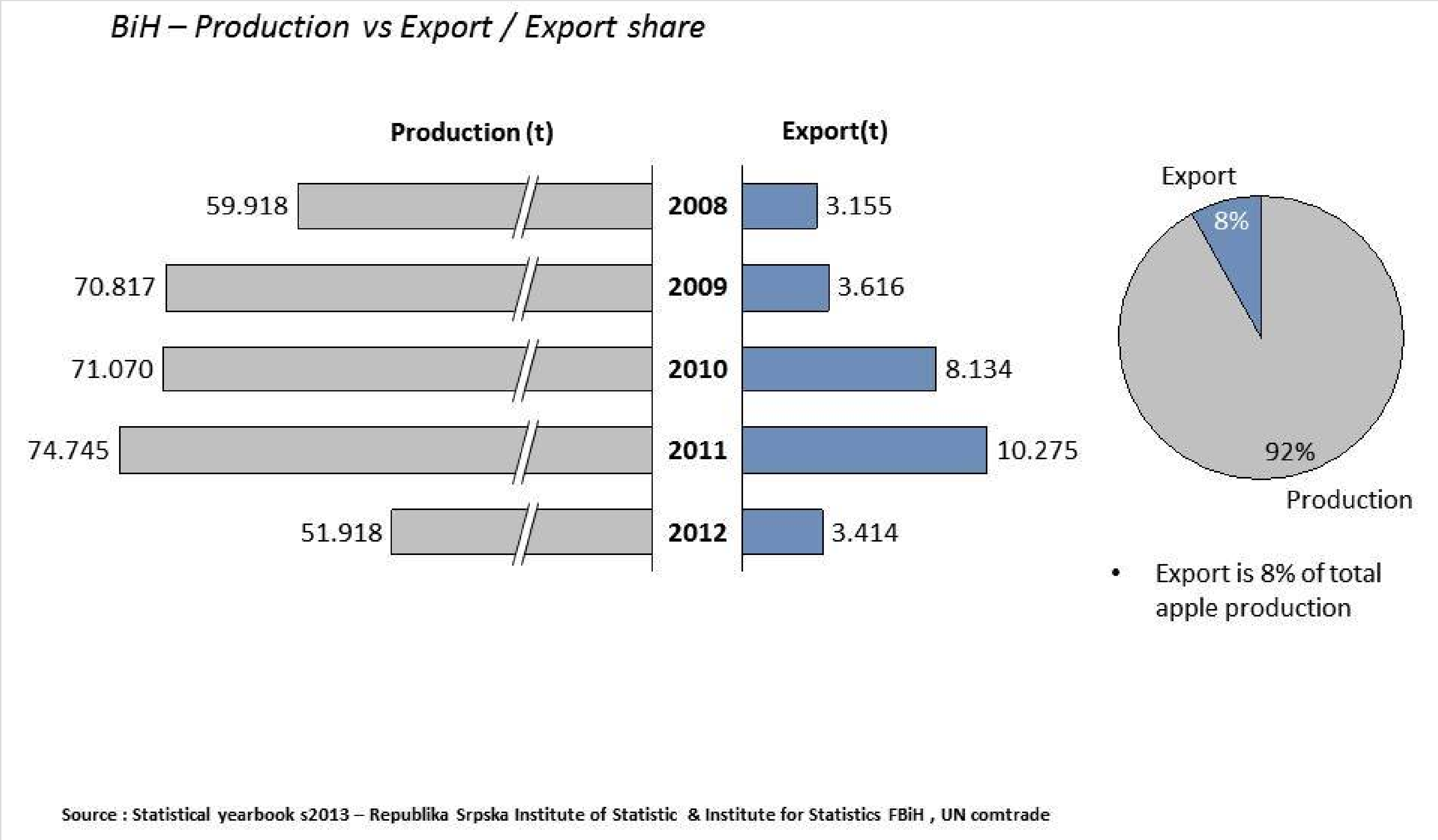




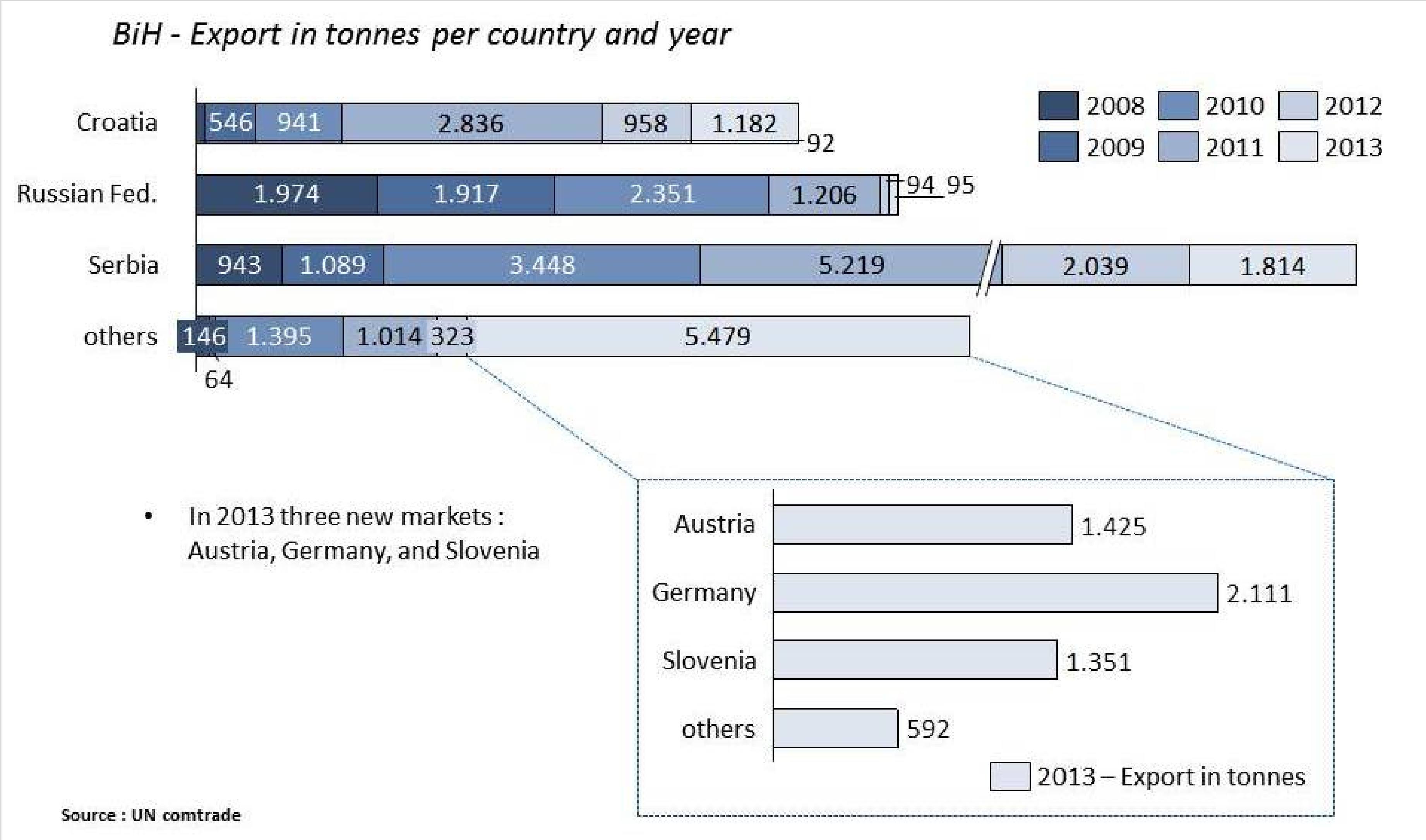
* Export in tones per year is raising

* waterfall chart is showing increase in tones year by year

Export vs Production of apples



Key markets - Export of apples per country



*BiH export per coutry – in 2013 three new markets with significat apple exports (Austria, Germany and Slovenia)

Competition for production of apples – Regional countries production

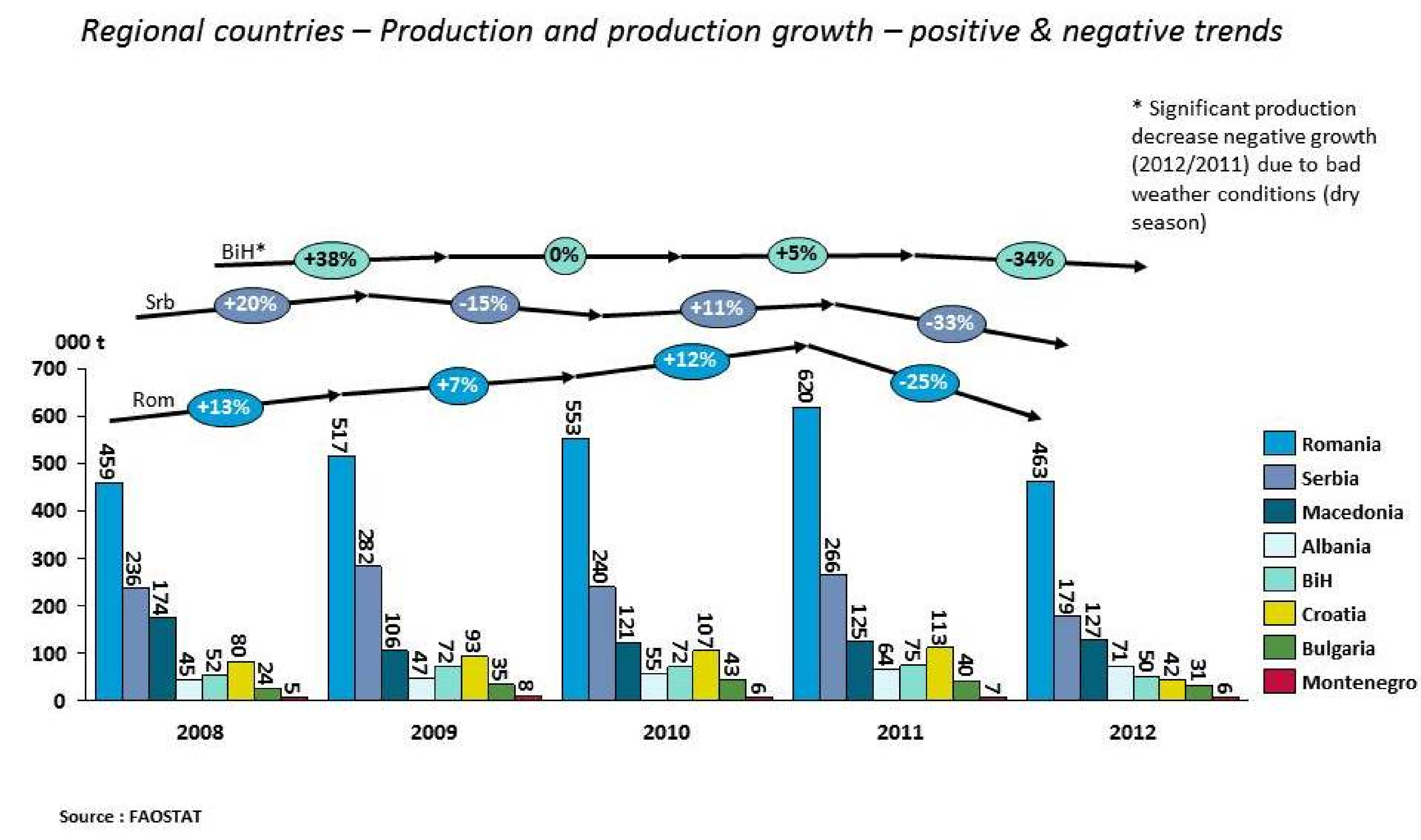
Regional countries – average production 2008-2012 (t)

Regional Country & world's prod. place	Av. Prod. 2008-2012 (t)
Romania[26]	522.533
Serbia[43]	240.341
Macedonia[49]	130.755
Albania[56]	56.421
BiH[59]	64.094
Croatia[65]	87.150
Bulgaria[68]	34.709
Montenegro[81]	6.464

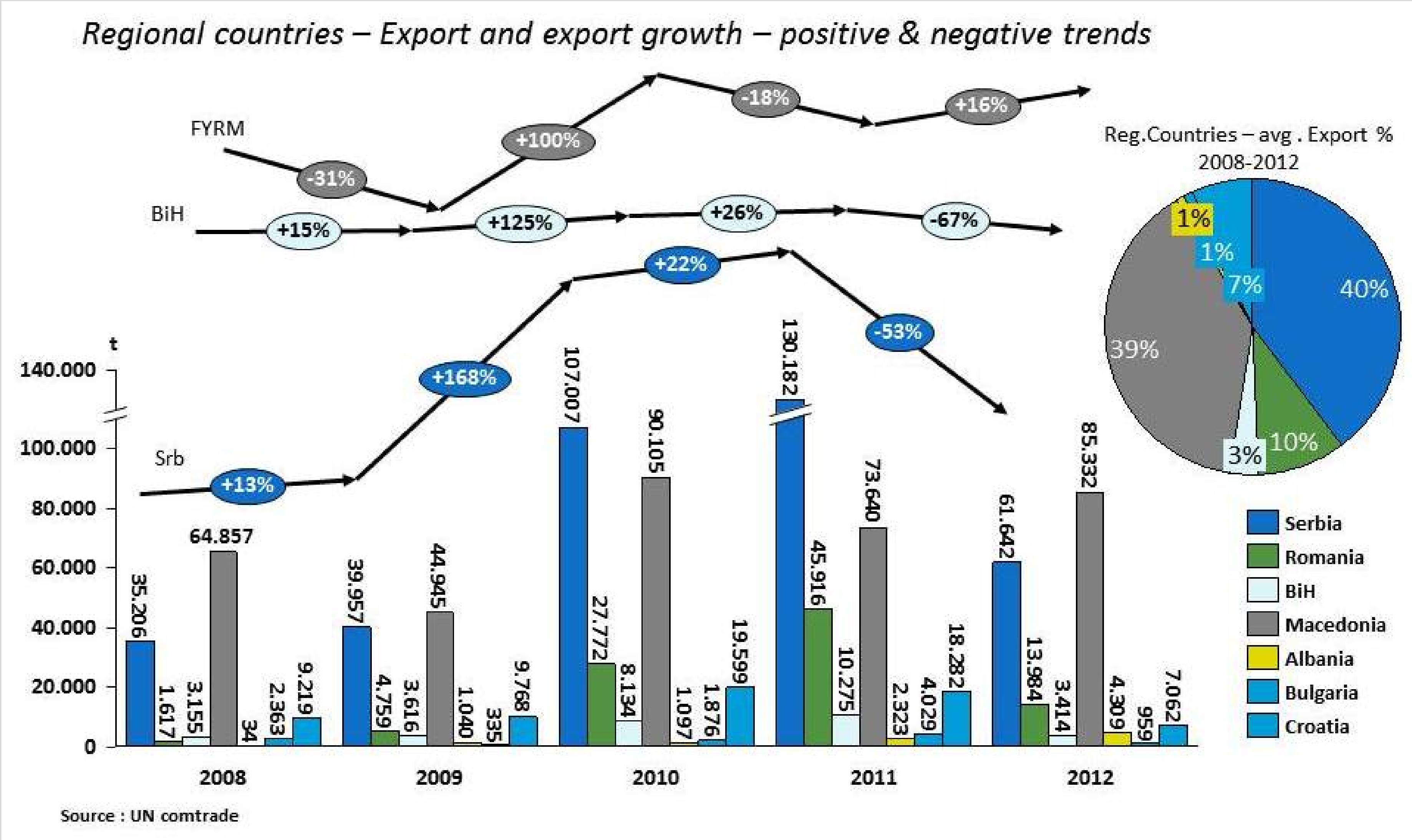
Source : FAOSTAT

*Balkan countries production in tones (arithmetic mean calculation 2008-2012).

Competition for production of apples – Regional countries production charts

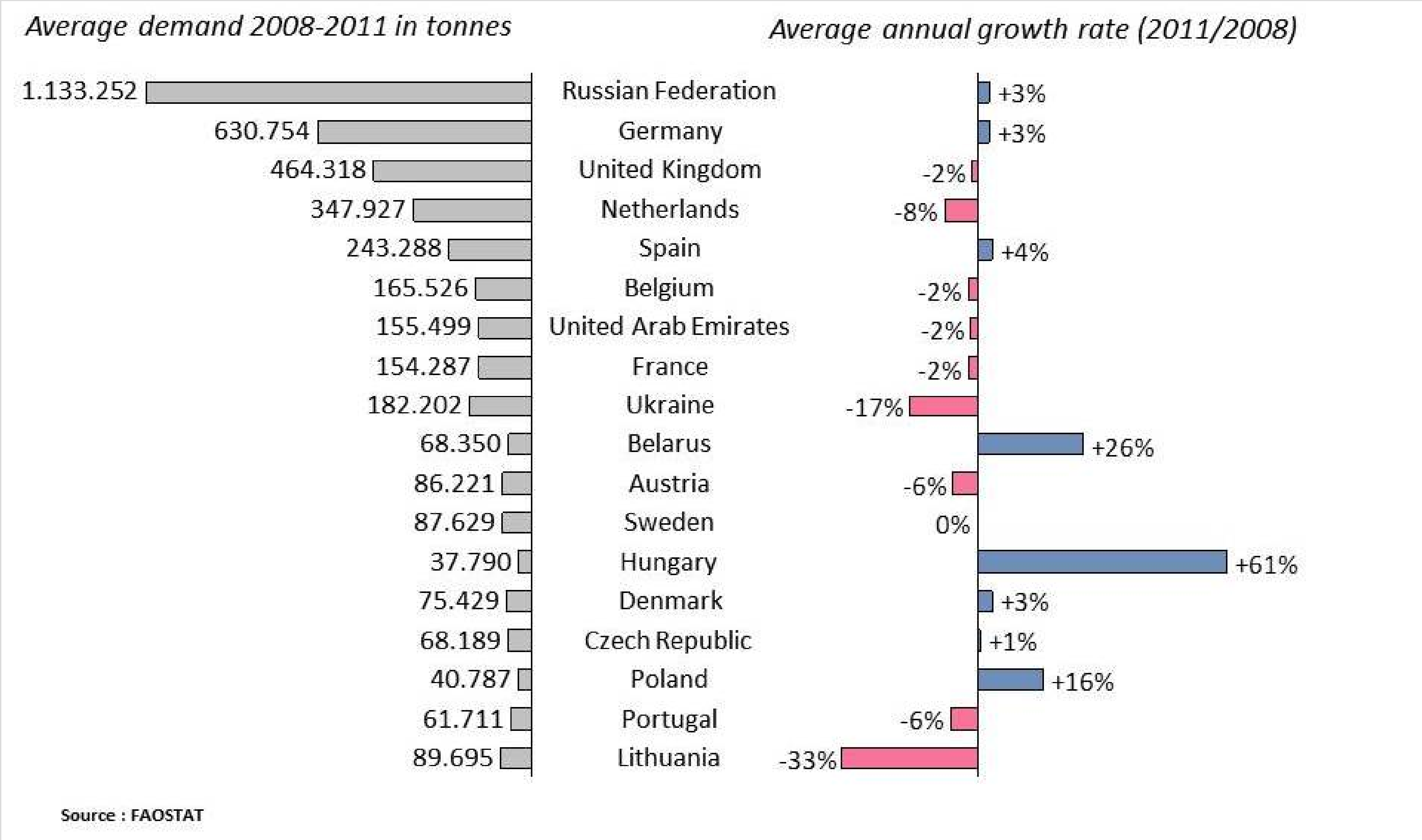


Competition for production of apples – Regional countries export to the World



*The very first Balkan's export country is Serbia with 40% of total export Balkan countries share. (2008-2012)

International Demand for apples



PEARS

Statistical analysis showed that Production of pears has an equable production in the reporting period 2008-2012, although in 2012 , due to dry season production of pears were significantly reduced. The largest pear production area in the RS is in Gradiska municipality, while in FBiH is in Tuzla Canton. The purchase price of pears is relatively good in comparison with other countries / producers.

Despite the reduction in the apple production in 2012 and the decline of the average growth rate of -8% (2012/2008) in the FBIH, export is increasing so that for the reference period 2011/2008 we have an increase in the average exports growth rate of + 235% . (Data for 2012 were not available).

The most important markets are Serbia and Croatia. Our biggest competitors in the region are Serbia and Romania with about 2.5 times higher production of pears . Serbia and Romania have the decline in production due to bad weather in 2012, while exports of pears is on the rise (similar to BiH).

The largest regional exporter of pears is Serbia, which makes for 45% of the total Balkan countries exports (Romania, Bosnia, Serbia , Croatia , Macedonia , Montenegro , Albania and Bulgaria). BiH is the second largest export Balkan countries with a share of approximately 40%.
International demand for pears is significant, while particular interest have Russian Federation, United Kingdom, Germany, France and the Netherlands.

Pears – market opportunity

Segment/ Product	Production Size[I] -FBIH			Exports[II] -FBIH		
	Year	Tons (000 t)	Growth	Year	Euro (000 €)	Growth
Pears	2009/2008	9,9/8,3	↑ 19%	2009/2008	26/2	↑ 1180%
	2010/2009	9,1/9,9	↓ -8,5%	2010/2009	27/26	↑ 5,9%
	2011/2010	10/9,1	↑ 10%	2011/2010	75/27	↑ 177%
	2012/2011	5,8/10	↓ -41%	2012/2011	no data	no data
	AVG. 2012/2008		↓ -8%	**AVG. 2012/2008**		↑ 235,0%

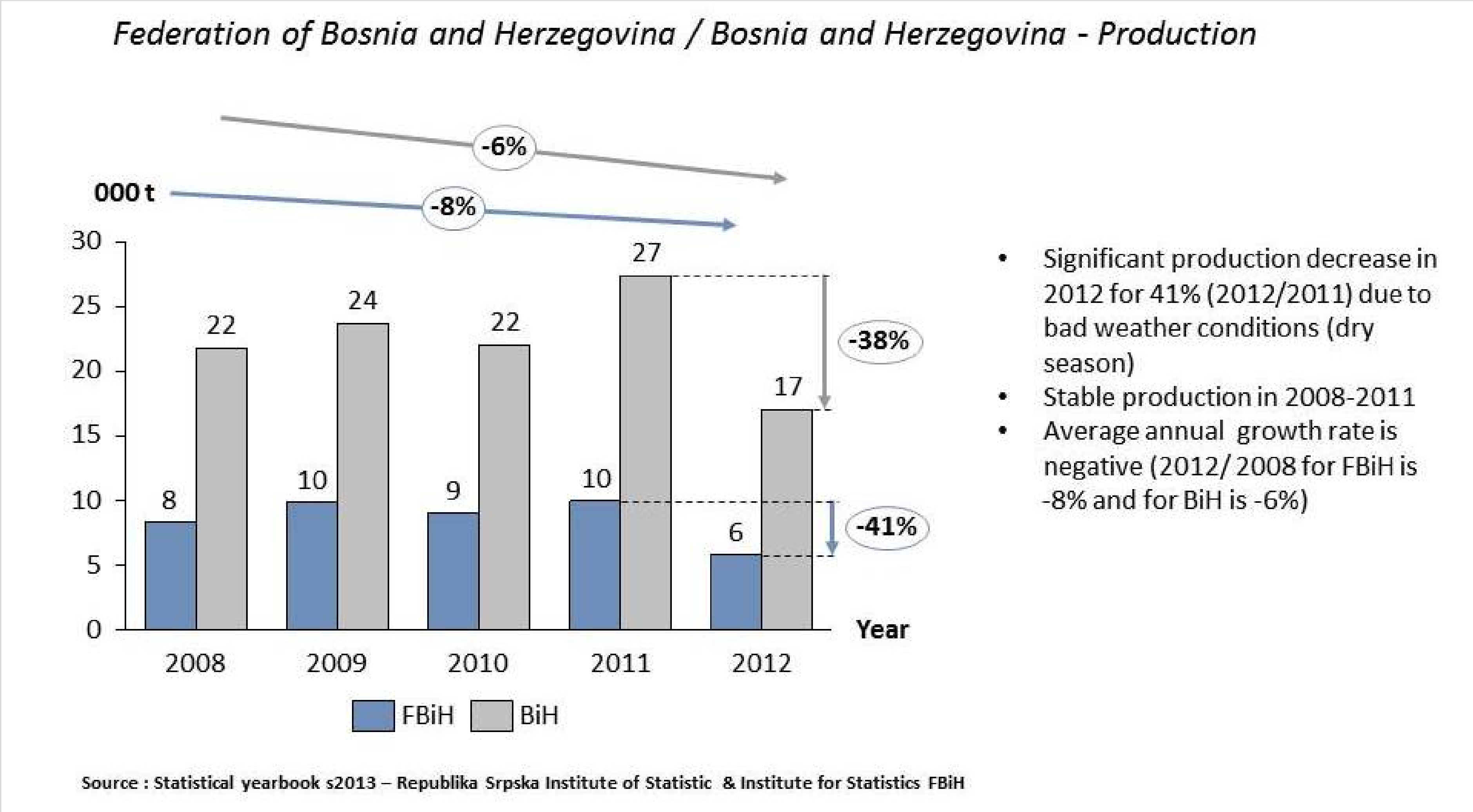
Key markets - name sofictication[III]-FBIH			
Country	Year	Euro (000 €)	Growth
Serbia	2009/2008	no data	no data
	2010/2009	13,3/2,6	↑ 420%
	2011/2010	3,6/13,3	↓ -73%
	2012/2011	no data	no data
	AVG. 2012/2008		**no data**
Croatia	2009/2008	1/2	↓ -50%
	2010/2009	1,5/1	↑ 50%
	2011/2010	45/1,5	↑ 2833%
	2012/2011	no data	no data
	AVG. 2012/2008		**no data**
Macedonia	2009/2008		
	2010/2009	7,7/12,3	↓ -38%
	2011/2010	7,7/7,7	→ 0%
	2012/2011	no data	no data
	AVG. 2012/2008		**no data**
Other countries	2009/2008		
	2010/2009	4,6/9,7	↓ -53%
	2011/2010	16,9/4,6	↑ 267%
	2012/2011	no data	no data
	AVG. 2012/2008		**no data**

Competition for production/processing[IV]			
Country	Year	Size (000 t)	Growth
Romania	2009/2008	66,1/52,6	↑ 26%
	2010/2009	60,4/66,1	↓ -9%
	2011/2010	66,9/60,4	↑ 11%
	2012/2011	54,3/66,9	↓ -19%
	AVG. 2012/2008		↑ 1%
Serbia	2009/2008	67,8/61,9	↑ 10%
	2010/2009	47,5/67,8	↓ -30%
	2011/2010	65,3/47,5	↑ 37%
	2012/2011	39,1/65,3	↓ -40%
	AVG. 2012/2008		↓ -11%
Macedonia	2009/2008	8,3/8,3	↑ 1%
	2010/2009	7,6/8,3	↓ -9%
	2011/2010	7,5/7,6	↓ -2%
	2012/2011	6,9/7,5	↓ -7%
	AVG. 2012/2008		↓ -4%
Albania	2009/2008	7,2/5,6	↑ 29%
	2010/2009	7,3/7,2	↑ 2%
	2011/2010	8,4/7,3	↑ 15%
	2012/2011	8,9/8,4	↑ 6%
	AVG. 2012/2008		↑ 13%
Croatia	2009/2008	10/8,8	↑ 12%
	2010/2009	8,7/10	↓ -12%
	2011/2010	8,9/8,7	↑ 2%
	2012/2011	2,1/8,9	↓ -76%
	AVG. 2012/2008		↓ -30%
Bulgaria	2009/2008	1,4/0,9	↑ 56%
	2010/2009	1,5/1,4	↑ 2%
	2011/2010	2/1,5	↑ 34%
	2012/2011	1,4/2	↓ -31%
	AVG. 2012/2008		↑ 10%
Montenegro	2009/2008	2,8/2	↑ 38%
	2010/2009	2,4/2,8	↓ -16%
	2011/2010	2,8/2,4	↑ 18%
	2012/2011	2,4/2,8	↓ -13%
	AVG. 2012/2008		↑ 4%
BiH	2009/2008	24,8/21,7	↑ 14%
	2010/2009	22,9/24,8	↓ -8%
	2011/2010	28,3/22,9	↑ 23%
	2012/2011	18/28,3	↓ -36%
	AVG. 2012/2008		↓ -5%

International Demand[V] (avg. 2008-2011)		
Country	Size (t)	Growth
Russian Federation	378.333	↑ 3%
Netherlands	181.885	↑ 3%
Brazil	175.461	↑ 15%
Germany	159.449	↑ 2%
France	153.121	↑ 1%
United Kingdom	131.603	↑ 1%
Italy	123.334	↑ 0%
Indonesia	105.486	↑ 16%
Viet Nam	86.359	↓ -2%
Mexico	81.032	↓ -2%
USA	76.991	↓ -3%
Canada	69.410	↓ 0%
Belgium	56.913	↓ -9%
Spain	50.135	↓ -5%
Malaysia	42.808	↓ -3%
China	40.069	↑ 1%
Thailand	39.457	↓ -8%
Sweden	35.821	↓ -1%
Denmark	30.193	↑ 2%
China, Hong Kong SAR	25.839	↑ 5%
Lithuania	24.577	↑ 41%
Poland	24.024	↑ 18%
Singapore	22.771	↓ -2%
Norway	21.957	↓ -6%
United Arab Emirates	21.200	↑ 9%
Colombia	20.551	↑ 23%
Austria	18.516	↑ 6%
Saudi Arabia	17.910	↑ 18%
Portugal	17.359	↓ -10%
Greece	16.081	↓ -4%

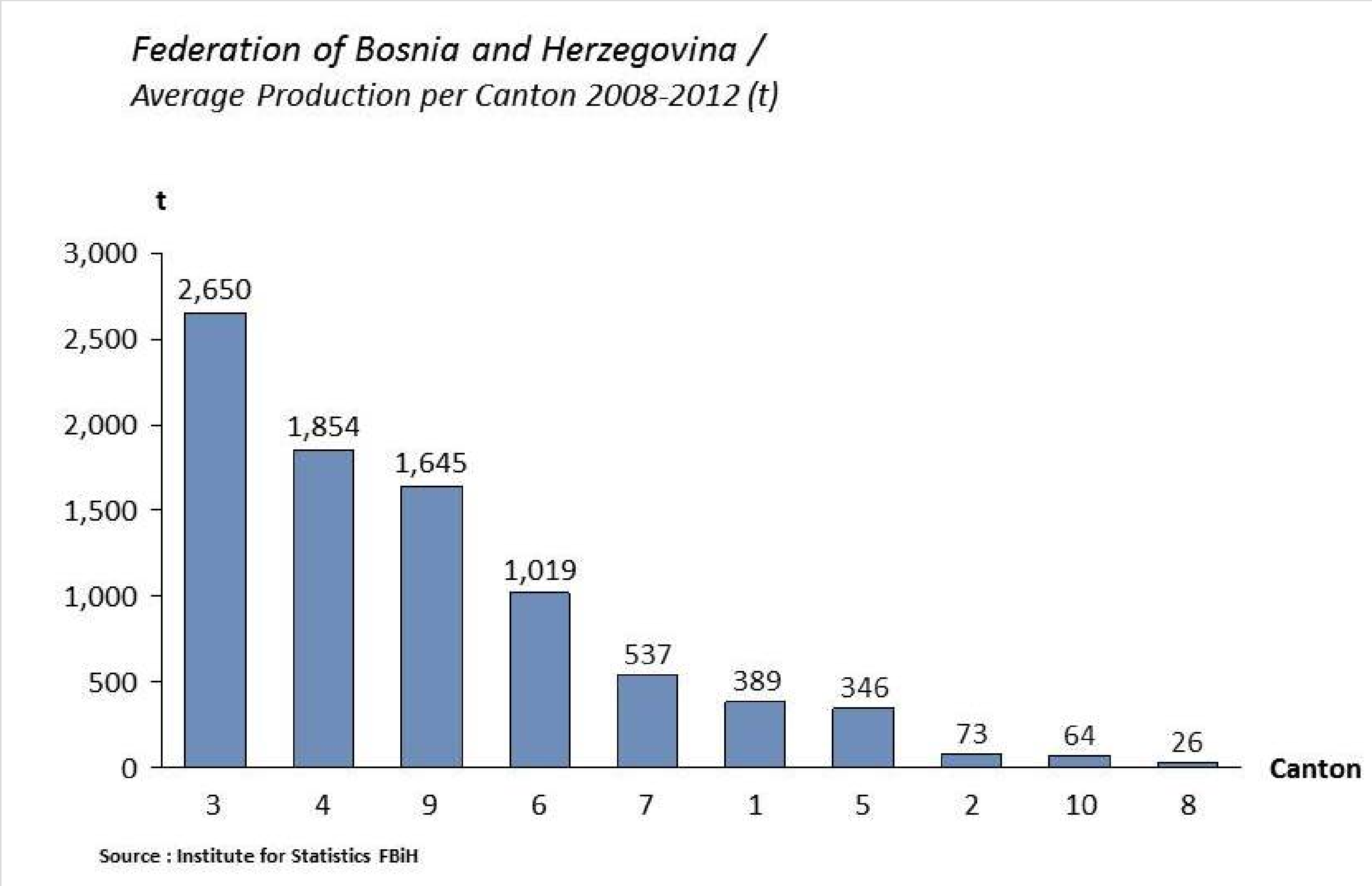
I source: Statistics institute Republika Srpska, Statistics institute Federation BiH / Link - Chart name: *Production of pears*
II source: Indirect Taxation Authority of BiH / Link - Chart name: *Export of pears in 000€*
III source: Indirect Taxation Authority of BiH
IV source: FAOSTAT and Uncomtrade / Link - Chart name: *Competition for production of pears – Regional countries production charts*
V source: FAOSTAT and Uncomtrade / Link - Chart name: *International Demand for pears*

Production of pears

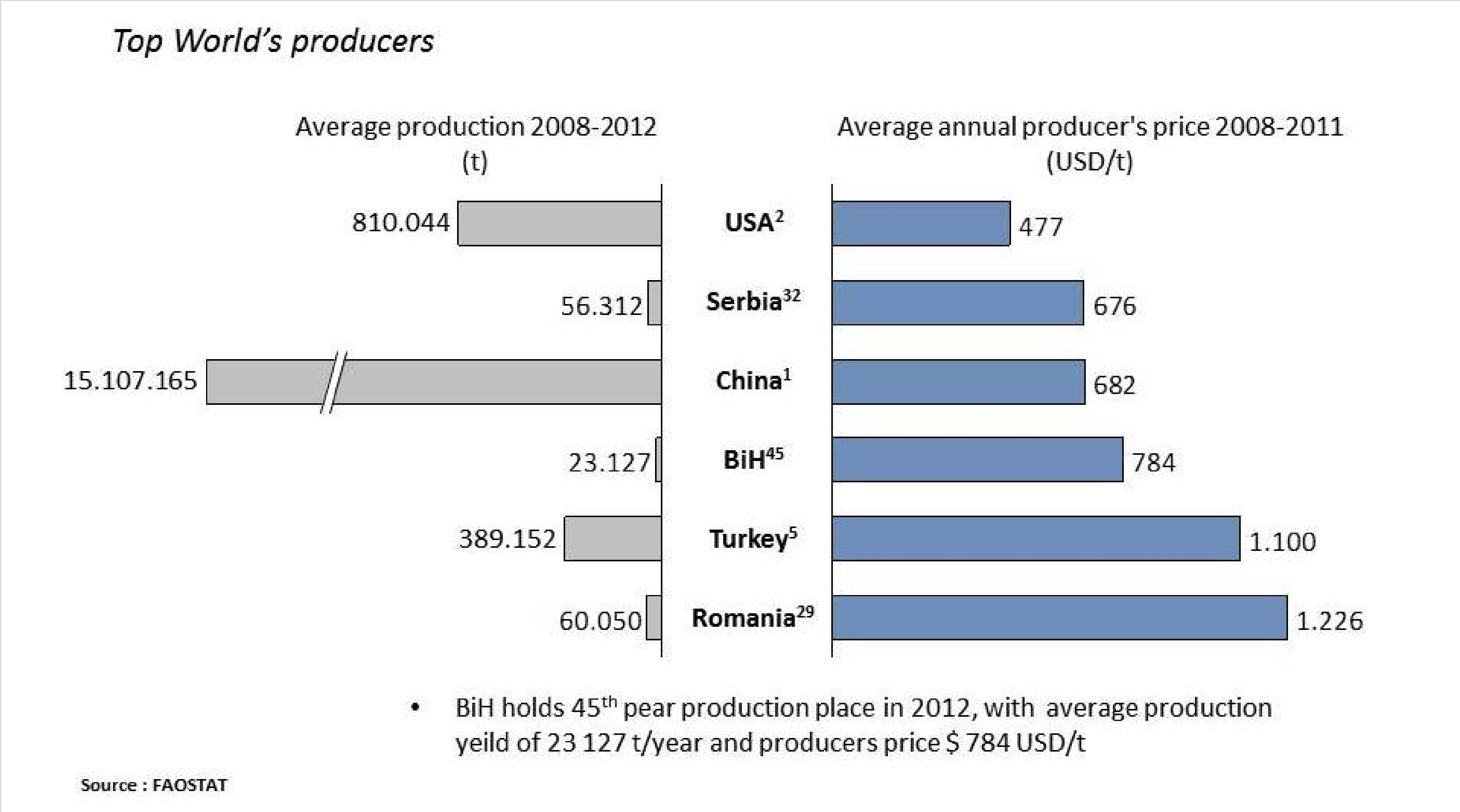


* Production of fresh pears showed in 000 tones

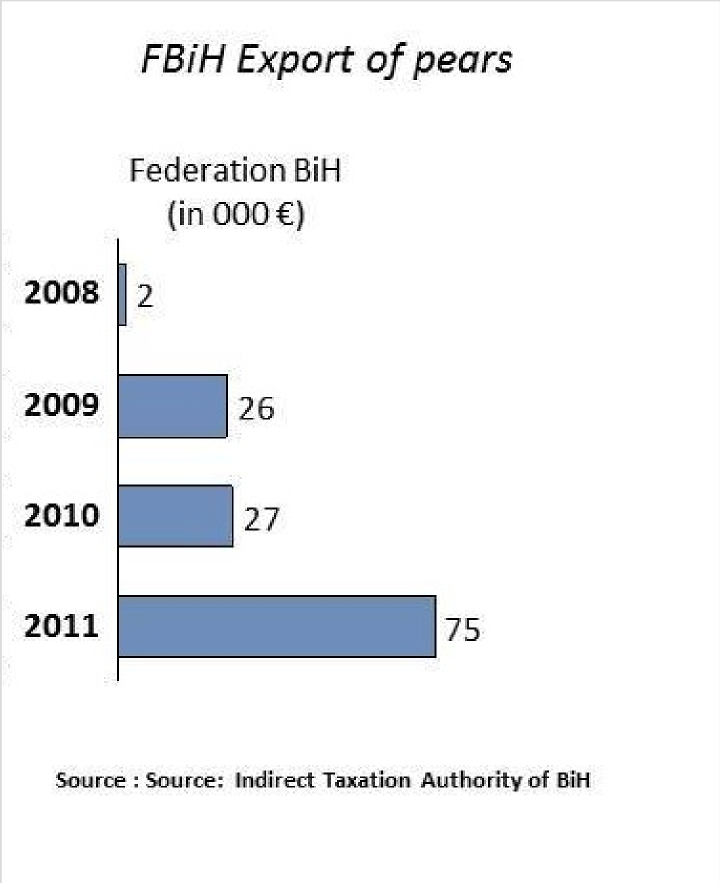
Production of pears – per Canton



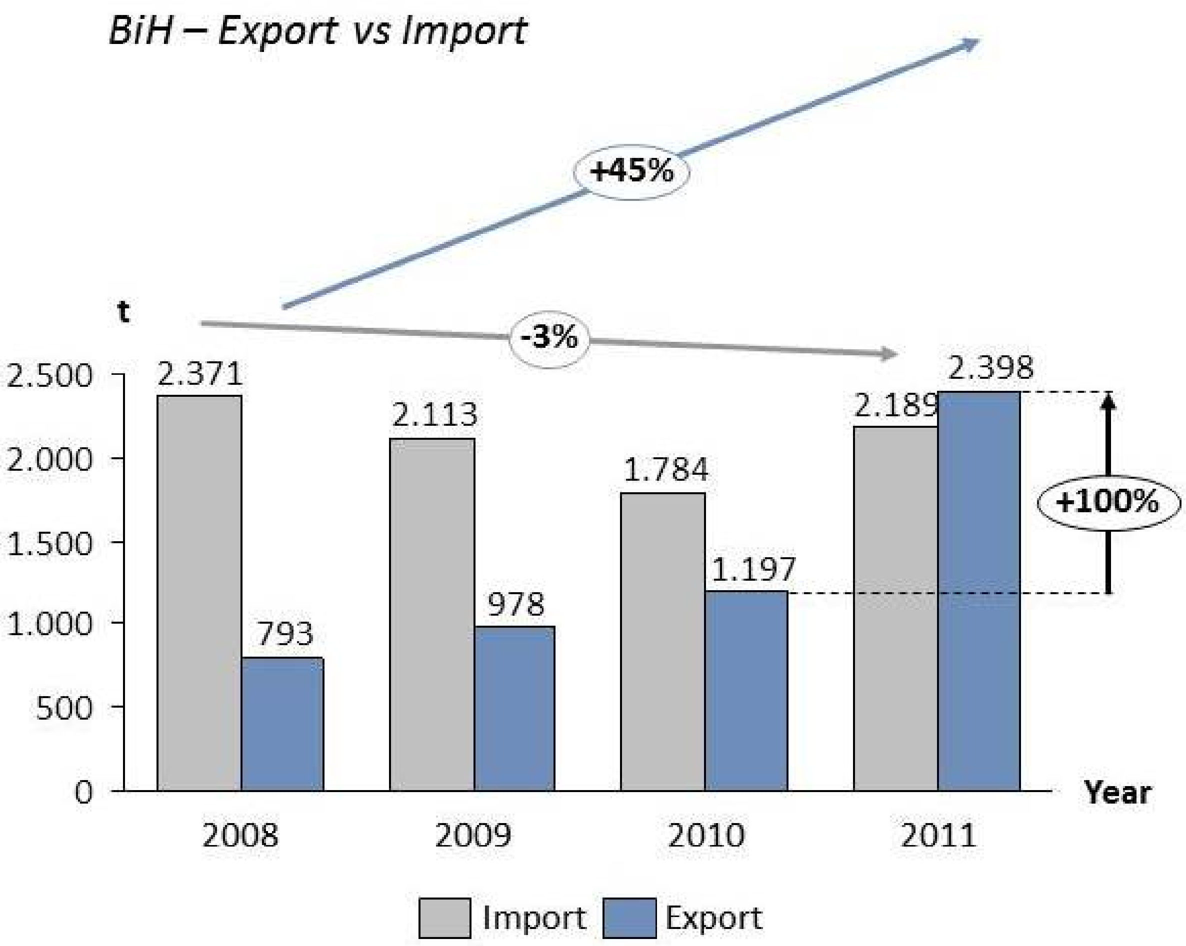
Production of pears – top world's producers



Export of pears in 000€



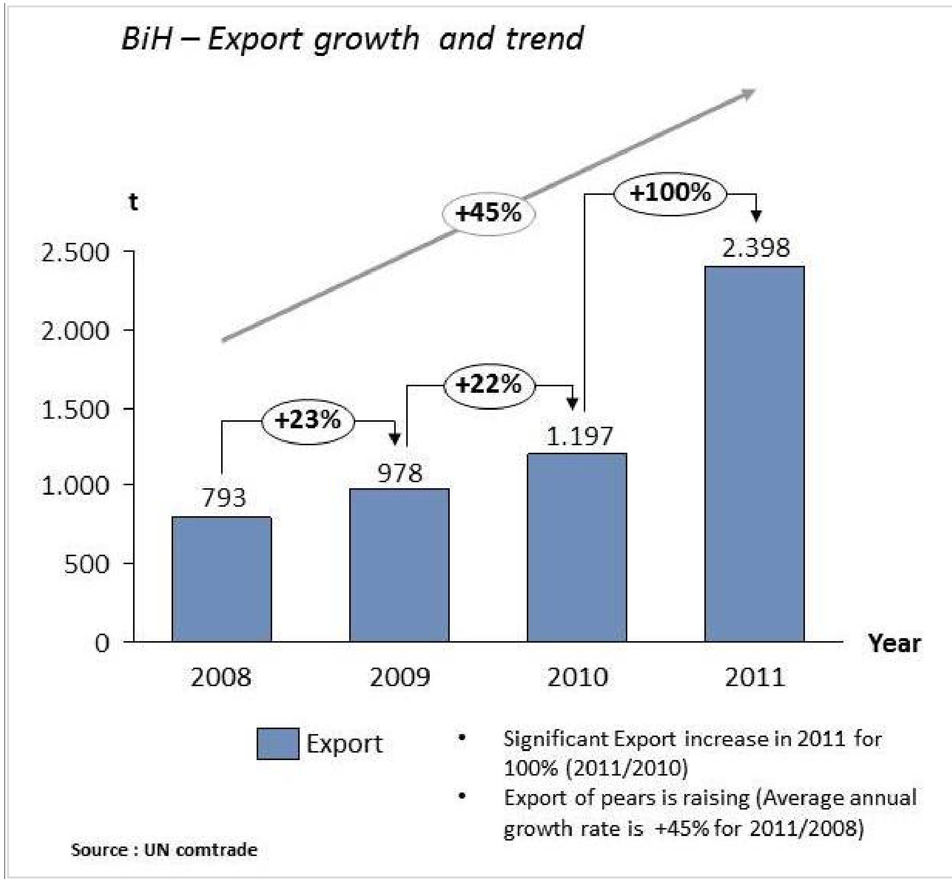
Export vs Import of pears

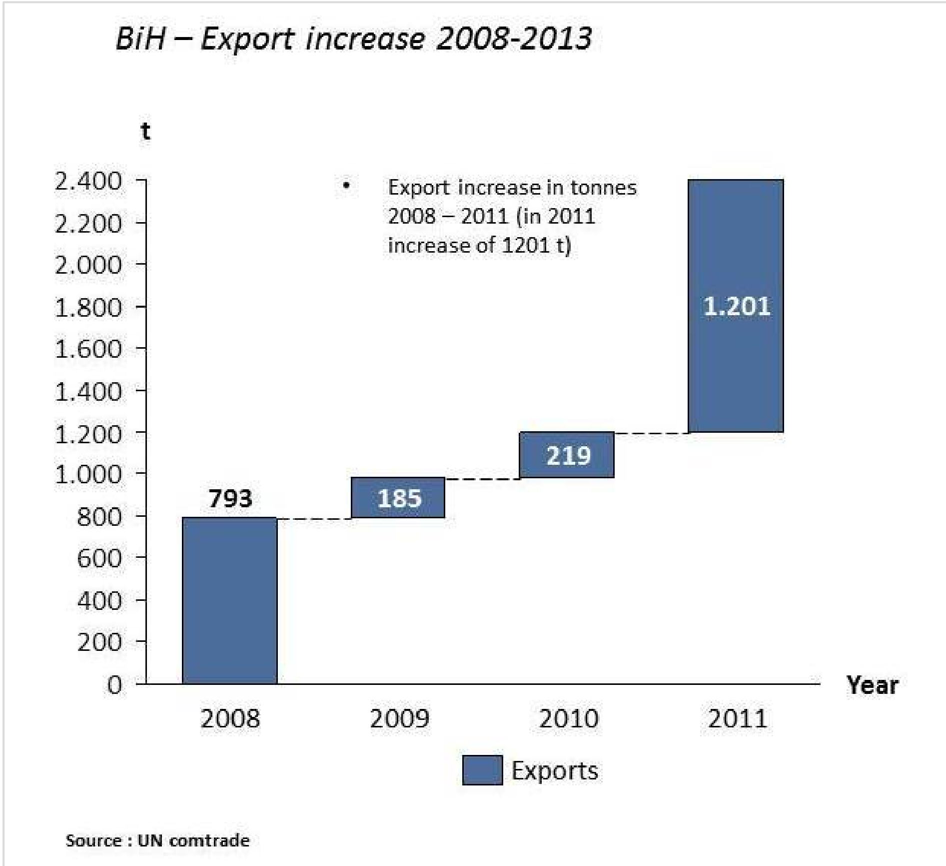


- Significant Export increase in 2011 for 100% (2011/2010)
- Import of pears is decreasing (Average annual growth rate is negative -3% for 2011/2008), Export is raising (Average annual growth rate is +45% for 2011/2008)

Source : UN comtrade

Export of pears growth and trend



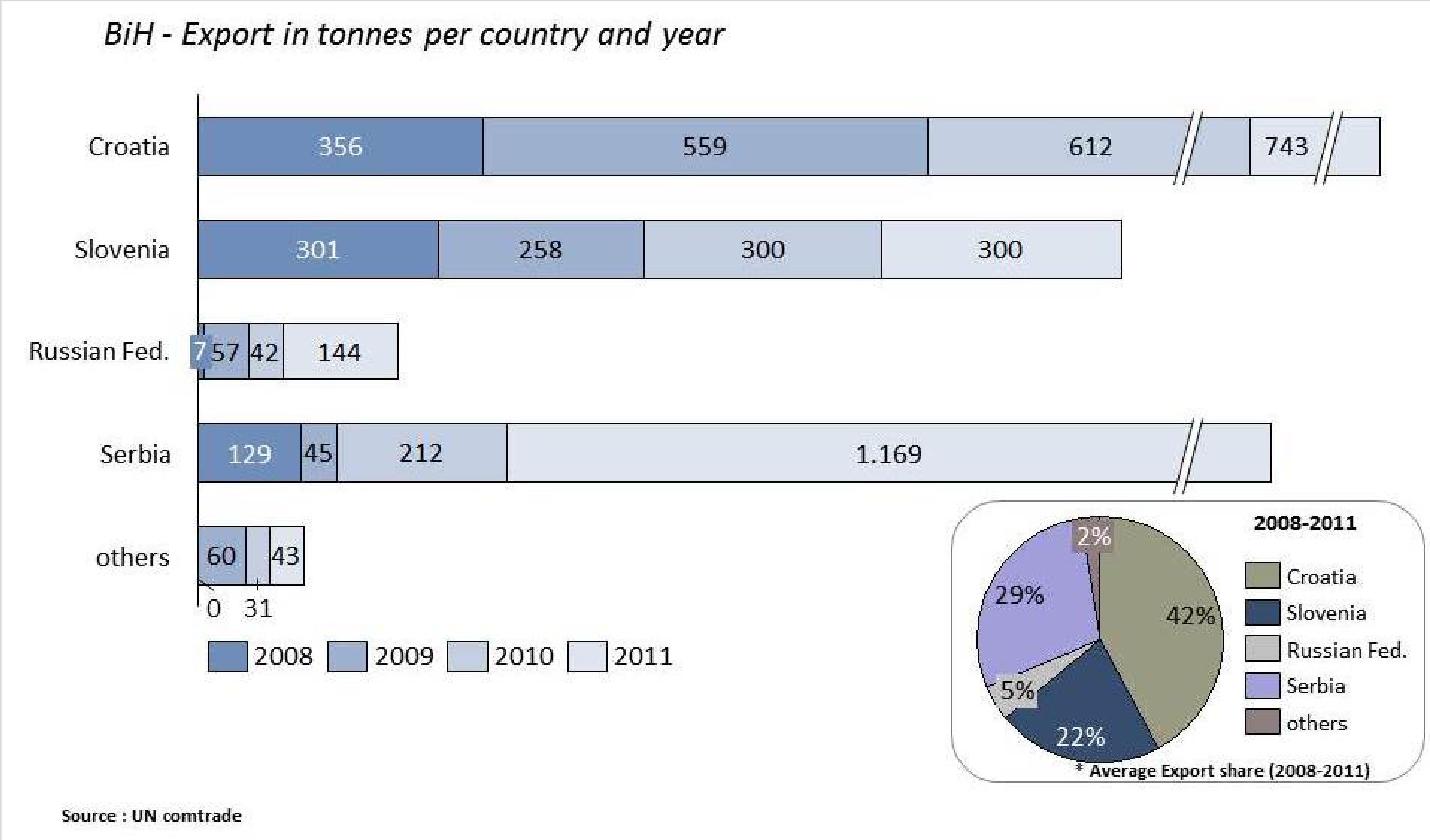


* Export in tones per year is raising

* waterfall chart is showing increase in tones year by year

Export vs Production of pears

Key markets - Export of pears per country



*BiH export per coutry – in 2011 great increase of pear export to Serbia. Croatia holds 42% of total export share.

Competition for production of pears – Regional countries production

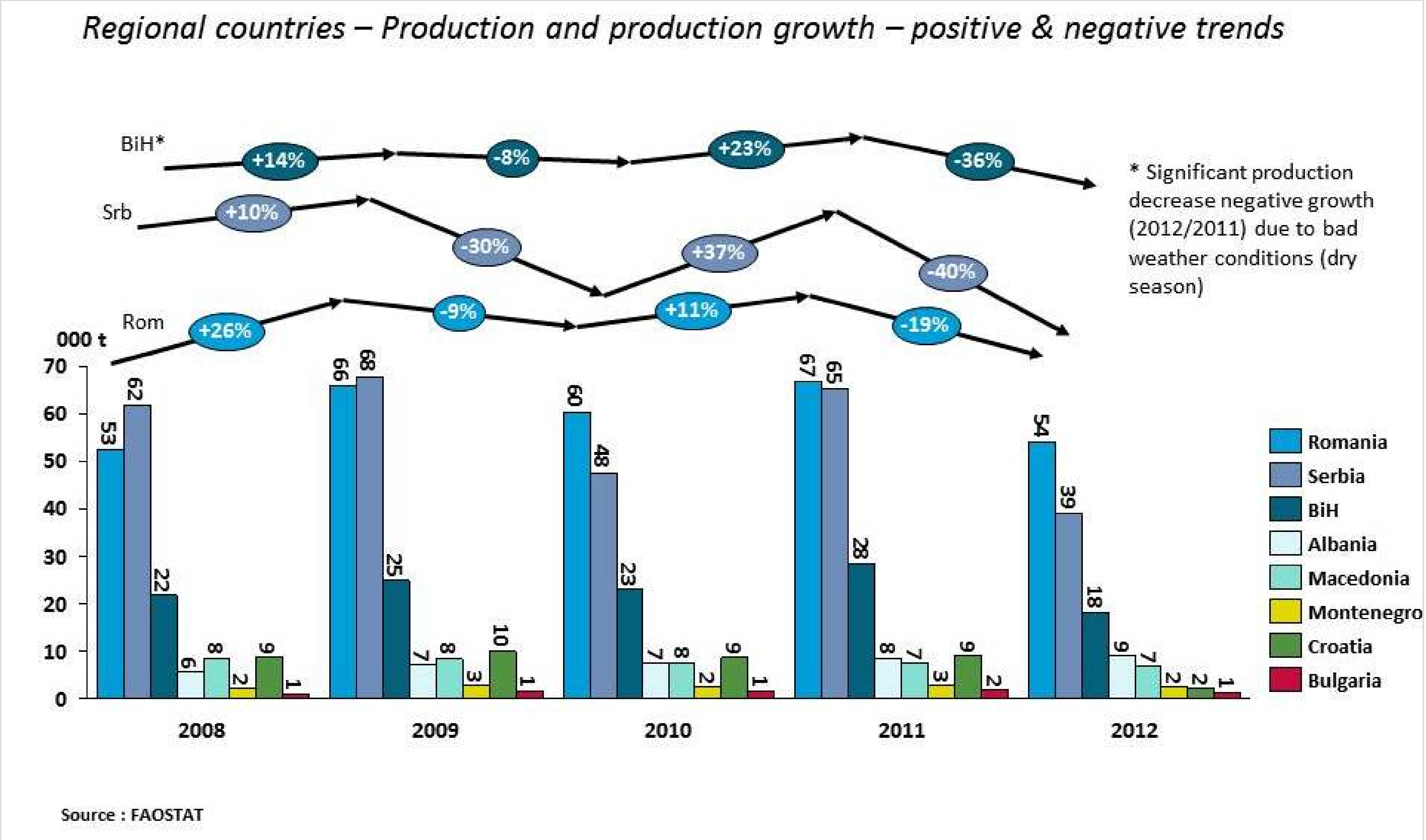
Regional countries – average production 2008-2012 (t)

Regional Country & world's prod. place	Av. Prod. 2008-2012 (t)
Romania[29]	60.050
Serbia[32]	56.312
BiH[45]	23.127
Albania[53]	7.482
Macedonia[57]	7.711
Montenegro[66]	2.479
Croatia[67]	7.709
Bulgaria[73]	1.434

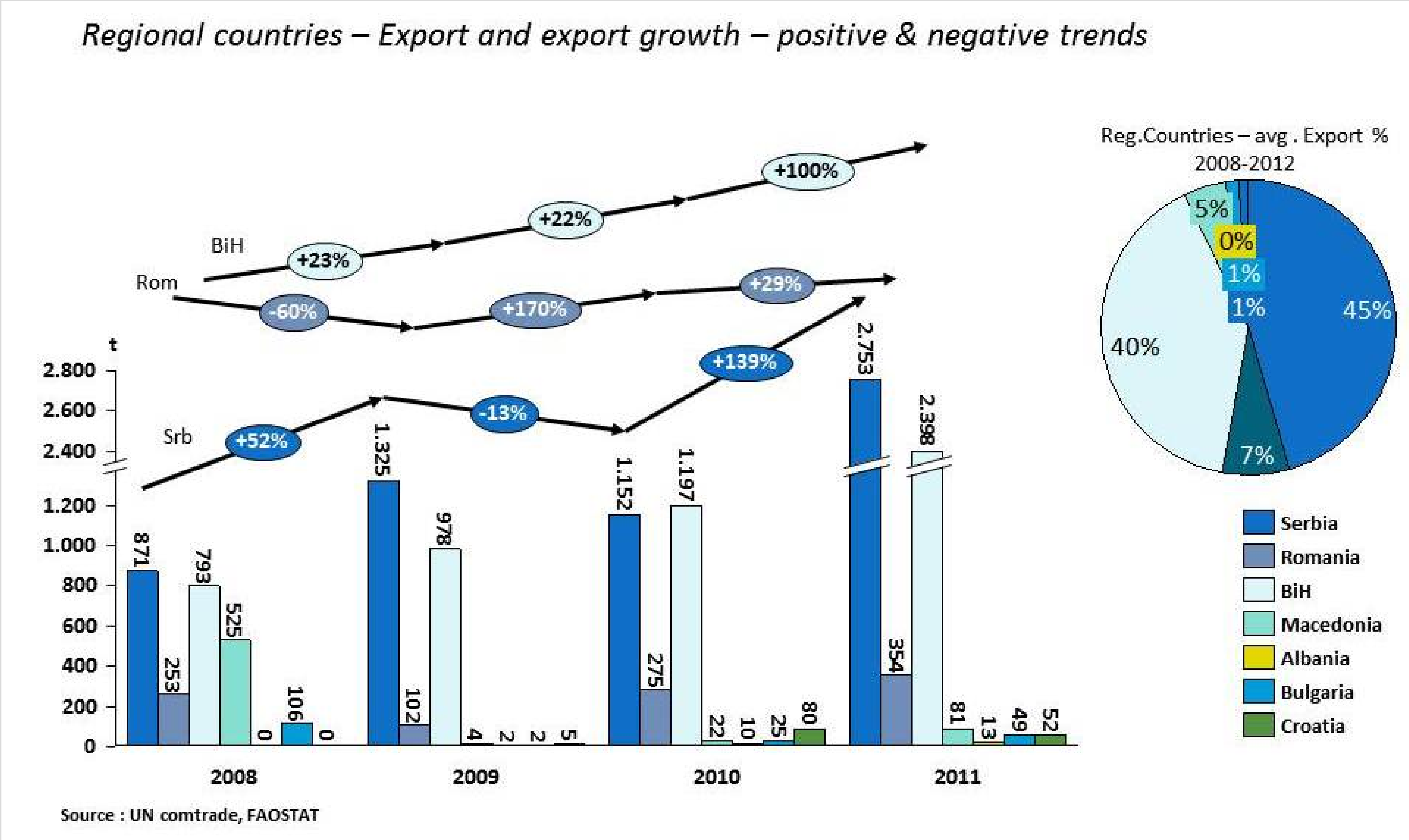
Source : FAOSTAT

*Balkan countries production in tonnes (arithmetic mean calculation 2008-2012).

Competition for production of pears – Regional countries production charts

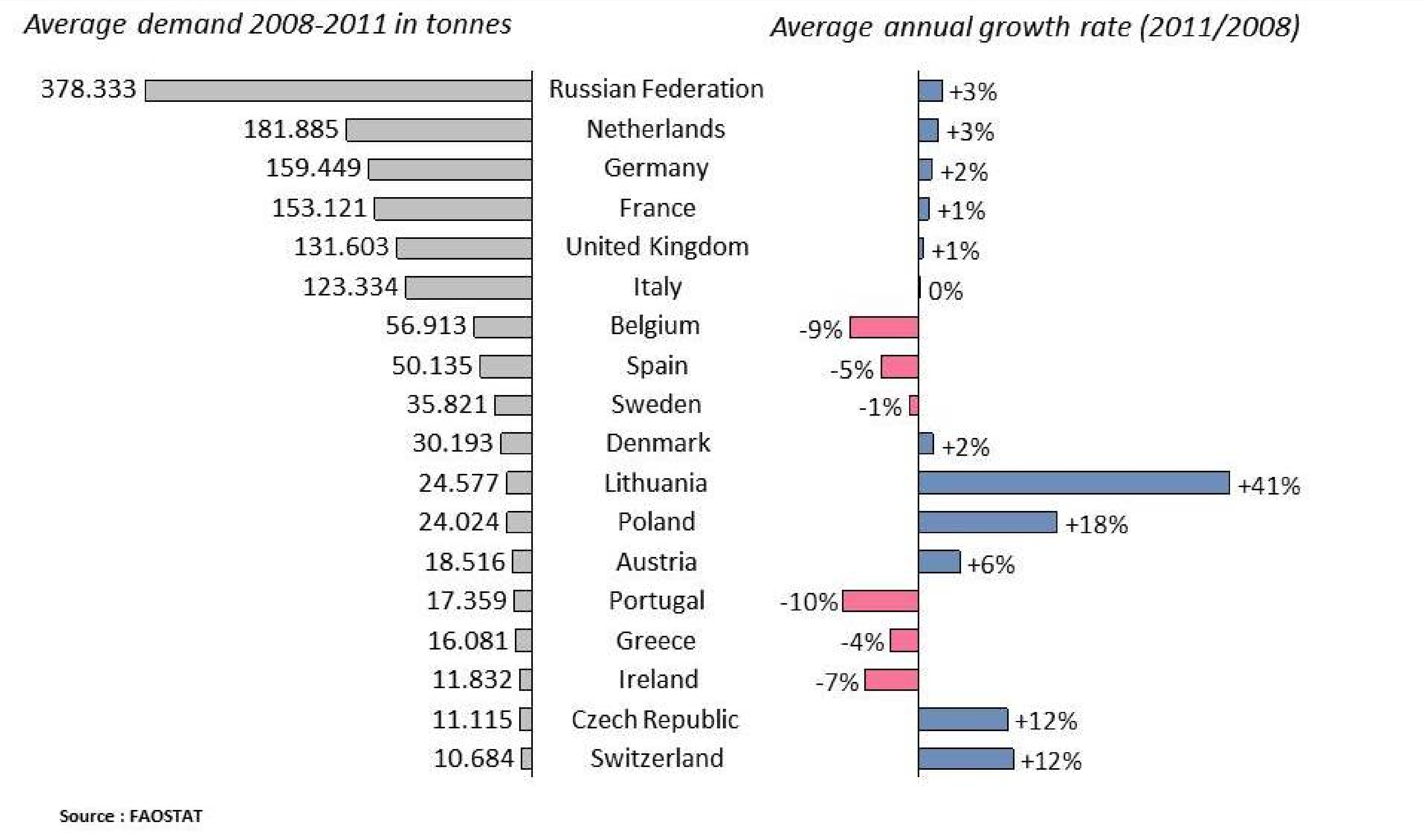


Competition for production of pears – Regional countries export to the World



*The very first Balkan’s export country is Serbia with 45% of total export Balkan countries share. (2008-2012)

International Demand for pears



STRAWBERRY & RASPBERRY

Statistical analysis showed that the berries, especially raspberries and strawberries are the strategic key products for the FBiH and BiH. Production of raspberries and strawberries have an equable production in the period 2008-2012 , although in 2012 , due to dry season production was reduced by -4 % (2012/2008) . The highest production of raspberries and strawberries in the RS is in the municipality of Zvornik, while in FBiH is in the Tuzla canton (strawberry - Tuzla canton, raspberry – Middlebosnian Canton) . Bosnia and Herzegovina is on the 10th world producers place of raspberries and 35th world producers place of strawberries. The western parts of Serbia and the Croatian part of the northern border of Bosnia and Herzegovina have a significant production of berries, which gives posibbility for potential aggregation and / or cooperation in terms of meeting international demand. The purchase price of berries is relatively good compared to other countries / producers .

Despite the reduction in the production of berries in 2012 and the decline of the average growth rate of -21% (2012/2008) for strawberry and -9% for raspberry in the FBIH, export is increasing so that for the period 2013/2008 the average growth rate is +32 % of berries fruit .

The most important markets are : Austria, Croatia, Russian Federation, Germany and Slovenia.

Our biggest competitors in the region are Serbia and Romania. Similarly as in Bosnia, the country's 2012 years have a decline in production due to bad weather , while exports is raising.

The largest regional exporter of berries is Serbia with a share of approximately 58 % of the total Balkan countries exports (Romania, Bosnia, Serbia, Croatia, Macedonia, Montenegro, Albania and Bulgaria) .

International demand for berries is great, while particular interest have Russian Federation, France , Britain, Germany and Italy .

Strawberries – market opportunity

Segment/ Product	Production Size[I] -FBIH Year	Tons (000 t)	Growth	Exports[II] -FBIH Year	Euro (000 €)	Growth
Strawberries	2009/2008	4,7/16,6	↓ -71%	2009/2008	91/93	↓ -2%
	2010/2009	7,9/4,7	↑ 67,2%	2010/2009	14/91	↓ -84,3%
	2011/2010	6,7/7,9	↓ -16%	2011/2010	39/14	↑ 176%
	2012/2011	6,4/6,7	↓ -4%	2012/2011	86/39	↑ 118%
	AVG. 2012/2008		↓ **-21%**	**AVG. 2012/2008**		↓ **-1,8%**

Key markets - name sofictication[III]-FBIH Country	Year	Euro (000 €)	Growth
Croatia	2009/2008	38,9/26,6	↑ 46%
	2010/2009	12,8/38,9	↓ -67%
	2011/2010	17,4/12,8	↑ 36%
	2012/2011	46,5/17,4	↑ 168%
	AVG. 2012/2008		↑ 15%
Germany	2009/2008	50,6/66	↓ -23%
	2010/2009	0/50,6	↓ -100%
	2011/2010	no data	no data
	2012/2011	no data	no data
	AVG. 2012/2008		no data
Other countries	2009/2008	no data	no data
	2010/2009	1,5/1,5	→ 0%
	2011/2010	21,5/1,5	↑ 1300%
	2012/2011	33,7/21,5	↑ 57%
	AVG. 2012/2008		↑ 180%

Competition for production/processing[IV] Country	Year	Size (000 t)	Growth
Romania	2009/2008	22/21,2	↑ 3%
	2010/2009	21,4/22	↓ -2%
	2011/2010	18,9/21,4	↓ -12%
	2012/2011	15,8/18,9	↓ -16%
	AVG. 2012/2008		↓ -7%
Serbia	2009/2008	35,8/37,9	↓ -6%
	2010/2009	33/35,8	↓ -8%
	2011/2010	36,2/33	↑ 10%
	2012/2011	26,5/36,2	↓ -27%
	AVG. 2012/2008		↓ -9%
Macedonia	2009/2008	4,4/3	↑ 49%
	2010/2009	4/4,4	↓ -9%
	2011/2010	4,7/4	↑ 17%
	2012/2011	3,4/4,7	↓ -27%
	AVG. 2012/2008		↑ 4%
Croatia	2009/2008	2,5/2,4	↑ 7%
	2010/2009	2,6/2,5	↑ 1%
	2011/2010	2,8/2,6	↑ 8%
	2012/2011	2/2,8	↓ -28%
	AVG. 2012/2008		↓ -4%
Bulgaria	2009/2008	8,6/8,6	→ 0%
	2010/2009	5,7/8,6	↓ -33%
	2011/2010	7/5,7	↑ 23%
	2012/2011	4,8/7	↓ -32%
	AVG. 2012/2008		↓ -14%
BiH	2009/2008	9,3/7,9	↑ 17%
	2010/2009	10,3/9,3	↑ 11%
	2011/2010	8,8/10,3	↓ -14%
	2012/2011	8,7/8,8	↓ -2%
	AVG. 2012/2008		↑ 2%

International Demand[V] (avg. 2008-2011) Country	Size (t)	Growth
USA	101.900	↑ 25%
Canada	111.274	↑ 9%
Germany	98.761	↑ 6%
France	99.970	↓ 0%
Russian Federation	37.812	↑ 16%
United Kingdom	43.706	↑ 2%
Italy	37.034	↑ 3%
EU-27	40.468	↓ -3%
Belgium	28.182	↑ 4%
Austria	20.691	↑ 14%
Netherlands	27.157	↑ 12%
Portugal	9.667	↑ 27%
Switzerland	13.235	↑ 6%
Poland	6.877	↑ 29%
Mexico	15.230	↓ -16%
Czech Rep.	8.483	↑ 10%
Norway	6.440	↑ 21%
Denmark	8.786	↓ -2%
Sweden	6.064	↑ 13%
Spain	7.260	↑ 19%
Lithuania	3.400	↑ 13%
China Hong Kong SAR	4.488	↑ 16%
Romania	6.243	↓ -2%
Japan	3.286	↑ 2%
Bulgaria	1.655	↑ 66%
El Salvador	2.702	↓ -2%
Singapore	2.900	↑ 7%
Rep. of Moldova	1.806	↑ 350%
Slovakia	3.805	↓ -15%
Slovenia	1.865	↑ 4%

I source: Statistics institute Republika Srpska, Statistics institute Federation BiH / Link - Chart name: *Production of strawberries*
II source: Indirect Taxation Authority of BiH / Link - Chart name: *Export of strawberries in 000€*
III source: Indirect Taxation Authority of BiH
IV source: FAOSTAT and Uncomtrade / Link - Chart name: *Competition for production of strawberries – Regional countries production charts*
V source: FAOSTAT and Uncomtrade / Link - Chart name: *International Demand for strawberries*

Raspberries – market opportunity

Segment/Product	Production Size[I] -FBIH Year	Tons (000 t)	Growth	Exports[II] -FBIH Year	Euro (000 €)	Growth
Raspberries	2009/2008	2,2/3,5	↓ -37%	2009/2008	6/1	↑ 1020%
	2010/2009	2,8/2,2	↑ 29,3%	2010/2009	42/6	↑ 648,2%
	2011/2010	3,6/2,8	↑ 27%	2011/2010	83/42	↑ 98%
	2012/2011	2,4/3,6	↓ -33%	2012/2011	381/83	↑ 360%
	AVG. 2012/2008		↓ -9%	AVG. 2012/2008		↑ 425,4%

Key markets - name sofictication[III]-FBIH Country	Year	Euro (000 €)	Growth
Croatia	2009/2008	1,5/0,5	↑ 200%
	2010/2009	0,5/1,5	↓ -67%
	2011/2010	5,6/0,5	↑ 1000%
	2012/2011	67,5/5,6	↑ 1100%
	AVG. 2012/2008		↑ 239%
Austria	2009/2008	no data	no data
	2010/2009	no data	no data
	2011/2010	no data	no data
	2012/2011	214,7/21	↑ 924%
	AVG. 2012/2008		↑ 924%
Other countries	2009/2008	no data	no data
	2010/2009	7,2/3,6	↑ 100%
	2011/2010	56,2/7,2	↑ 686%
	2012/2011	50,1/56,2	↓ -11%
	AVG. 2012/2008		↑ 141%

Competition for production/processing[IV] Country	Year	Size (000 t)	Growth
Bulgaria	2009/2008	3,5/3,5	↓ -1%
	2010/2009	6,1/3,5	↑ 74%
	2011/2010	7,7/6,1	↑ 25%
	2012/2011	4,9/7,7	↓ -37%
	AVG. 2012/2008		↑ 8%
Croatia	2009/2008	1/0,9	↑ 4%
	2010/2009	1/1	↑ 3%
	2011/2010	1/1	↓ -1%
	2012/2011	0,8/1	↓ -19%
	AVG. 2012/2008		↓ -4%
Romania	2009/2008	0,05/0,02	↑ 182%
	2010/2009	0,03/0,05	↓ -35%
	2011/2010	0,05/0,03	↑ 52%
	2012/2011	0,15/0,05	↑ 223%
	AVG. 2012/2008		↑ 73%
Serbia	2009/2008	87/84,3	↑ 3%
	2010/2009	87,2/87	↑ 0%
	2011/2010	123,1/87,2	↑ 41%
	2012/2011	96,1/123,1	↓ -22%
	AVG. 2012/2008		↑ 3%
Macedonia	2009/2008	0,09/0,06	↑ 51%
	2010/2009	0,01/0,09	↓ -90%
	2011/2010	0,08/0,01	↑ 811%
	2012/2011	0,12/0,08	↑ 48%
	AVG. 2012/2008		↑ 21%
BiH	2009/2008	8,5/7,5	↑ 13%
	2010/2009	7,9/8,5	↓ -6%
	2011/2010	9,5/7,9	↑ 19%
	2012/2011	7/9,5	↓ -26%
	AVG. 2012/2008		↓ -2%

International Demand[V] (avg. 2008-2011) Country	Size (t)	Growth
USA	61.363	↑ 19%
Canada	29.457	↑ 14%
Germany	17.540	↓ -3%
United Kingdom	12.852	↓ 0%
EU-27	12.024	↑ 1%
Netherlands	9.989	↓ -6%
France	8.015	↑ 4%
Austria	9.641	↓ -22%
Italy	4.817	↓ -1%
Belgium	3.373	↓ -8%
Switzerland	1.162	↑ 12%
Russian Federation	963	↑ 17%
Norway	554	↑ 56%
Ireland	1.173	↑ 2%
Spain	1.627	↓ -12%
Lithuania	524	↑ 47%
Bulgaria	230	↑ 40%
Sweden	440	↑ 20%
Denmark	735	↑ 2%
Japan	482	↑ 6%
China Hong Kong SAR	244	↑ 22%
Côte d'Ivoire	193	↑ 19%
Singapore	172	↑ 15%
Finland	124	↑ 43%
Slovakia	130	↑ 39%
Luxembourg	140	↑ 14%
Portugal	124	↑ 44%
Kazakhstan	88	↑ 97%
Bahamas	95	↑ 21%
Czech Rep.	165	↑ 5%

I source: Statistics institute Republika Srpska, Statistics institute Federation BiH / Link - Chart name: *Production of raspberries*

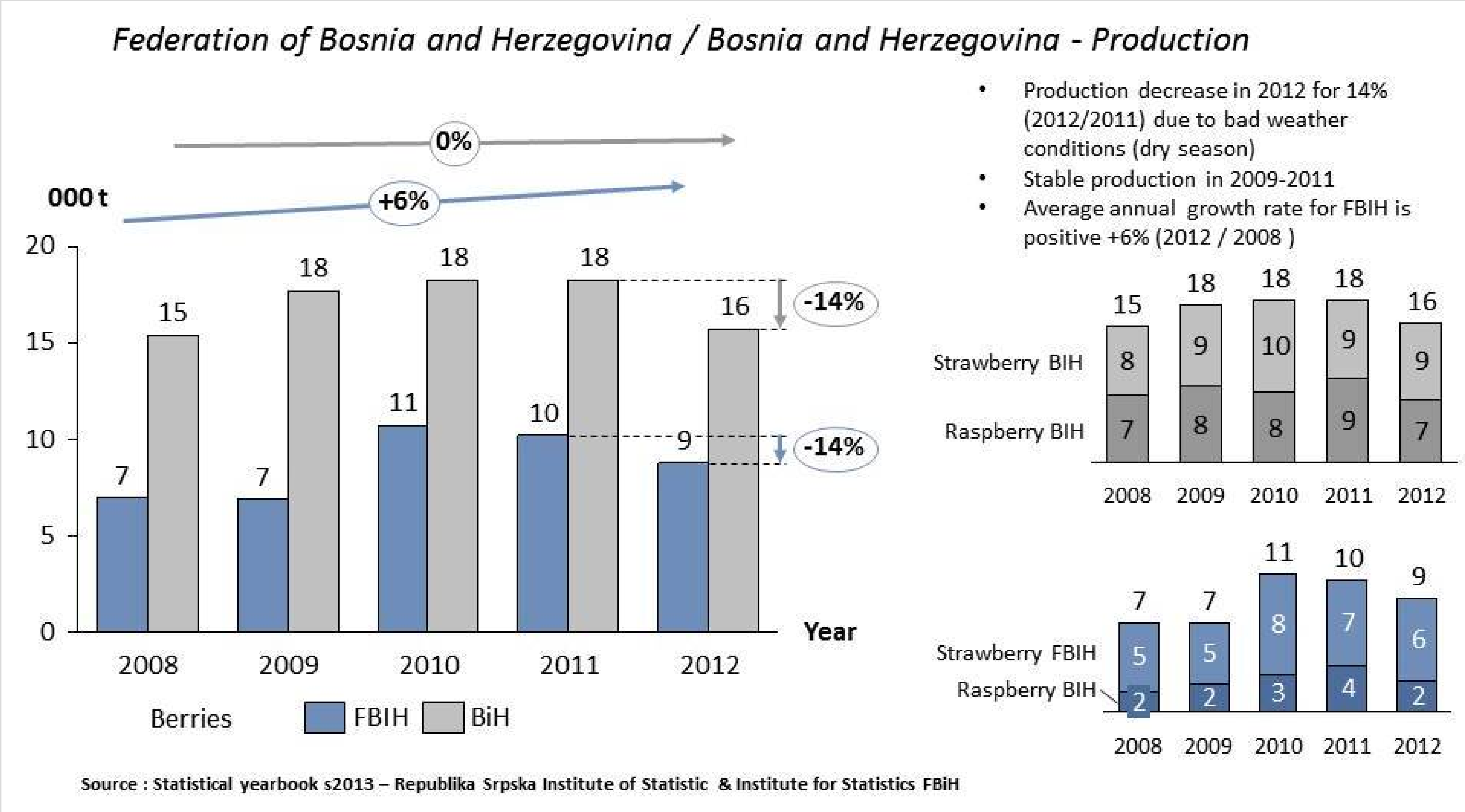
II source: Indirect Taxation Authority of BiH / Link - Chart name: *Export of raspberries in 000€*

III source: Indirect Taxation Authority of BiH

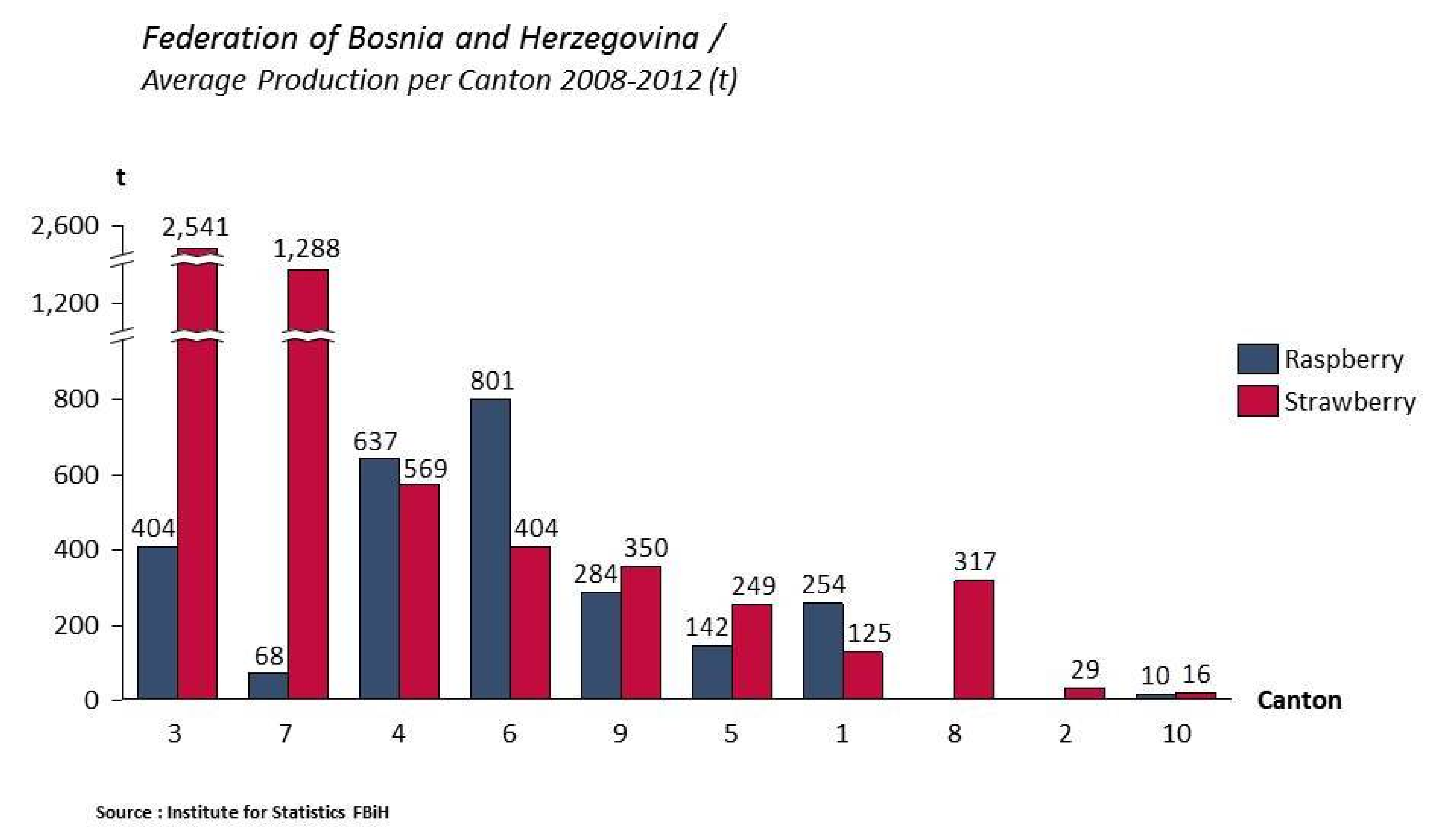
IV source: FAOSTAT and Uncomtrade / Link - Chart name: *Competition for production of raspberries – Regional countries production charts*

V source: FAOSTAT and Uncomtrade / Link - Chart name: *International Demand for raspberries*

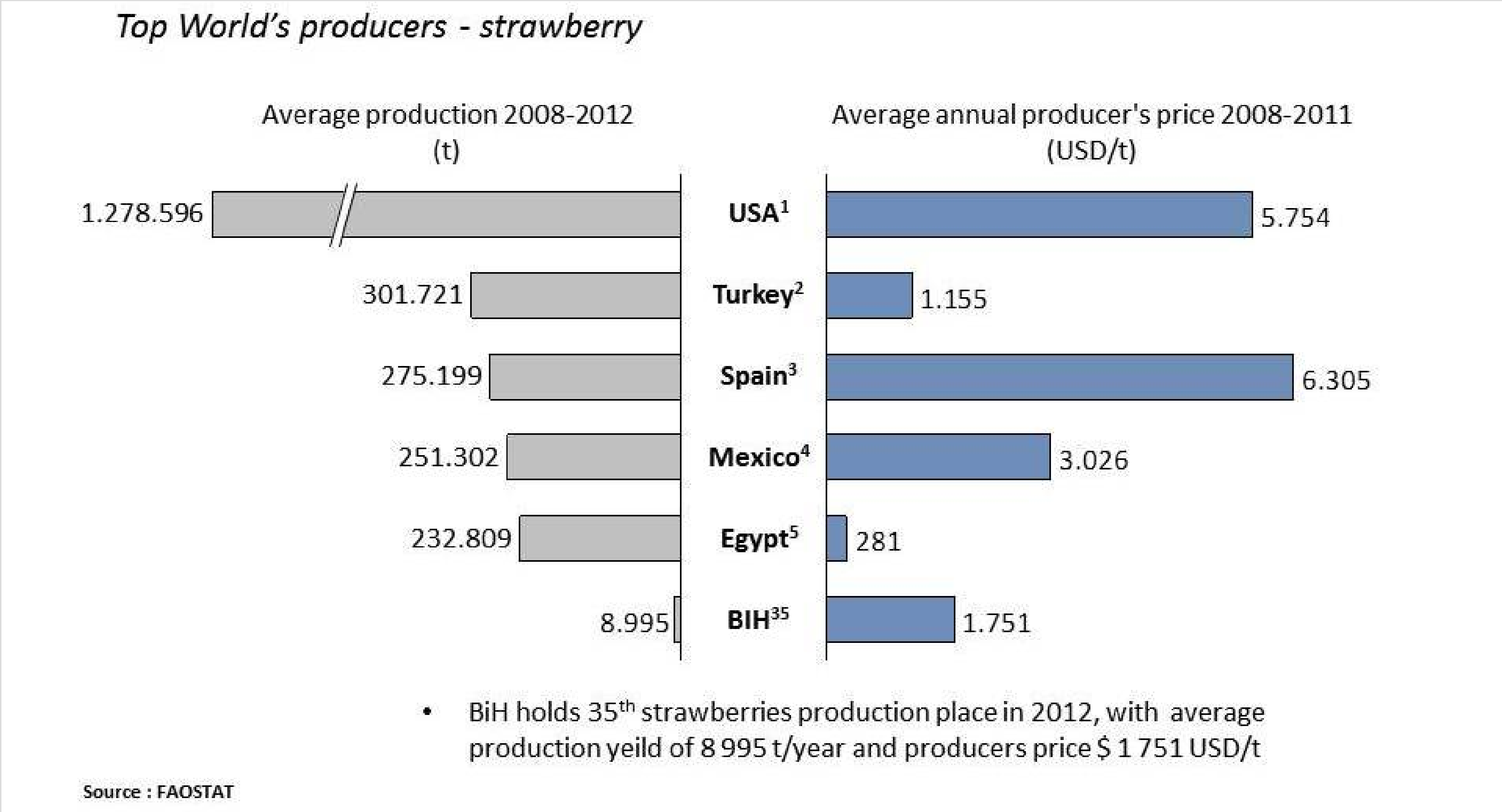
Production of strawberries and raspberries



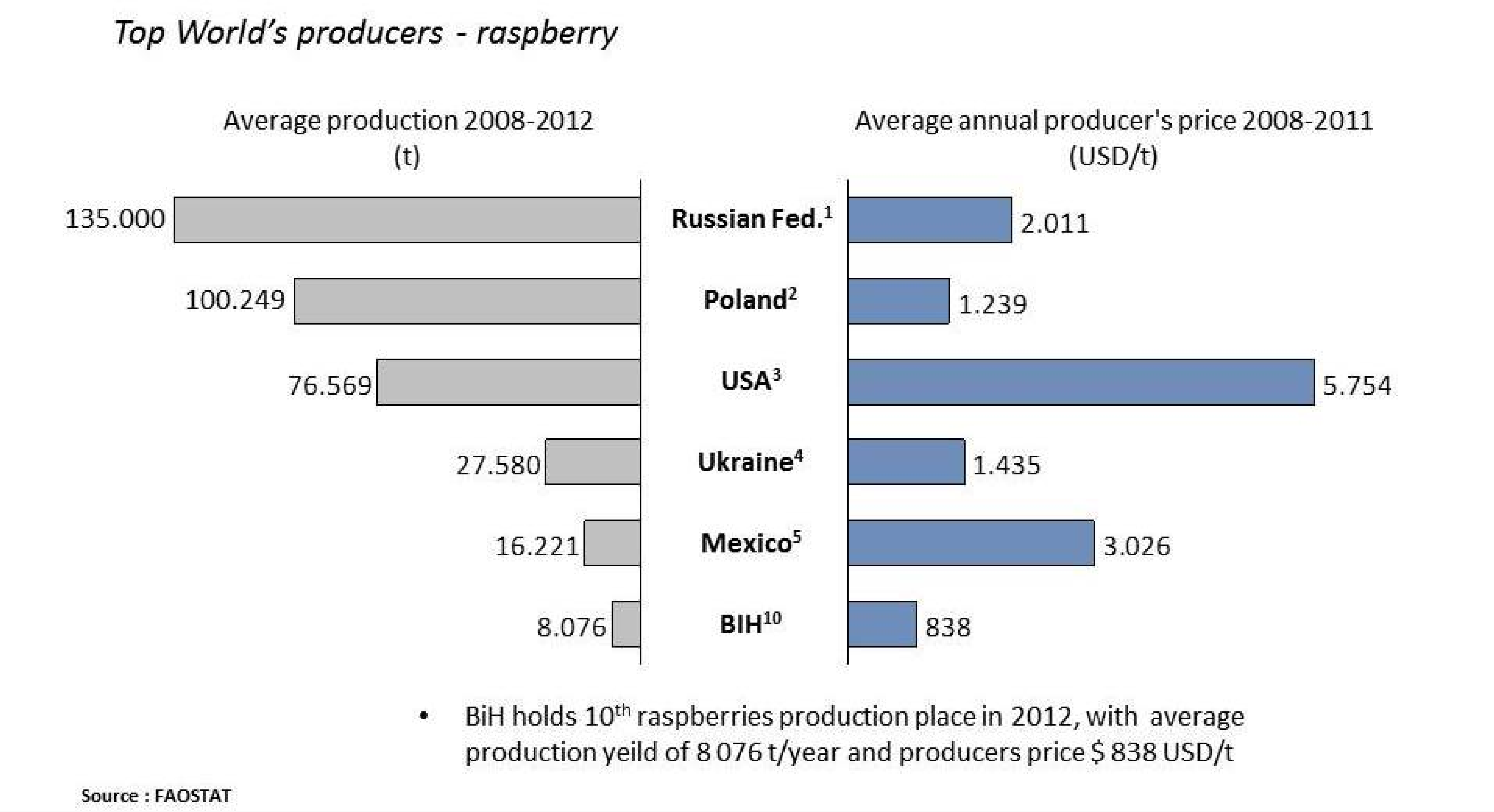
Production of strawberries and raspberries per Canton



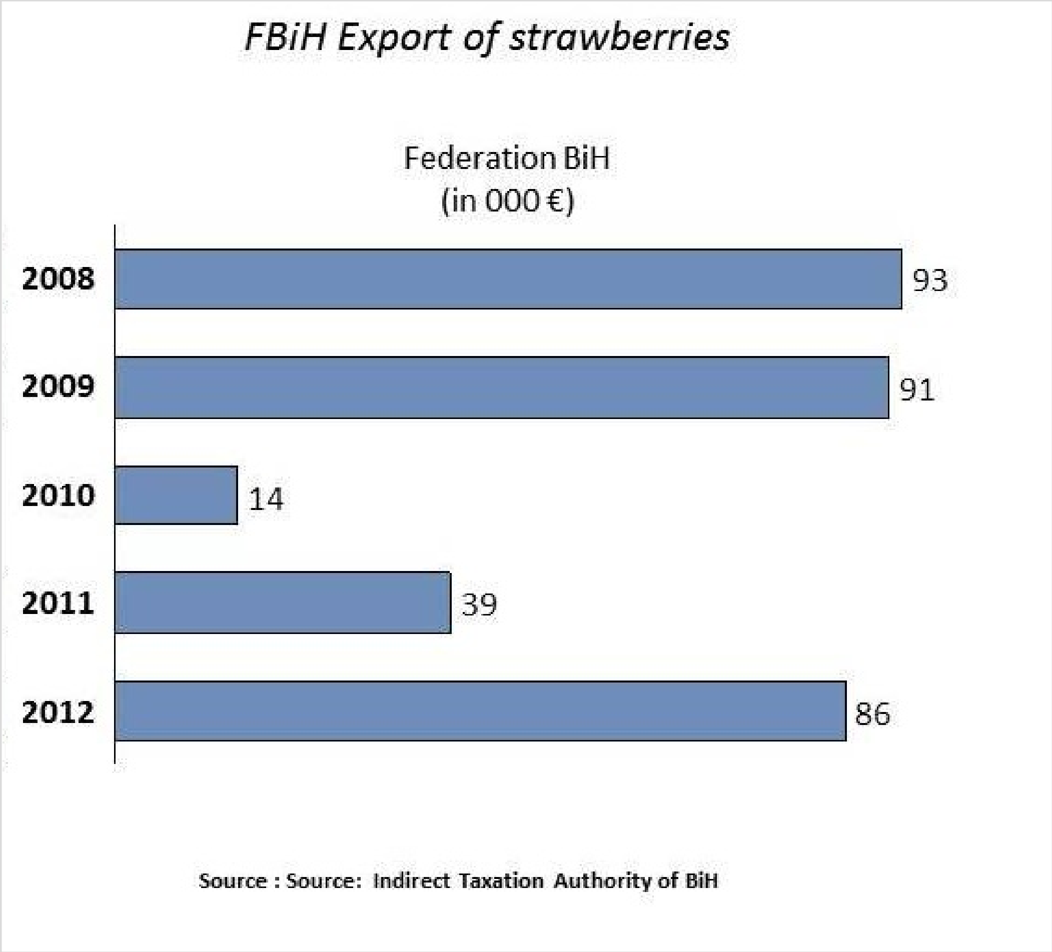
Production of strawberries – top world's producers



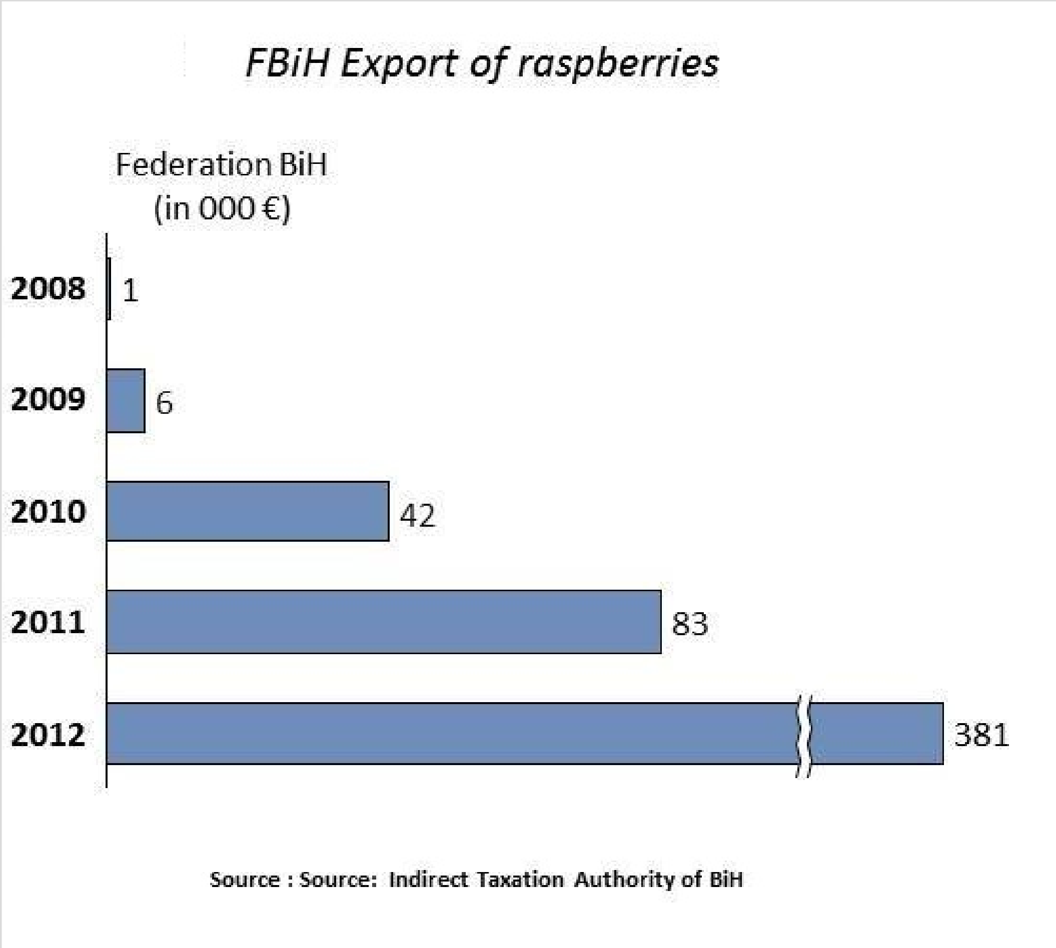
Production of raspberries – top world's producers



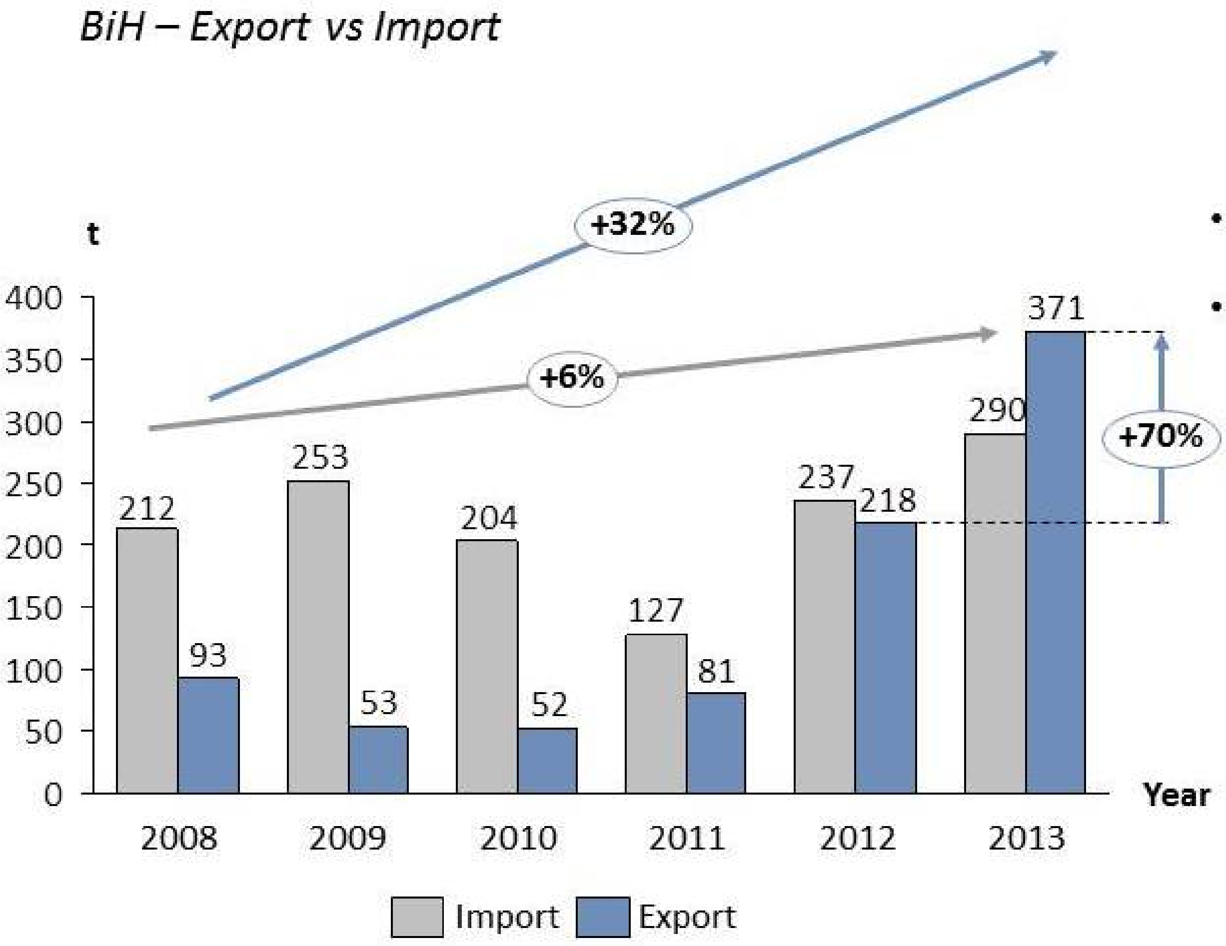
Export of strawberries in 000 €



Export of raspberries in 000 €



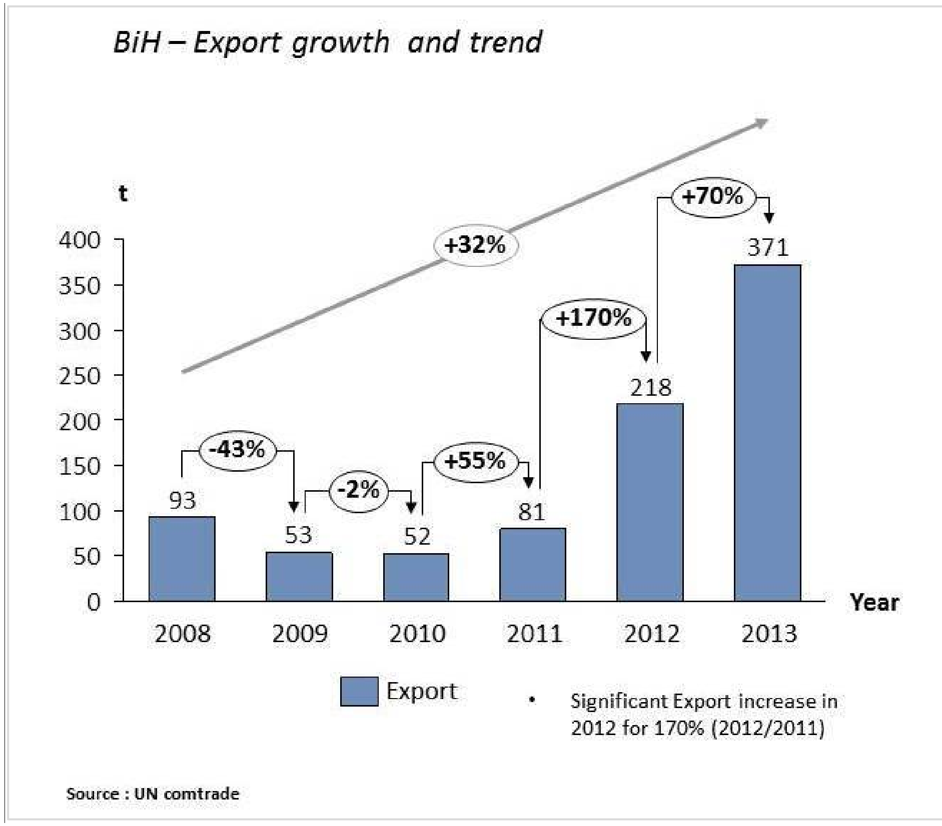
Export vs Import of Berries (strawberries+ raspberries)



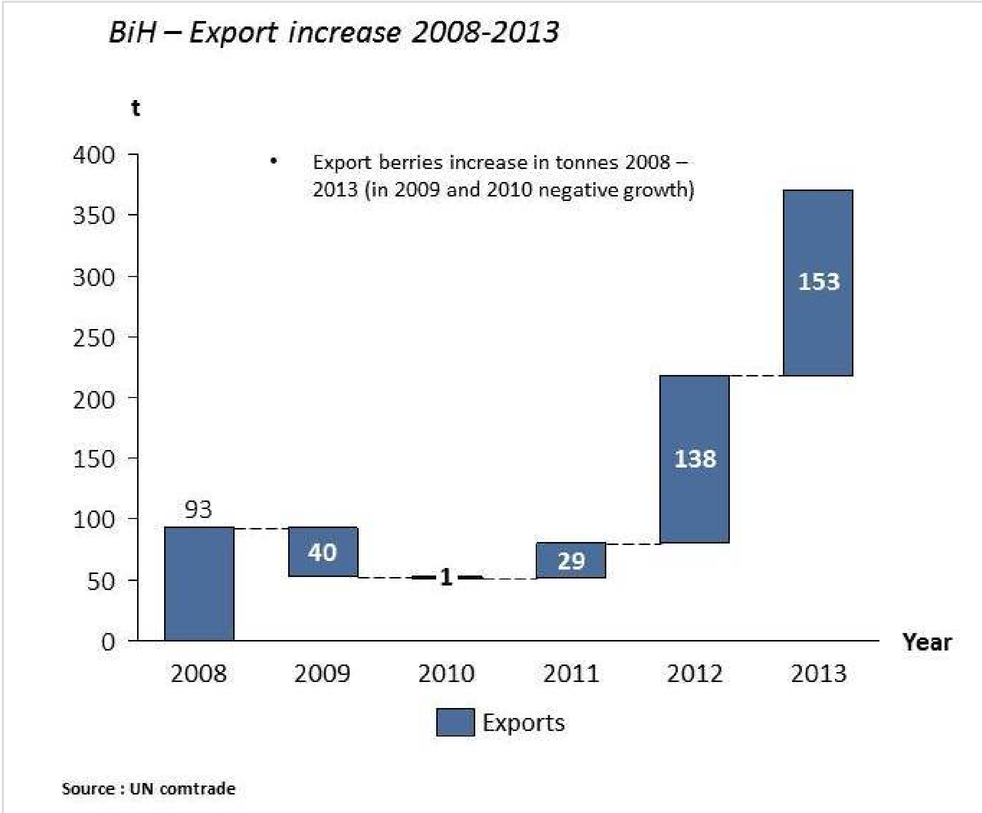
- Significant berries Export increase in 2013 for 70% (2013/2012)
- Import of berries is raising (Average annual growth rate is +6% for 2013/2008), Export is also raising (Average annual growth rate is +32% for 2013/2008)

Source : UN comtrade

Export of Berries growth and trend

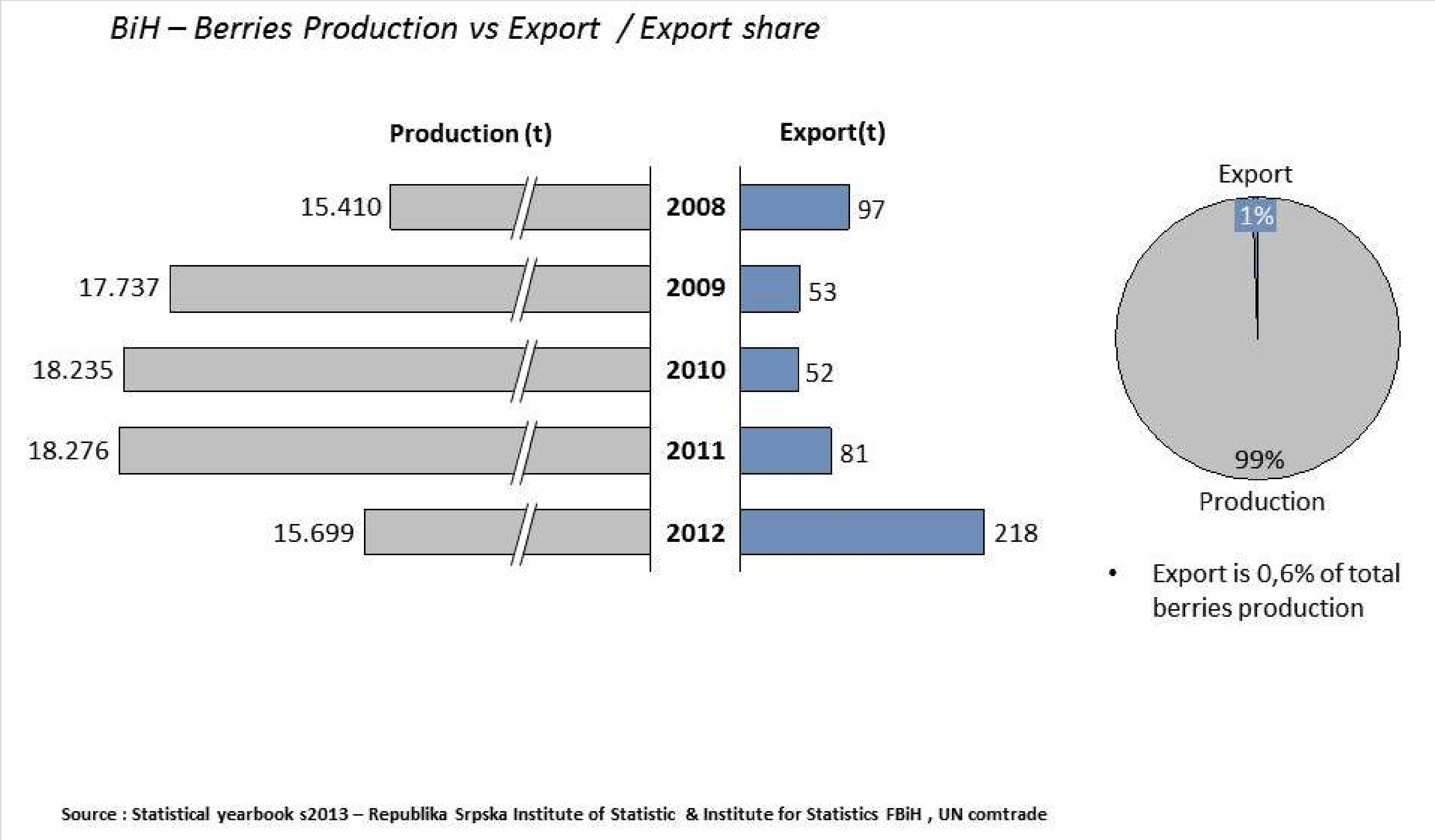


* Export per year is raising

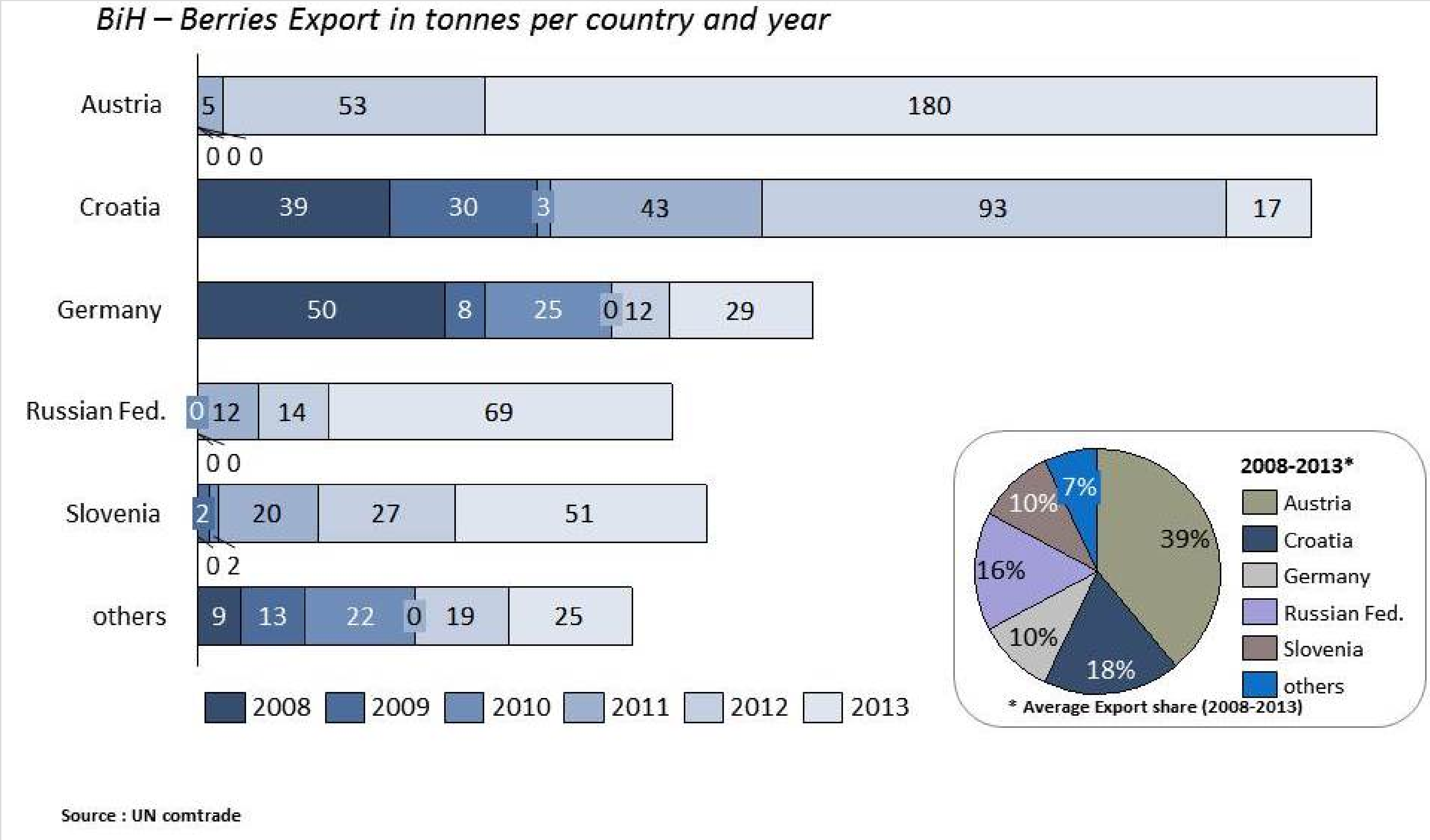


* waterfall chart is showing increase in tons year by year

Export vs Production of Berries



Key markets - Export of Berries per country



*BiH export per coutry – in 2013 great increase of berries export to Austria holding 39% of total export share.

Competition for production of Berries – Regional countries production

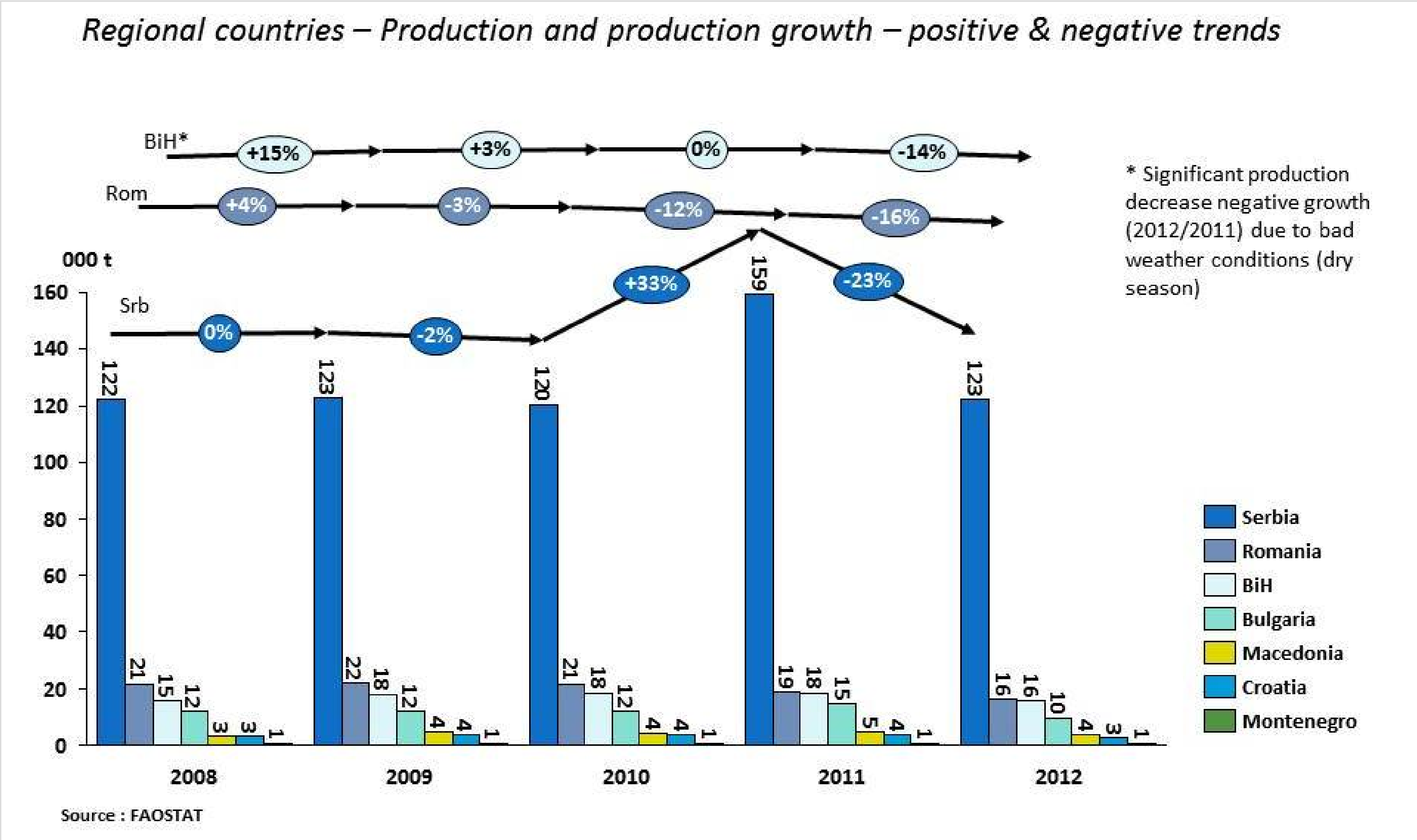
Regional countries – average berries production 2008-2012 (t)

Regional Country & world's prod. place	Av. Prod. 2008-2012 (t)
Serbia[12]	129.406
Romania[29]	19.928
BIH[30]	17.071
Bulgaria39	12.076
Macedonia[55]	3.951
Croatia[58]	3.393
Montenegro[73]	500

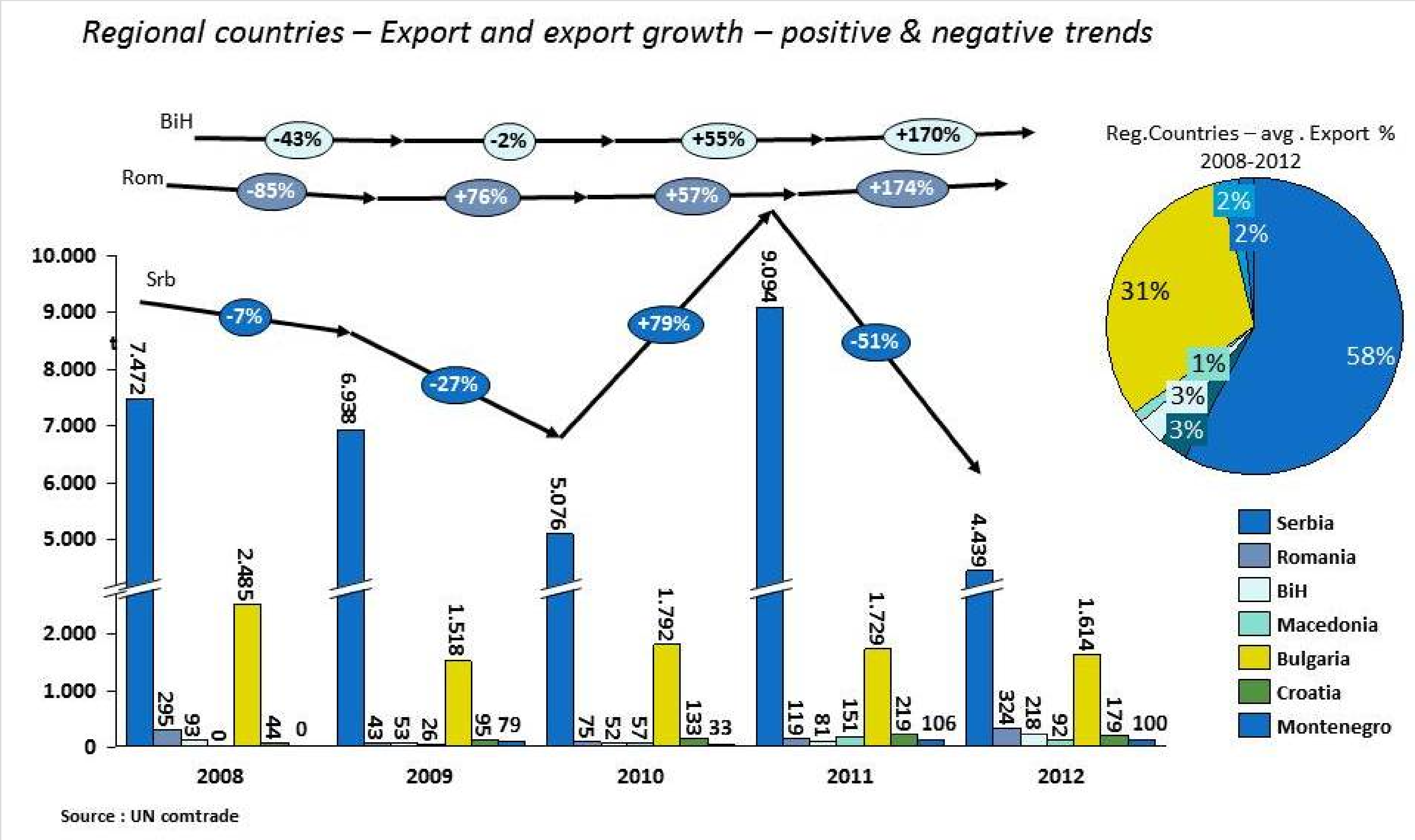
Source : FAOSTAT

*Balkan countries production in tonnes (arithmetic mean calculation 2008-2012).

Competition for production of Berries – Regional countries production charts

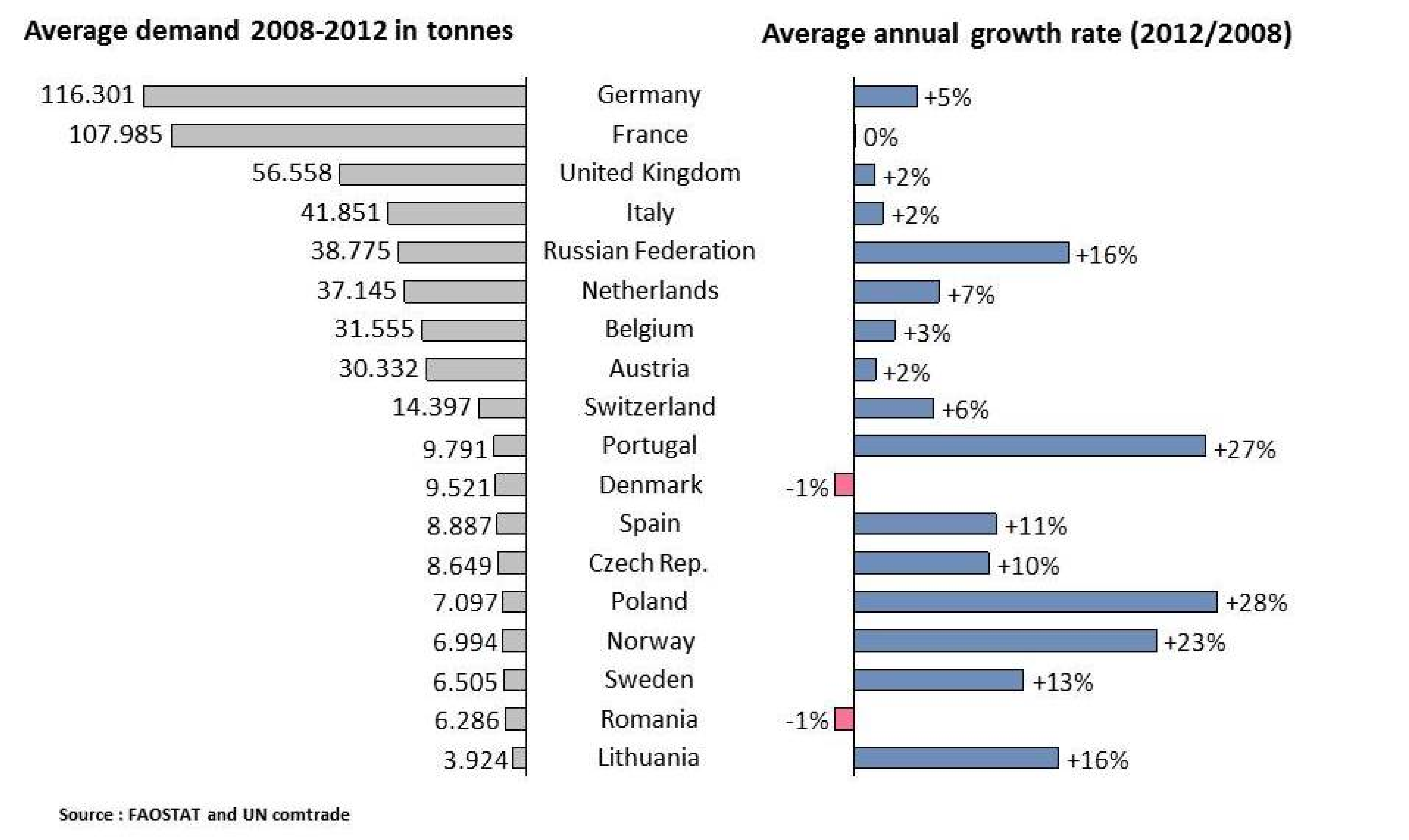


Competition for production of Berries – Regional countries export to the World



*The very first Balkan's export country is Serbia with 58% of total export Balkan countries share. (2008-2012)

International Demand for Berries



OTHER FRUITS

Statistical analysis in the next three tables gave an overview of market opportunities for cherry, sour cherry and apricot. These three fruits does not belong within the statistical top three fruit products because of its modest production, export and market capacity. The regional competition is very strong, where almost all Balkan countries produce more (and export) of the RS and BiH. The main market for these three fruits is Croatia, while international demand is certainly very good. In this moment, Bosnia-Herzegovina does not have the option of market extending because of its modest capacity.

Cheery- market opportunity

Segment/ Product	Production Size[I] -FBIH				Exports[II] -FBIH				Key markets - name sofictication[III]-FBIH				
	Year	Size (000t)	Growth		Year	Euro (000 €)	Growth		Country	Year	Euro (000 €)	Growth	
Cheery	2009/2008	5,3/4,8	↑	11%	2009/2008	no data		no data	Croatia	2009/2008	no data	no data	
	2010/2009	5,5/5,3	↑	4%	2010/2009	no data		no data		2010/2009	no data	no data	
	2011/2010	6,2/5,5	↑	12%	2011/2010	65/12	↑	428%		2011/2010	no data	no data	
	2012/2011	4,3/6,2	↓	-31%	2012/2011	120/65	↑	85%		2012/2011	no data	no data	
	AVG. 2012/2008		↓	-3%	**AVG. 2012/2008**		↑	**213%**		**AVG. 2012/2008**		**no data**	

Competition for production/processing[IV] Country	Year	Size (000 t)	Growth	
Romania	2009/2008	67,9/67,7	↑	0%
	2010/2009	70,3/67,9	↑	4%
	2011/2010	81,8/70,3	↑	16%
	2012/2011	70,5/81,8	↓	-14%
	AVG. 2012/2008		↑	**1%**
Serbia	2009/2008	29,2/29,6	↓	-1%
	2010/2009	22,2/29,2	↓	-24%
	2011/2010	28,6/22,2	↑	29%
	2012/2011	22,2/28,6	↓	-22%
	AVG. 2012/2008		↓	**-7%**
Bulgaria	2009/2008	17,5/16,1	↑	9%
	2010/2009	25/17,5	↑	43%
	2011/2010	30,1/25	↑	20%
	2012/2011	19,5/30,1	↓	-35%
	AVG. 2012/2008		↑	**5%**
Croatia	2009/2008	7,1/8	↓	-11%
	2010/2009	5,3/7,1	↓	-26%
	2011/2010	9,1/5,3	↑	72%
	2012/2011	6,5/9,1	↓	-29%
	AVG. 2012/2008		↓	**-5%**
Albania	2009/2008	10,9/8	↑	36%
	2010/2009	12,5/10,9	↑	15%
	2011/2010	14,4/12,5	↑	15%
	2012/2011	14,6/14,4	↑	1%
	AVG. 2012/2008		↑	**16%**
Macedonia	2009/2008	5,6/5,6	↓	-1%
	2010/2009	5,7/5,6	↑	2%
	2011/2010	6/5,7	↑	6%
	2012/2011	5,5/6	↓	-8%
	AVG. 2012/2008		↓	**0%**
Montenegro	2009/2008	2,3/2	↑	12%
	2010/2009	2,2/2,3	↓	-3%
	2011/2010	2,1/2,2	↓	-5%
	2012/2011	1,9/2,1	↓	-7%
	AVG. 2012/2008		↓	**-1%**

International Demand[V] (avg. 2008-2011) Country	Size (t)	Growth	
Russian Federation	66.632	↑	10%
China	42.543	↑	40%
Canada	28.752	↑	10%
Germany	25.573	↑	14%
China, Hong Kong SAR	20.494	↑	41%
USA	19.489	↓	-6%
Austria	17.751	↑	11%
United Kingdom	16.476	↑	5%
Netherlands	15.550	↓	-18%
China, mainland	11.127	↑	93%
China, Taiwan Province	10.771	↑	6%
Japan	9.975	↑	7%
Italy	8.281	↑	15%
France	6.676	↑	29%
Belgium	6.444	↑	5%
Belarus	4.068	↓	-34%
Lithuania	4.031	↓	-36%
Republic of Korea	4.005	↑	14%
Saudi Arabia	3.118	↑	69%
Brazil	3.050	↑	22%
Spain	2.822	↑	4%
Australia	2.759	↑	28%
Switzerland	2.446	↑	19%
Denmark	1.865	↑	17%
Portugal	1.811	↑	20%
Bosnia and Herzegovin	1.476	↓	-27%
Kazakhstan	1.404	↑	183%
Egypt	1.224	↑	76%
Republic of Moldova	1.201	↑	105%
Thailand	1.192	↑	17%

I source: Statistics institute Republika Srpska, Statistics institute Federation BiH
II source: Indirect Taxation Authority of BiH
III source: Indirect Taxation Authority of BiH
IV source: FAOSTAT and Uncomtrade
V source: FAOSTAT and Uncomtrade

Sour Cheery- market opportunity

Segment/ Product	Production Size[I] -FBIH				Exports[II]				Key markets - name sofictication[III]				
	Year	Size (000t)	Growth		Year	USD (000 $)	Growth		Country	Year	USD (000 $)	Growth	
Sour Cheery	2009/2008	1,5/1,4	↑	12%	2009/2008	no data		no data	Croatia	2009/2008	no data		no data
	2010/2009	1,6/1,5	↑	5%	2010/2009	no data		no data		2010/2009	no data		no data
	2011/2010	1,9/1,6	↑	17%	2011/2010	no data		no data		2011/2010	no data		no data
	2012/2011	1,4/1,9	↓	-25%	2012/2011	no data		no data		2012/2011	no data		no data
	AVG. 2012/2008		↑	1%	2013/2012	90,7/184,3	↓	-51%		2013/2012	90,7/184,3	↓	-79%

Competition for production/processing[IV]				
Country	Year	Size (000 t)	Growth	
Serbia	2009/2008	105,4/89,7	↑	17%
	2010/2009	66,2/105,4	↓	-37%
	2011/2010	90,6/66,2	↑	37%
	2012/2011	74,7/90,6	↓	-18%
	AVG. 2012/2008		↓	**-4%**
Bulgaria	2009/2008	4/3,3	↑	21%
	2010/2009	2,8/4	↓	-29%
	2011/2010	4,3/2,8	↑	53%
	2012/2011	3,9/4,3	↓	-10%
	AVG. 2012/2008		↑	**4%**
Croatia	2009/2008	7/6,7	↑	5%
	2010/2009	6,8/7	↓	-3%
	2011/2010	10,7/6,8	↑	58%
	2012/2011	6/10,7	↓	-44%
	AVG. 2012/2008		↓	**-3%**
Albania	2009/2008	15,4/14,1	↑	9%
	2010/2009	15/15,4	↓	-2%
	2011/2010	17/15	↑	13%
	2012/2011	17/17	→	0%
	AVG. 2012/2008		↑	**5%**

International Demand[V] (avg. 2008-2011)			
Country	Size (t)	Growth	
Germany	22.673	↓	-3%
Russian Federation	7.239	↑	11%
Austria	2.160	↑	4%
Belgium	1.971	↓	-22%
Netherlands	1.394	↓	-51%
United Kingdom	738	↓	-31%
Italy	716	↓	-10%
Croatia	687	↑	275%
Poland	646	↑	110%
Hungary	609	↑	206%
Lithuania	570	↓	-66%
France	362	↓	-12%
Sweden	195	↑	34%
Bulgaria	185	↑	10%
Romania	177	↓	-57%
Denmark	142	↓	-31%
Estonia	135	↑	23%
Slovakia	107	↑	8%
Czech Republic	26	↑	6%
Spain	20	↑	36%
Greece	18	↓	-45%
Luxembourg	9	↓	-37%
Malta	7	↑	33%

I source: Statistics institute Republika Srpska, Statistics institute Federation BiH

II source: Uncomtrade

III source: Uncomtrade

IV source: FAOSTAT and Uncomtrade

V source: FAOSTAT and Uncomtrade

Apricot- market opportunity

Segment/ Product	Production Size[I] -FBIH			Exports[II] -FBIH			Key markets - name sofictication[III]-FBIH			
	Year	Size (t)	Growth	Year	Euro (000 €)	Growth	Country	Year	Euro (000 €)	Growth
Apricot	2009/2008	721/418	72%	2009/2008	no data	no data	Croatia	2009/2008	no data	no data
	2010/2009	871/721	21%	2010/2009	2/13	-84%		2010/2009	2/1	100%
	2011/2010	983/871	13%	2011/2010	1/2	-75%		2011/2010	0/2	N/A
	2012/2011	773/983	-21%	2012/2011	25/1	4800%		2012/2011	no data	no data
	AVG. 2012/2008		17%	**AVG. 2012/2008**		**24%**		**AVG. 2012/2008**		**no data**

Competition for production/processing[IV]				International Demand[V] (avg. 2008-2011)		
Country	Year	Size (000 t)	Growth	Country	Size (t)	Growth
Romania	2009/2008	32,5/32,1	1%	Russian Federation	58.256	2%
	2010/2009	23,8/32,5	-27%	Germany	43.131	6%
	2011/2010	33,7/23,8	42%	Italy	22.187	14%
	2012/2011	29,1/33,7	-14%	Austria	13.346	-5%
	AVG. 2012/2008		**-2%**	France	12.066	-13%
Serbia	2009/2008	31,2/22,3	40%	Pakistan	9.775	-42%
	2010/2009	22,9/31,2	-26%	Netherlands	7.510	2%
	2011/2010	32,7/22,9	42%	Switzerland	6.577	-4%
	2012/2011	16,6/32,7	-49%	Belgium	5.345	15%
	AVG. 2012/2008		**-7%**	United Kingdom	5.325	3%
Bulgaria	2009/2008	7,6/13	-42%	Kazakhstan	4.647	312%
	2010/2009	11,6/7,6	53%	Canada	4.575	-5%
	2011/2010	11,9/11,6	3%	Czech Republic	4.422	3%
	2012/2011	10,2/11,9	-15%	Saudi Arabia	4.241	33%
	AVG. 2012/2008		**-6%**	Poland	4.022	3%
Croatia	2009/2008	1,6/1,5	6%	Romania	1.834	6%
	2010/2009	1,2/1,6	-26%	Hungary	1.765	56%
	2011/2010	1,7/1,2	41%	Portugal	1.723	-13%
	2012/2011	0,7/1,7	-58%	Croatia	1.698	-2%
	AVG. 2012/2008		**-17%**	USA	1.616	-16%
Albania	2009/2008	3,9/3,5	10%	Belarus	1.508	1%
	2010/2009	3,5/3,9	-10%	Lithuania	1.485	17%
	2011/2010	3,9/3,5	12%	Slovenia	1.478	-3%
	2012/2011	4,3/3,9	10%	Mexico	1.393	-21%
	AVG. 2012/2008		**5%**	Spain	1.323	65%
Macedonia	2009/2008	3/3,7	-20%	Palestinian Territory	1.200	0%
	2010/2009	3/3	2%	Denmark	1.009	-15%
	2011/2010	3,7/3	25%	Bulgaria	1.002	47%
	2012/2011	4,5/3,7	20%	Australia	936	11%
	AVG. 2012/2008		**5%**	Slovakia	910	19%

I source: Statistics institute Republika Srpska, Statistics institute Federation BiH
II source: Indirect Taxation Authority of BiH
III source: Indirect Taxation Authority of BiH
IV source: FAOSTAT and Uncomtrade
V source: FAOSTAT and Uncomtrade

FRUIT PROCESSING/ CREATING VALUE ADDED IN FRUIT VALUE CHAIN

Processing industry in the FBiH is concentrated in small private companies, where the emphasis is placed mainly on the production of frozen fruit where an average growth rate is +12% (2012 / 2008).
Key markets are: Serbia, Croatia, Austria, Germany and Albania. Competition in the region is high, while Serbia and Romania have a positive average growth rate (2012/2008).
International demand is raising, especially for the processing of fruit distillates and spirits, where only a few countries have negative average growth rate.
More detailed statistical calculations of fruit industry are given in the following six tables.

Fruit and vegetable juices- market opportunity

Segment/ Product	Production Size[I] -FBIH Year	Size (000 lit)	Growth	Exports[II] -FBIH Year	Euro (000 €)	Growth
Fruit and vegetable juices	2009/2008	2885/4653	↓ -38%	2009/2008	5/42	↓ -88%
	2010/2009	2220/2885	↓ -23%	2010/2009	14/5	↑ 180%
	2011/2010	4825/2220	↑ 117%	2011/2010	15/14	↑ 5%
	2012/2011	6079/4825	↑ 26%	2012/2011	17/15	↑ 13%
	AVG. 2012/2008		↑ 7%	**AVG. 2012/2008**		↓ -20%

Key markets - name sofictication[III]-FBIH Country	Year	Euro (000 €)	Growth
Serbia	2009/2008	0/6,6	N/A
	2010/2009	no data	no data
	2011/2010	no data	no data
	2012/2011	0/0,5	N/A
	AVG. 2012/2008		**N/A**
Croatia	2009/2008	1,5/3,6	↓ -57%
	2010/2009	0,5/1,5	↓ -67%
	2011/2010	0/0,5	↓ -100%
	2012/2011	no data	no data
	AVG. 2012/2008		↑ **5%**
Other countries	2009/2008	3,6/26,1	↓ -86%
	2010/2009	13,8/3,6	↑ 286%
	2011/2010	5,1/13,8	↓ -63%
	2012/2011	4,6/5,1	↓ -10%
	AVG. 2012/2008		↓ **-35%**

Competition for export/processing[IV] Country	Year	Size (000t)	Growth
Romania	2009/2008	0,9/0,6	↑ 41%
	2010/2009	6,2/0,9	↑ 617%
	2011/2010	2,4/6,2	↓ -62%
	2012/2011	no data	no data
	AVG. 2012/2008		↑ **57%**
Serbia	2009/2008	6,1/12,1	↓ -50%
	2010/2009	6,6/6,1	↑ 8%
	2011/2010	7,6/6,6	↑ 16%
	2012/2011	no data	no data
	AVG. 2012/2008		↓ **-14%**
Bulgaria	2009/2008	4/6	↓ -32%
	2010/2009	4,3/4	↑ 6%
	2011/2010	4/4,3	↓ -8%
	2012/2011	no data	no data
	AVG. 2012/2008		↓ **-13%**
Croatia	2009/2008	0,1/0,1	↓ -25%
	2010/2009	0,1/0,1	↑ 27%
	2011/2010	0,2/0,1	↑ 94%
	2012/2011	no data	no data
	AVG. 2012/2008		↑ **23%**
Albania	2009/2008	0,2/0,2	↓ -17%
	2010/2009	0,1/0,2	↓ -5%
	2011/2010	0,2/0,1	↑ 36%
	2012/2011	no data	no data
	AVG. 2012/2008		↑ **2%**
Macedonia	2009/2008	0,7/1,1	↓ -37%
	2010/2009	3,2/0,7	↑ 377%
	2011/2010	0,6/3,2	↓ -81%
	2012/2011	0/0,6	↓ -100%
	AVG. 2012/2008		↓ **-17%**
Montenegro	2009/2008	1,7/0	↑ 3823%
	2010/2009	2,4/1,7	↑ 40%
	2011/2010	1,5/2,4	↓ -36%
	2012/2011	no data	no data
	AVG. 2012/2008		↑ **228%**

International Demand[V] (avg. 2008-2011) Country	Size (t)	Growth
USA	425.114	↑ 0%
France	211.060	↑ 2%
United Kingdom	195.158	↓ -10%
Netherlands	134.850	↓ -4%
Canada	120.189	↓ -7%
Germany	112.811	↓ -2%
Belgium	91.830	↓ -11%
Saudi Arabia	91.088	↑ 61%
Yemen	82.968	↑ 0%
Oman	67.768	↑ 2%
Japan	61.861	↓ -4%
United Arab Emirates	58.735	↓ -45%
Russian Federation	55.784	↓ -16%
Iraq	46.739	↓ -11%
Spain	41.347	↓ -15%
Austria	39.543	↓ -8%
Portugal	38.260	↑ 4%
Italy	30.777	↑ 1%
Ireland	27.641	↑ 7%
Sweden	25.358	↑ 2%
Syrian Arab Republic	24.722	↓ -45%
China	23.341	↓ -1%
Botswana	22.750	↓ -6%
Denmark	22.517	↑ 17%
Kazakhstan	21.974	↓ -18%
Singapore	21.390	↑ 16%
China ex.int	16.941	↑ 18%
Ghana	16.803	↑ 22%
Australia	16.646	↑ 5%
Malaysia	16.284	↑ 34%

I source: Statistics institute Republika Srpska, Statistics institute Federation BiH
II source: Indirect Taxation Authority of BiH
III source: Indirect Taxation Authority of BiH
IV source: FAOSTAT and Uncomtrade - calculation based on country exports
V source: FAOSTAT and Uncomtrade

Non concentrated fruit and veg. juices - market opportunity

Segment/ Product	Production Size[I] -FBIH			Exports[II]			Key markets - name sofictication[III]			
	Year	Size (000 lit)	Growth	Year	Euro (000 €)	Growth	Country	Year	Euro (000 €)	Growth
Non concent. fruit and veg. juices	2009/2008	0/2591	N/A	2009/2008	no data	no data	no data	2009/2008	no data	no data
	2010/2009	85/0	N/A	2010/2009	no data	no data		2010/2009	no data	no data
	2011/2010	179/85	↑ 111%	2011/2010	no data	no data		2011/2010	no data	no data
	2012/2011	90/179	↓ -50%	2012/2011	no data	no data		2012/2011	no data	no data
	AVG. 2012/2008		↓ -57%	**AVG. 2012/2008**		**no data**		**AVG. 2012/2008**		**no data**

Competition for export/processing[IV]			
Country	Year	Size (000t)	Growth
Romania	2009/2008	0,8/0,3	↑ 163%
	2010/2009	2,1/0,8	↑ 156%
	2011/2010	0,8/2,1	↓ -64%
	2012/2011	0/0,8	N/A
	AVG. 2012/2008		↑ **34%**
Serbia	2009/2008	2,2/2,8	↓ -23%
	2010/2009	1,7/2,2	↓ -23%
	2011/2010	1,4/1,7	↓ -15%
	2012/2011	0/1,4	N/A
	AVG. 2012/2008		↓ **-20%**
Bulgaria	2009/2008	2,4/3,1	↓ -22%
	2010/2009	4,6/2,4	↑ 93%
	2011/2010	4,8/4,6	↑ 3%
	2012/2011	0/4,8	N/A
	AVG. 2012/2008		↑ **16%**
Croatia	2009/2008	0,7/0,7	↑ 6%
	2010/2009	0,8/0,7	↑ 11%
	2011/2010	0,8/0,8	↓ -5%
	2012/2011	0/0,8	N/A
	AVG. 2012/2008		↑ **4%**
Macedonia	2009/2008	0,3/0,5	↓ -37%
	2010/2009	2,6/0,3	↑ 751%
	2011/2010	3,1/2,6	↑ 19%
	2012/2011	0/3,1	N/A
	AVG. 2012/2008		↑ **85%**

International Demand[V] (avg. 2008-2011)		
Country	Size (t)	Growth
Belgium	815.616	↓ -13%
France	782.964	↑ 2%
United States of Ameri	687.090	↓ 0%
Netherlands	617.587	↑ 1%
Germany	580.790	↓ -7%
Canada	300.240	↓ 0%
United Kingdom	296.301	↑ 2%
Japan	145.980	↑ 4%
Italy	133.119	↑ 4%
Spain	100.936	↓ -1%
China	87.942	↑ 15%
China ex.int	80.240	↑ 22%
Sweden	79.762	↓ -16%
Russian Federation	73.608	↓ -6%
China, mainland	71.372	↑ 22%
Austria	58.662	↓ -16%
Denmark	54.509	↓ -8%
Switzerland	53.348	↓ -5%
Ireland	47.806	↑ 5%
Poland	46.613	↓ -5%
Czech Republic	38.465	↓ -4%
Norway	29.215	↓ -3%
Australia	26.243	↓ -43%
Finland	23.538	↑ 5%
Greece	20.850	↓ -11%
Portugal	20.019	↑ 2%
Saudi Arabia	19.451	↑ 2%
Mexico	19.129	↑ 46%
South Africa	18.917	↑ 4%
Slovakia	18.912	↓ -2%

I source: Statistics institute Republika Srpska, Statistics institute Federation BiH
II source: FAOSTAT and Uncomtrade
III source: FAOSTAT and Uncomtrade
IV source: FAOSTAT and Uncomtrade - calculation based on country exports
V source: FAOSTAT and Uncomtrade

Jams, fruit jellies and marmelades - market opportunity

Segment/ Product	Production Size[I] -FBIH Year	Size (t)	Growth	Exports[II] -FBIH Year	Euro (000 €)	Growth
Jams, fruit jellies and marmelades	2009/2008	1408/3058	-54%	2009/2008	1999/1986	1%
	2010/2009	718/1408	-49%	2010/2009	1385/1999	-31%
	2011/2010	732/718	2%	2011/2010	1400/1385	1%
	2012/2011	875/732	19%	2012/2011	969/1400	-31%
	AVG. 2012/2008		**-27%**	**AVG. 2012/2008**		**-16%**

Key markets - name sofictication[III]-FBIH Country	Year	Euro (000 €)	Growth
Serbia	2009/2008	728,1/463,2	57%
	2010/2009	603,8/728,1	-17%
	2011/2010	940,8/603,8	56%
	2012/2011	466,3/940,8	-50%
	AVG. 2012/2008		**0%**
Croatia	2009/2008	837/958,7	-13%
	2010/2009	493,9/837	-41%
	2011/2010	223,4/493,9	-55%
	2012/2011	185,1/223,4	-17%
	AVG. 2012/2008		**-34%**
Macedonia	2009/2008	13,8/22	-37%
	2010/2009	9,2/13,8	-33%
	2011/2010	0/9,2	N/A
	2012/2011	no data	no data
	AVG. 2012/2008		**N/A**
Albania	2009/2008	no data	no data
	2010/2009	0,5/4,6	-89%
	2011/2010	1/0,5	100%
	2012/2011	1/1	0%
	AVG. 2012/2008		**N/A**
Germany	2009/2008	216,8/270	-20%
	2010/2009	206,1/216,8	-5%
	2011/2010	153,4/206,1	-26%
	2012/2011	42,9/153,4	-72%
	AVG. 2012/2008		**-37%**
Austria	2009/2008	7,2/22	-67%
	2010/2009	0/7,2	-100%
	2011/2010	no data	no data
	2012/2011	57,8/16,4	253%
	AVG. 2012/2008		**38%**
Other countries	2009/2008	191,2/181	6%
	2010/2009	71,1/191,2	-63%
	2011/2010	64,9/71,1	-9%
	2012/2011	208,6/64,9	221%
	AVG. 2012/2008		**4%**

Competition for export/processing[IV] Country	Year	Size (000t)	Growth
Romania	2009/2008	0,9/0,1	785%
	2010/2009	0,4/0,9	-51%
	2011/2010	0,4/0,4	-14%
	2012/2011	0,3/0,4	-8%
	AVG. 2012/2008		**36%**
Serbia	2009/2008	7,8/9,5	-17%
	2010/2009	11,2/7,8	42%
	2011/2010	10,9/11,2	-2%
	2012/2011	14,6/10,9	34%
	AVG. 2012/2008		**12%**
Bulgaria	2009/2008	5,6/12,5	-55%
	2010/2009	6,3/5,6	12%
	2011/2010	7/6,3	11%
	2012/2011	5,4/7	-22%
	AVG. 2012/2008		**-19%**
Croatia	2009/2008	6,2/6,8	-8%
	2010/2009	7,6/6,2	23%
	2011/2010	11,6/7,6	52%
	2012/2011	11,7/11,6	0%
	AVG. 2012/2008		**15%**
Macedonia	2009/2008	1,1/0	0%
	2010/2009	1,3/1,1	16%
	2011/2010	1,4/1,3	13%
	2012/2011	3,7/1,4	159%
	AVG. 2012/2008		**50%**

International Demand[V] (avg. 2008-2011) Country	Size (t)	Growth
Russian Fed.	101.679	0%
USA	85.258	11%
France	89.218	2%
Germany	69.684	5%
United Kingdom	35.335	5%
Netherlands	26.265	8%
Canada	22.504	13%
Italy	25.972	5%
Belgium	19.954	1%
Australia	16.224	8%
Spain	13.555	10%
Japan	14.813	-5%
Brazil	16.785	-1%
Saudi Arabia	9.451	237%
Sweden	11.568	-5%
Kazakhstan	9.956	-2%
Austria	8.113	10%
Lebanon	9.807	4%
Switzerland	8.091	22%
El Salvador	8.729	4%
Guatemala	6.380	25%
Bulgaria	3.118	56%
Mexico	10.136	-11%
Malaysia	7.977	11%
Czech Rep.	8.617	-2%
New Zealand	6.266	1%
Slovakia	6.933	-2%
Portugal	5.524	7%
China	4.862	19%
Costa Rica	5.565	2%

I source: Statistics institute Republika Srpska, Statistics institute Federation BiH
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IV source: FAOSTAT and Uncomtrade - calculation based on country exports
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Fruit distillates and fruit brandies - market opportunity

Segment/ Product	Production Size[I] -FBIH			Exports[II] -FBIH		
	Year	Size (000 lit)	Growth	Year	Euro (000 €)	Growth
Fruit distillates and fruit brandies	2009/2008	3604/4704	-23%	2009/2008	74/118	-37%
	2010/2009	4651/3604	29%	2010/2009	55/74	-25%
	2011/2010	3261/4651	-30%	2011/2010	198/55	259%
	2012/2011	2874/3261	-12%	2012/2011	32/198	-84%
	AVG. 2012/2008		-12%	AVG. 2012/2008		-28%

Key markets - name sofictication[III]-FBIH			
Country	Year	Euro (000 €)	Growth
Croatia	2009/2008	54,7/94,6	-42%
	2010/2009	35,3/54,7	-36%
	2011/2010	168,2/35,3	377%
	2012/2011	4,1/168,2	-98%
	AVG. 2012/2008		-54%
Kosovo	2009/2008	6,1/12,8	-52%
	2010/2009	11,8/6,1	92%
	2011/2010	11,8/11,8	0%
	2012/2011	9,7/11,8	-17%
	AVG. 2012/2008		-7%
Other countries	2009/2008	12,8/10,2	25%
	2010/2009	7,2/12,8	-44%
	2011/2010	18,4/7,2	157%
	2012/2011	18,4/18,4	0%
	AVG. 2012/2008		16%

Competition for export/processing [IV]			
Country	Year	Size (000t)	Growth
Romania	2009/2008	12,3/15,1	-18%
	2010/2009	10,4/12,3	-15%
	2011/2010	10,8/10,4	3%
	2012/2011	no data	no data
	AVG. 2011/2008		-10%
Serbia	2009/2008	12,5/10,8	16%
	2010/2009	12,7/12,5	2%
	2011/2010	16,9/12,7	33%
	2012/2011	no data	no data
	AVG. 2011/2008		16%
Bulgaria	2009/2008	56,9/92,1	-38%
	2010/2009	53,6/56,9	-6%
	2011/2010	59,1/53,6	10%
	2012/2011	no data	no data
	AVG. 2011/2008		-14%
Croatia	2009/2008	8/8,2	-2%
	2010/2009	6,9/8	-14%
	2011/2010	8,2/6,9	19%
	2012/2011	no data	no data
	AVG. 2011/2008		0%
Albania	2009/2008	0,2/0,1	77%
	2010/2009	0,3/0,2	85%
	2011/2010	0,1/0,3	-64%
	2012/2011	no data	no data
	AVG. 2011/2008		5%
Macedonia	2009/2008	69,1/70,8	-2%
	2010/2009	70,5/69,1	2%
	2011/2010	97,8/70,5	39%
	2012/2011	no data	no data
	AVG. 2011/2008		11%
Montenegro	2009/2008	7,4/7,2	3%
	2010/2009	7,4/7,4	0%
	2011/2010	7,2/7,4	-4%
	2012/2011	no data	no data
	AVG. 2011/2008		0%

International Demand [V] (avg. 2008-2011)		
Country	Size (t)	Growth
USA	1.799.490	7%
Germany	1.715.526	5%
United Kingdom	1.310.740	7%
Russian Federation	806.409	11%
France	804.059	12%
Netherlands	492.454	3%
China	408.662	22%
Canada	387.543	3%
China ex.int	385.148	28%
Belgium	378.672	-8%
Japan	335.511	4%
Spain	333.792	-5%
China, mainland	304.455	26%
Italy	242.601	28%
Denmark	217.564	2%
Switzerland	206.977	1%
Czech Republic	195.568	-1%
Sweden	185.793	8%
Portugal	179.064	-2%
Angola	127.502	-2%
Poland	127.478	5%
Austria	103.191	9%
Ireland	95.760	9%
Norway	94.883	2%
Singapore	94.247	9%
Brazil	93.797	12%
Mexico	93.412	1%
Australia	90.735	-8%
Ukraine	84.520	15%
Finland	82.379	0%

I source: Statistics institute Republika Srpska, Statistics institute Federation BiH
II source: Indirect Taxation Authority of BiH
III source: Indirect Taxation Authority of BiH
IV source: FAOSTAT and Uncomtrade - calculation based on country exports
V source: FAOSTAT and Uncomtrade

Processed Fruit and vegetables - market opportunity

Segment/ Product	Production Size[I] -FBIH Year	Size (000 t)	Growth	Exports[II] -FBIH Year	Euro (000 €)	Growth
Processed fruit and vegetables	2009/2008	3,7/5,4	↓ -32%	2009/2008	634/1013	↓ -37%
	2010/2009	0,7/3,7	↓ -81%	2010/2009	430/634	↓ -32%
	2011/2010	2,5/0,7	↑ 259%	2011/2010	471/430	↑ 10%
	2012/2011	0,8/2,5	↓ -69%	2012/2011	414/471	↓ -12%
	AVG. 2012/2008		↓ -38%	**AVG. 2012/2008**		↓ -20%

Key markets - name sofictication[III]-FBIH Country	Year	Euro (000 €)	Growth
Serbia	2009/2008	84,9/166,7	↓ -49%
	2010/2009	53,2/84,9	↓ -37%
	2011/2010	1,5/53,2	↓ -97%
	2012/2011	16,4/1,5	↑ 967%
	AVG. 2012/2008		↓ **-44%**
Croatia	2009/2008	120,2/204,5	↓ -41%
	2010/2009	13,8/120,2	↓ -89%
	2011/2010	32,2/13,8	↑ 133%
	2012/2011	26,1/32,2	↓ -19%
	AVG. 2012/2008		↓ **-40%**
Mecedonia	2009/2008	146,7/180,5	↓ -19%
	2010/2009	72,6/146,7	↓ -51%
	2011/2010	61,9/72,6	↓ -15%
	2012/2011	28,1/61,9	↓ -55%
	AVG. 2012/2008		↓ **-37%**
Kosovo	2009/2008	4,6/0,5	↑ 800%
	2010/2009	8,7/4,6	↑ 89%
	2011/2010	40,4/8,7	↑ 365%
	2012/2011	1/40,4	↓ -97%
	AVG. 2012/2008		↑ **19%**
Austria	2009/2008	0,5/19,9	↓ -97%
	2010/2009	0/0,5	↓ -100%
	2011/2010	no data	no data
	2012/2011	41,9/92	↓ -54%
	AVG. 2012/2008		↑ **28%**
Germany	2009/2008	1,5/0,5	↑ 200%
	2010/2009	15,9/1,5	↑ 933%
	2011/2010	1,5/15,9	↓ -90%
	2012/2011	28,6/1,5	↑ 1767%
	AVG. 2012/2008		↑ **174%**
Other countries	2009/2008	228,5/241,8	↓ -6%
	2010/2009	70/228,5	↓ -69%
	2011/2010	84,9/70	↑ 21%
	2012/2011	96,6/84,9	↑ 14%
	AVG. 2012/2008		↓ **-20%**

Competition for export/processing[IV] Country	Year	Size (000t)	Growth	International Demand[V] (avg. 2008-2011) Country	Size (t)	Growth
Romania	2009/2008	10,1/9,7	↑ 4%	United States of Americ	1.809.556	↑ 2%
	2010/2009	20,1/10,1	↑ 100%	Germany	1.465.308	↓ 0%
	2011/2010	22,2/20,1	↑ 11%	France	968.991	↑ 0%
	2012/2011	no data	no data	Japan	833.253	↑ 2%
	AVG. 2012/2008		↑ **32%**	Netherlands	811.653	↓ -9%
Serbia	2009/2008	151,2/132,6	↑ 14%	United Kingdom	620.608	↑ 1%
	2010/2009	181,5/151,2	↑ 20%	Russian Federation	590.655	↓ -6%
	2011/2010	188/181,5	↑ 4%	Republic of Korea	435.778	↑ 2%
	2012/2011	no data	no data	Canada	421.939	↑ 5%
	AVG. 2012/2008		↑ **12%**	Belgium	385.467	↑ 1%
Bulgaria	2009/2008	55,6/68,4	↓ -19%	China	318.076	↑ 11%
	2010/2009	67,1/55,6	↑ 21%	Italy	304.091	↑ 1%
	2011/2010	64,7/67,1	↓ -4%	Spain	303.256	↓ 0%
	2012/2011	no data	no data	China ex.int	243.054	↑ 21%
	AVG. 2012/2008		↓ **-2%**	Austria	203.931	↑ 1%
Croatia	2009/2008	10,1/10,8	↓ -7%	Australia	185.319	↑ 8%
	2010/2009	13,2/10,1	↑ 31%	China, mainland	168.695	↑ 20%
	2011/2010	14,9/13,2	↑ 13%	Poland	167.263	↑ 7%
	2012/2011	no data	no data	Sweden	143.523	↑ 1%
	AVG. 2012/2008		↑ **11%**	Mexico	138.885	↓ -1%
Albania	2009/2008	0,5/0,2	↑ 136%	Saudi Arabia	118.387	↑ 18%
	2010/2009	0,3/0,5	↓ -32%	Czech Republic	115.765	↑ 1%
	2011/2010	no data	no data	Thailand	95.561	↓ -4%
	2012/2011	no data	no data	Denmark	90.230	↑ 5%
	AVG. 2012/2008		↑ **9%**	United Arab Emirates	89.803	↓ -12%
Montenegro	2009/2008	0,9/0,4	↑ 117%	Switzerland	81.519	↑ 1%
	2010/2009	1,2/0,9	↑ 30%	Malaysia	81.408	↑ 7%
	2011/2010	1/1,2	↓ -16%	China, Hong Kong SAR	74.443	↑ 2%
	2012/2011	no data	no data	Portugal	71.523	↓ -4%
	AVG. 2012/2008		↑ **34%**	Brazil	71.218	↑ 21%

I source: Statistics institute Republika Srpska, Statistics institute Federation BiH
II source: Indirect Taxation Authority of BiH
III source: Indirect Taxation Authority of BiH
IV source: FAOSTAT and Uncomtrade - calculation based on country exports
V source: FAOSTAT and Uncomtrade

Deep freezing and cold stores - market opportunity

Segment/ Product	Production Size[I] -FBIH Year	Production Size (t)	Production Growth	Exports[II] -FBIH Year	Exports Euro (000 €)	Exports Growth
Deep freezing and cold stores	2009/2008	no data	no data	2009/2008	7361/5113	↑ 44%
	2010/2009	no data	no data	2010/2009	8731/7361	↑ 19%
	2011/2010	no data	no data	2011/2010	9970/8731	↑ 14%
	2012/2011	no data	no data	2012/2011	7978/9970	↓ -20%
	AVG. 2012/2008		no data	**AVG. 2012/2008**		↑ 12%

Key markets - name sofictication[III]-FBIH Country	Year	Euro (000 €)	Growth
Serbia	2009/2008	717,3/865,6	↓ -17%
	2010/2009	1818,2/717,3	↑ 153%
	2011/2010	1660,2/1818,2	↓ -9%
	2012/2011	2509,9/1660,2	↑ 51%
	AVG. 2012/2008		↑ **30%**
Croatia	2009/2008	952/657	↑ 45%
	2010/2009	497,5/952	↓ -48%
	2011/2010	613,6/497,5	↑ 23%
	2012/2011	859,5/613,6	↑ 40%
	AVG. 2012/2008		↑ **7%**
Austria	2009/2008	212,2/52,7	↑ 303%
	2010/2009	642,2/212,2	↑ 203%
	2011/2010	1891,8/642,2	↑ 195%
	2012/2011	928/1891,8	↓ -51%
	AVG. 2012/2008		↑ **105%**
Germany	2009/2008	362,5/290,4	↑ 25%
	2010/2009	705,1/362,5	↑ 95%
	2011/2010	557,3/705,1	↓ -21%
	2012/2011	260,8/557,3	↓ -53%
	AVG. 2012/2008		↓ **-3%**
Other countries	2009/2008	5116,5/3234,4	↑ 58%
	2010/2009	5067,9/5116,5	↓ -1%
	2011/2010	5246,9/5067,9	↑ 4%
	2012/2011	3420/5246,9	↓ -35%
	AVG. 2012/2008		↑ **1%**

Competition for export/processing[IV] Country	Year	Size (000t)	Growth
Romania	2009/2008	4,7/5,6	↓ -16%
	2010/2009	7,7/4,7	↑ 63%
	2011/2010	7,9/7,7	↑ 3%
	2012/2011	6,9/7,9	↓ -13%
	AVG. 2012/2008		↑ **5%**
Serbia	2009/2008	123,1/107,2	↑ 15%
	2010/2009	149,8/123,1	↑ 22%
	2011/2010	155,9/149,8	↑ 4%
	2012/2011	136,1/155,9	↓ -13%
	AVG. 2012/2008		↑ **6%**
Bulgaria	2009/2008	7,8/6,5	↑ 21%
	2010/2009	11,6/7,8	↑ 48%
	2011/2010	10,8/11,6	↓ -7%
	2012/2011	12,4/10,8	↑ 14%
	AVG. 2012/2008		↑ **18%**
Croatia	2009/2008	0,6/0,1	↑ 305%
	2010/2009	2,7/0,6	↑ 364%
	2011/2010	1,7/2,7	↓ -35%
	2012/2011	1,3/1,7	↓ -24%
	AVG. 2012/2008		↑ **75%**
Montenegro	2009/2008	0,8/0,3	↑ 123%
	2010/2009	0,6/0,8	↓ -24%
	2011/2010	0,5/0,6	↓ -6%
	2012/2011	0,2/0,5	↓ -63%
	AVG. 2012/2008		↓ **-12%**
Macedonia	2009/2008	2,5/0	no data
	2010/2009	5,6/2,5	↑ 129%
	2011/2010	4,2/5,6	↓ -26%
	2012/2011	4/4,2	↓ -4%
	AVG. 2012/2008		↑ **18%**

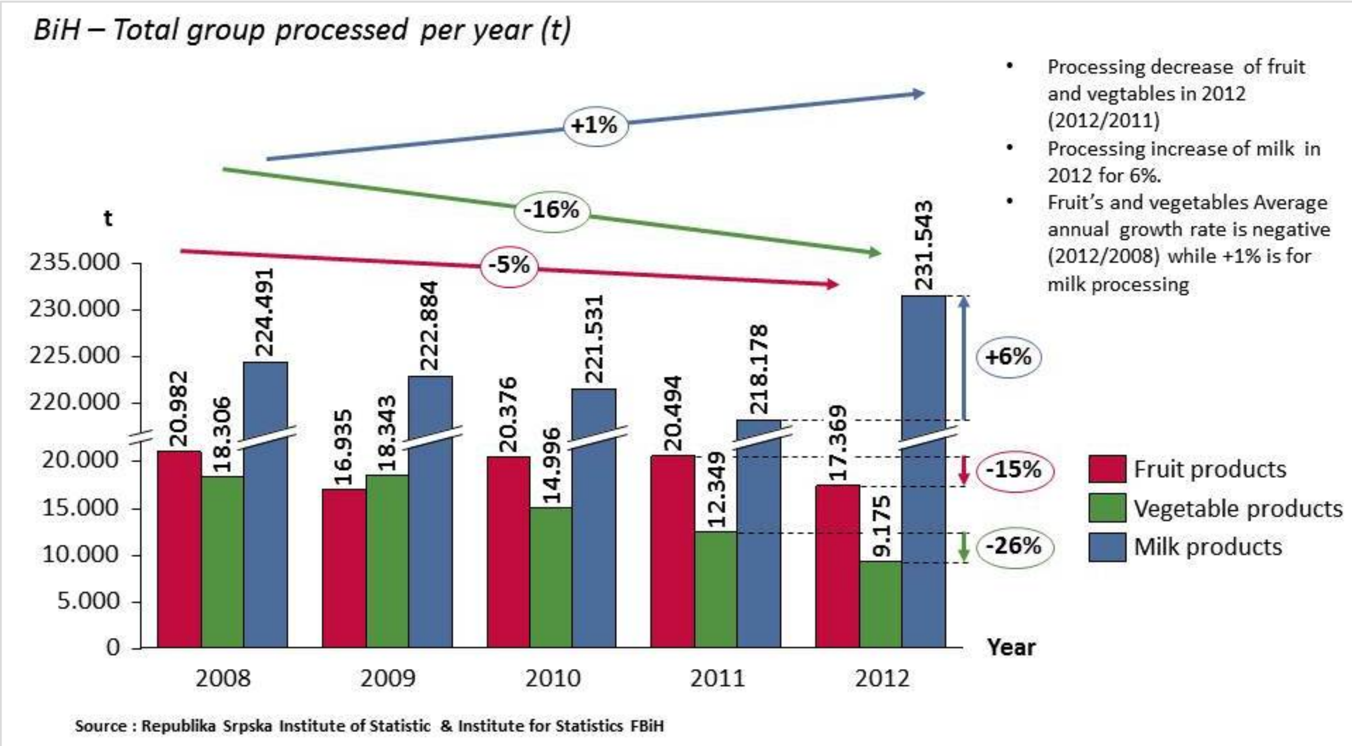
International Demand[V] (avg. 2008-2011) Country	Size (t)	Growth
Germany	320.823	↑ 4%
USA	251.819	↑ 14%
France	146.947	↑ 4%
Netherlands	115.215	↑ 5%
Belgium	95.855	↑ 8%
Canada	70.000	↑ 5%
Russian Federation	66.314	↑ 6%
United Kingdom	64.892	↓ -4%
Japan	61.552	↑ 3%
Austria	54.192	↑ 0%
Italy	45.040	↓ 0%
Poland	35.091	↑ 7%
Rep. of Korea	32.532	↑ 11%
Sweden	29.480	↑ 3%
China	28.067	↑ 5%
Australia	27.145	↑ 13%
Spain	26.883	↓ -1%
Denmark	25.709	↓ -3%
Switzerland	22.043	↓ -3%
Finland	14.228	↑ 6%
Norway	11.783	↑ 2%
Mexico	9.655	↓ -1%
Czech Rep.	9.580	↑ 6%
Lithuania	8.814	↑ 9%
Thailand	8.612	↓ -13%
Hungary	7.481	↑ 11%
Serbia	7.228	↑ 12%
Brazil	6.153	↑ 40%
Portugal	4.971	↑ 19%
Ukraine	4.904	↑ 4%

I source: Statistics institute Republika Srpska, Statistics institute Federation BiH
II source: Indirect Taxation Authority of BiH
III source: Indirect Taxation Authority of BiH
IV source: FAOSTAT and Uncomtrade - calculation based on country exports
V source: FAOSTAT and Uncomtrade

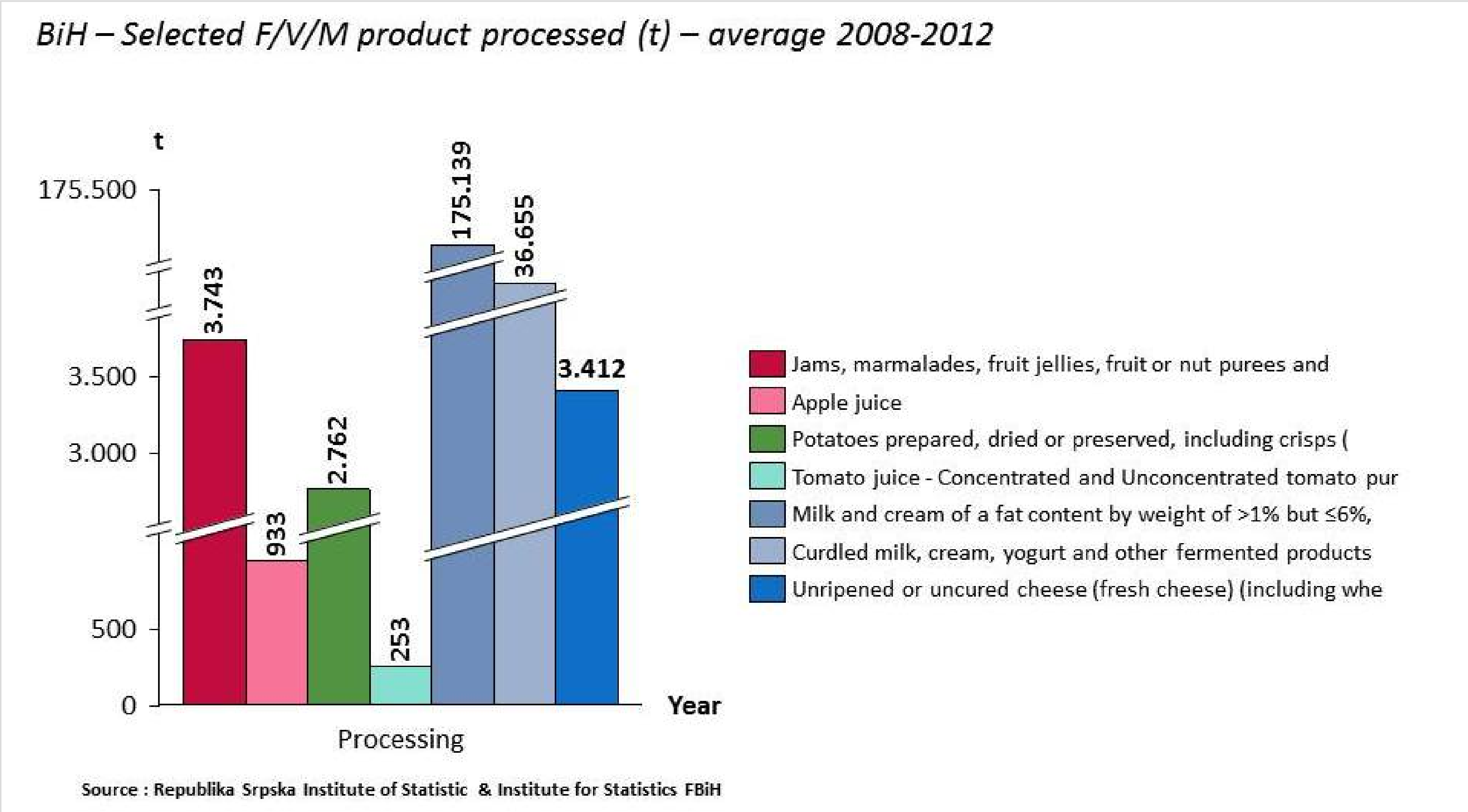
Processing

Value Chain – processed groups of fruit, vegetable and milk products

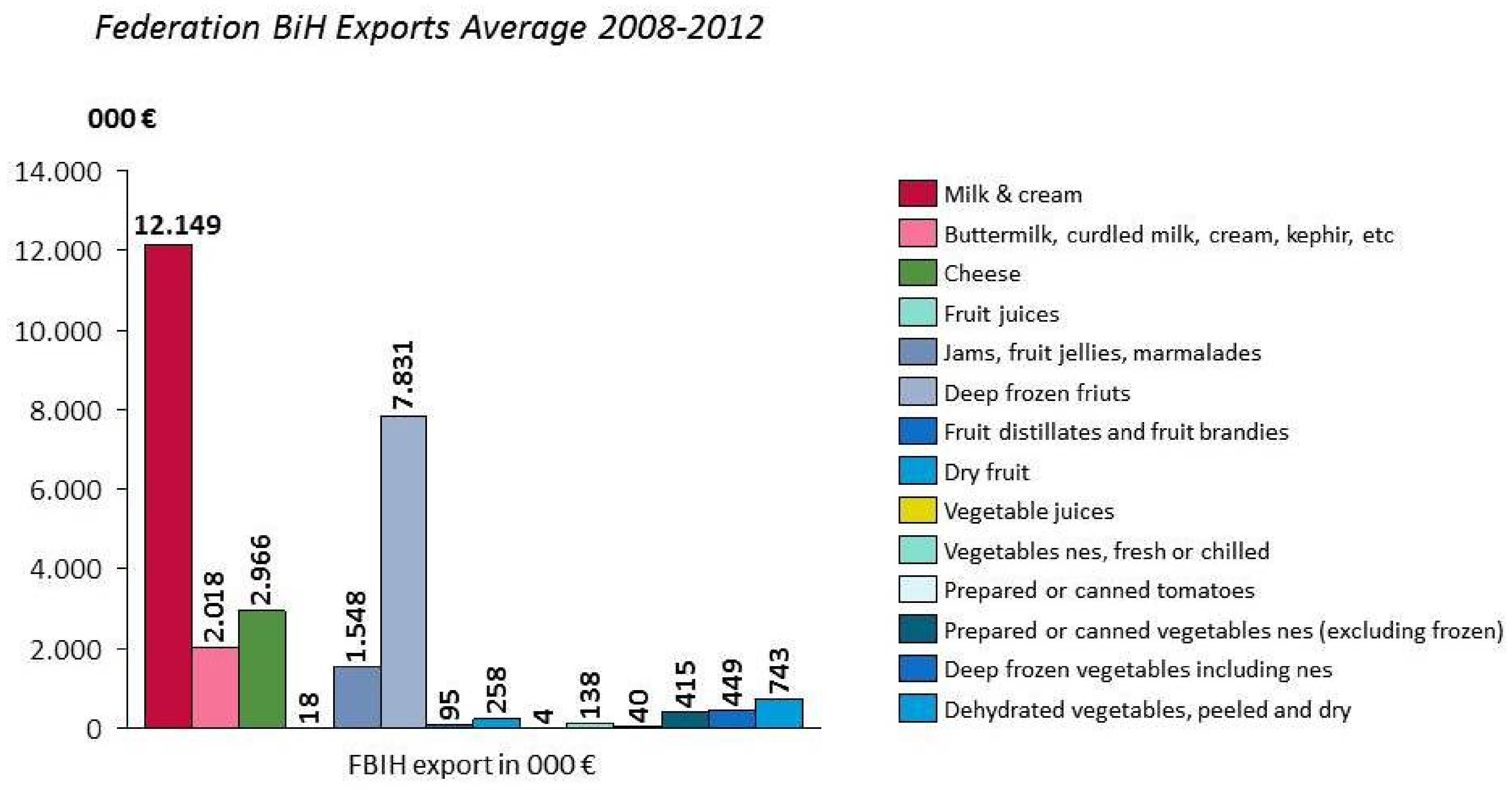
Statistical analysis of the value chain for three sectors (fruit, vegetables and milk):



Value Chain – processed selected fruit, vegetable and milk products



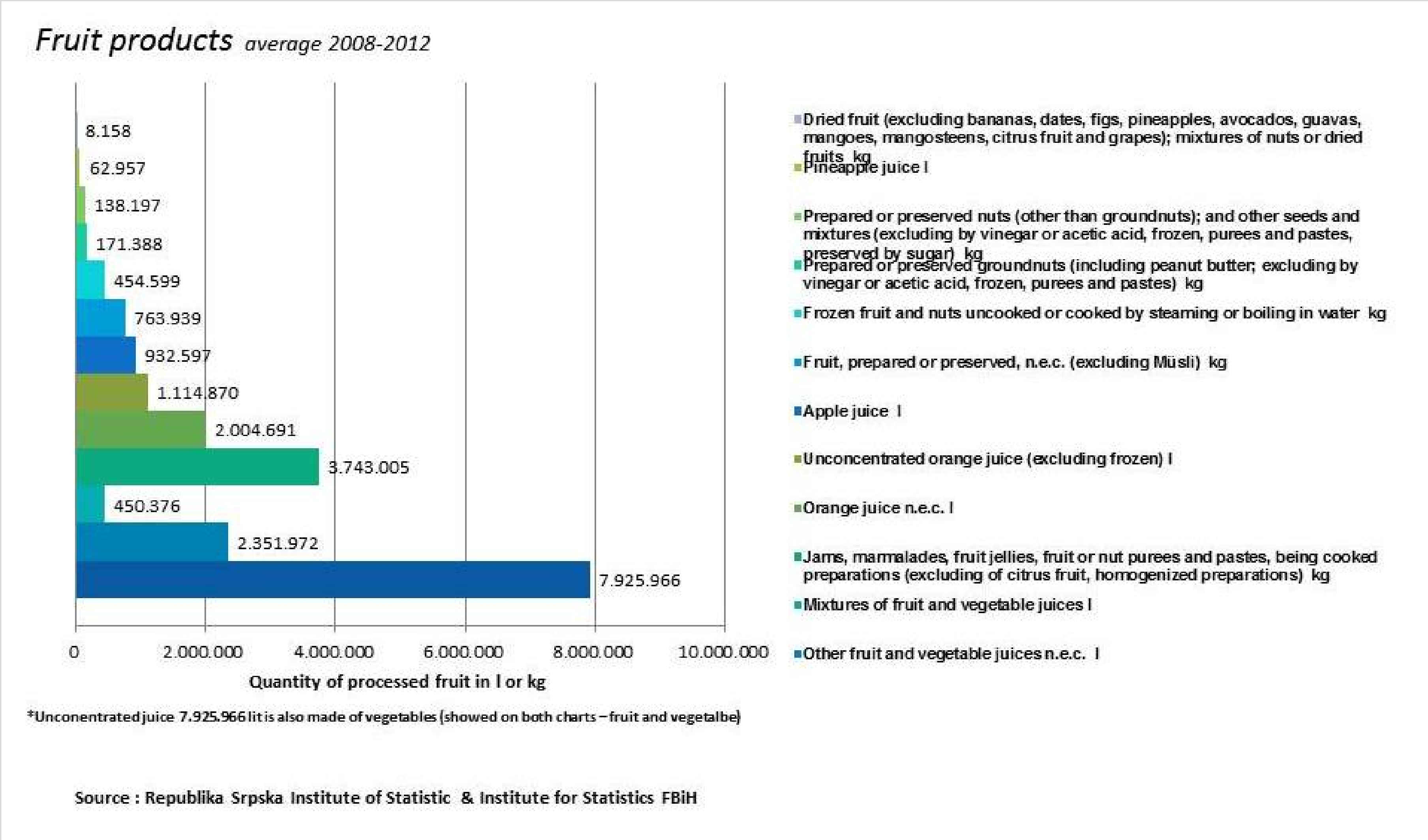
Value Chain – Export of processed fruit, vegetable and milk products in 000€



Source : Source: Indirect Taxation Authority of BiH

FRUIT PRODUCTS

Data analysis (from statistical yearbooks) calculated the average processing results which are shown in the chart (in liters or kilograms - depending on the types of processed fruit). The analysis includes the import of raw materials for processing/products.

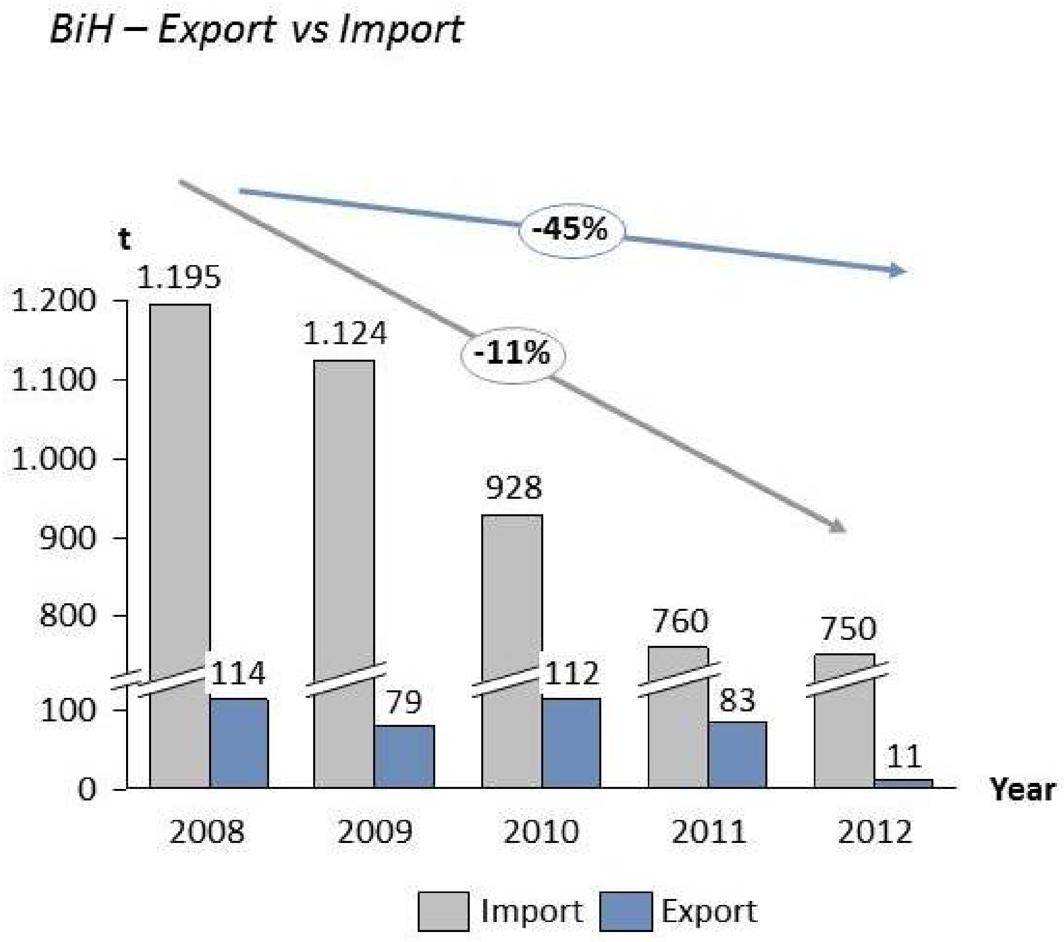


*fruit products – average production in tons 2008-2012

Further analysis is devoted to the processing of apple juice and marmalade/jams as the top two products that are processed from domestic raw materials.

The decrease in production of fruits (2012) in the region had a negative effect on the processing industry. Export also has a negative growth in 2012, which is more affect for apple juice, while the situation is little better when it comes to marmelades and jams. The main market for these types of products is Croatian. The largest regional competitors in apple juice processing and marmalades are Serbia and Croatia. The demand for these products in the world market is large (Russian Federation, Germany, France, Great Britain and others).

Fruit products export vs import – Apple juice

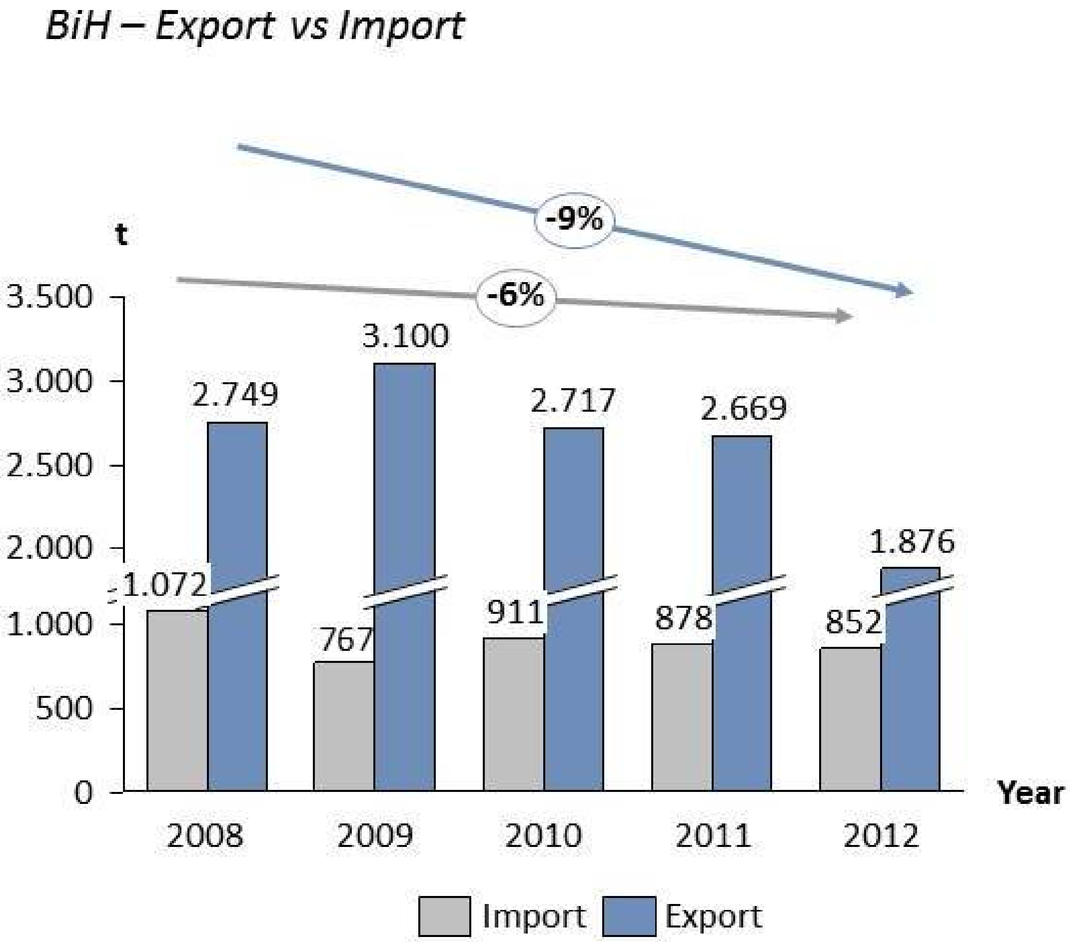


Apple juice

- Import is decreasing (Average annual growth rate is -11% for 2012/2008), as well as export (Average annual growth rate is -45% for 2012/2008).

Source : UN comtrade

Fruit products export vs import – Jams, marmelades

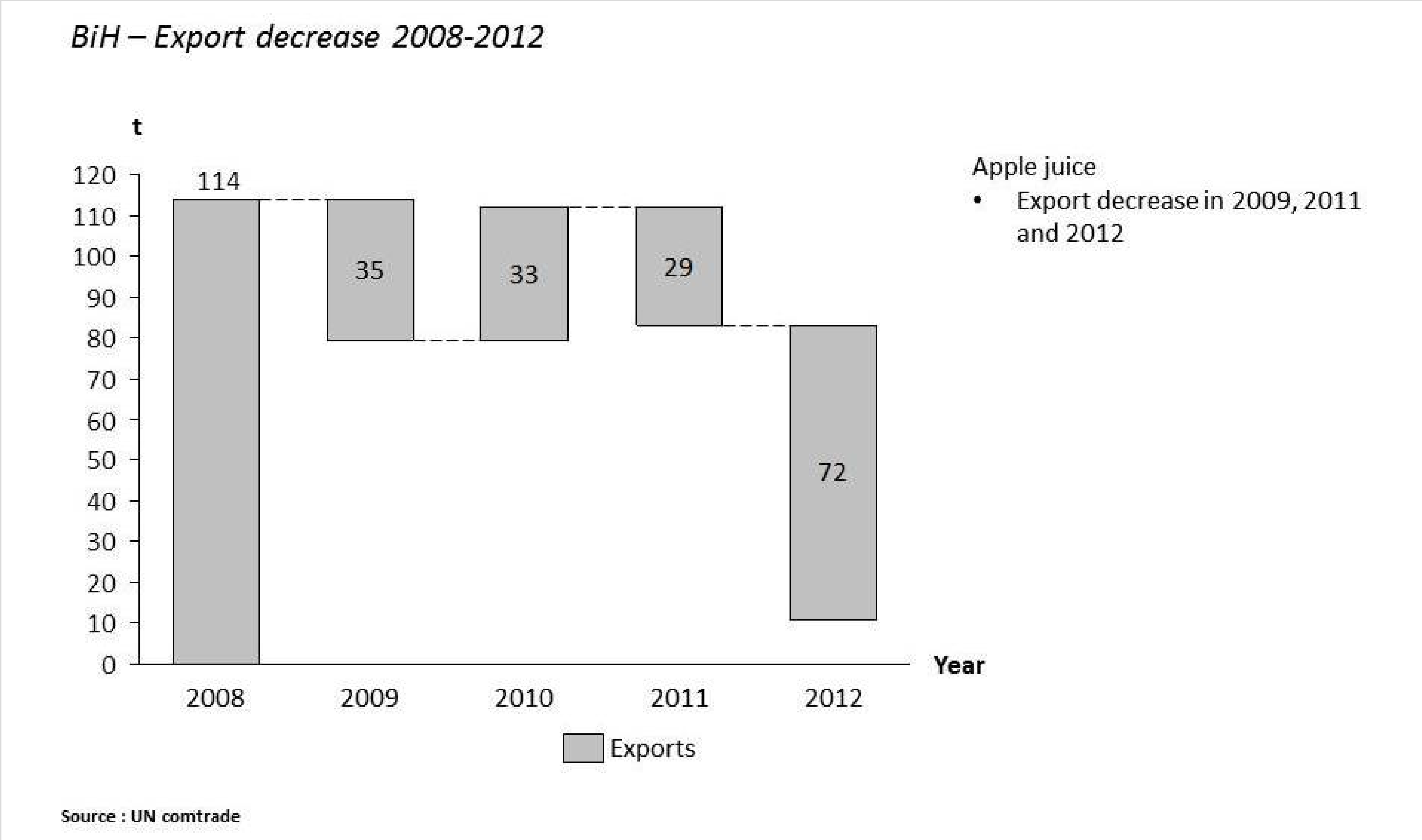


Jams, fruit jellies, marmalades, fruit or nut purée and fruit or nut pastes

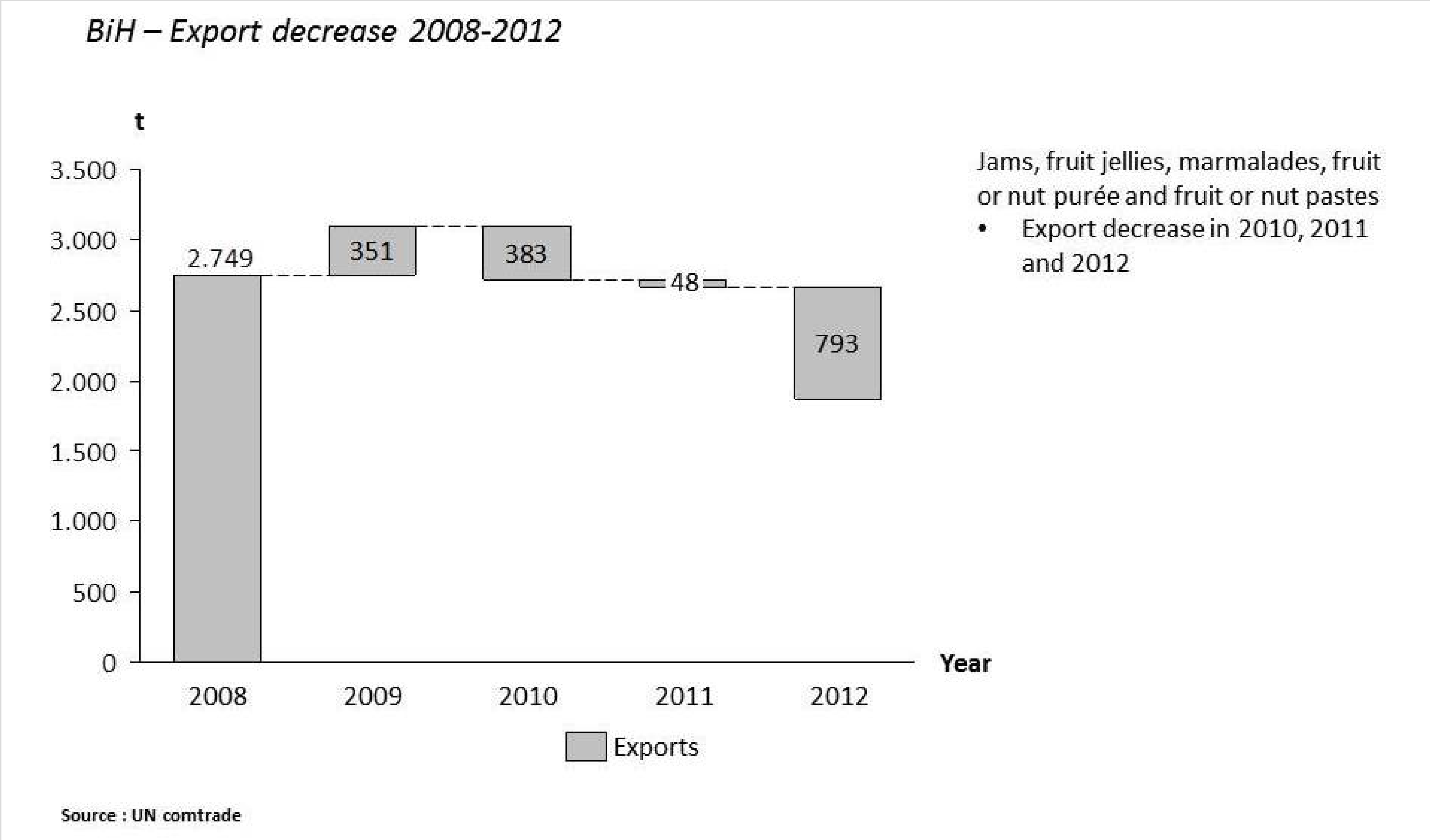
- Import is decreasing (Average annual growth rate is -6% for 2012/2008), as well as export (Average annual growth rate is -9% for 2012/2008).

Source : UN comtrade

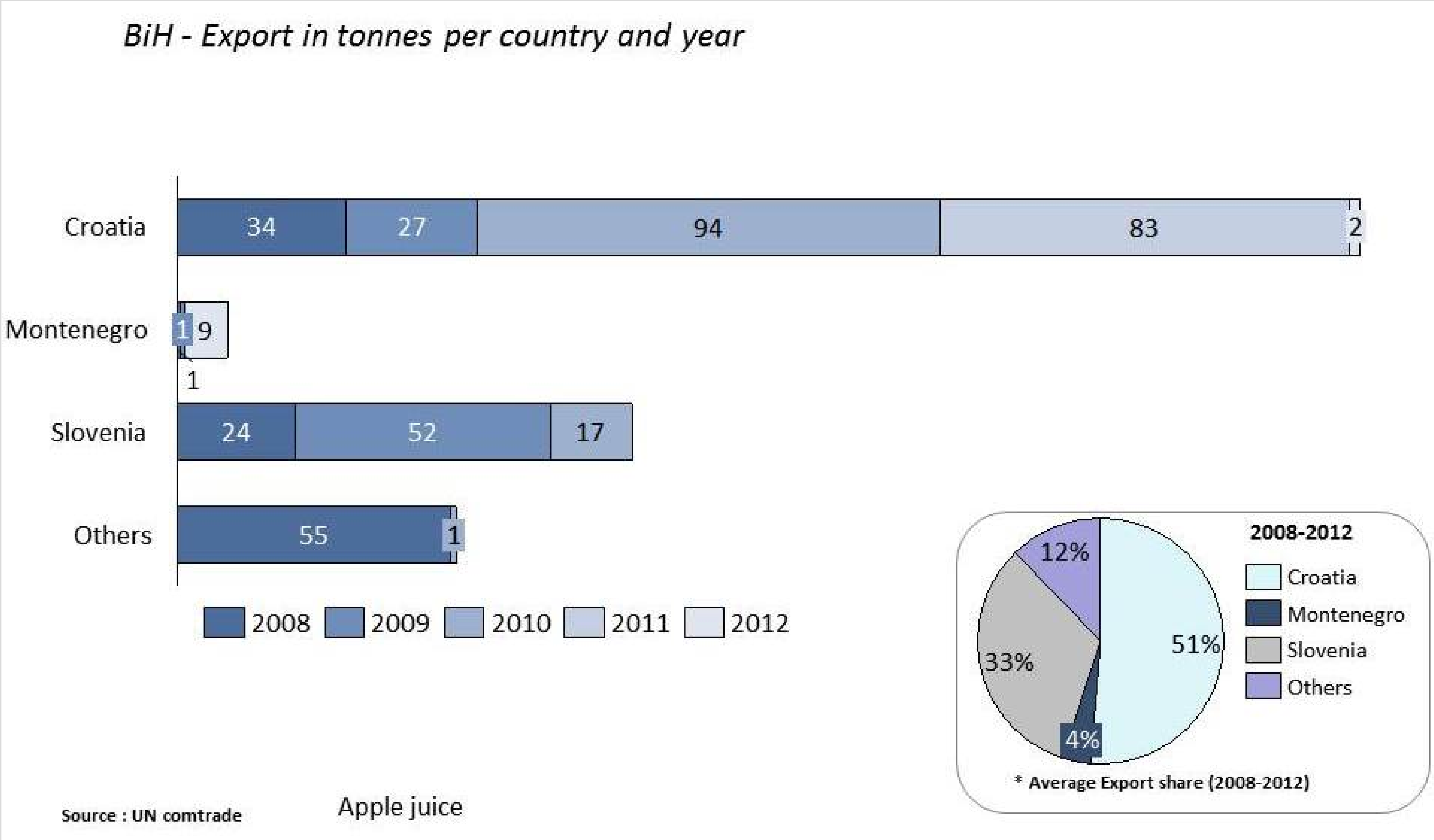
Fruit products – Apple juice export



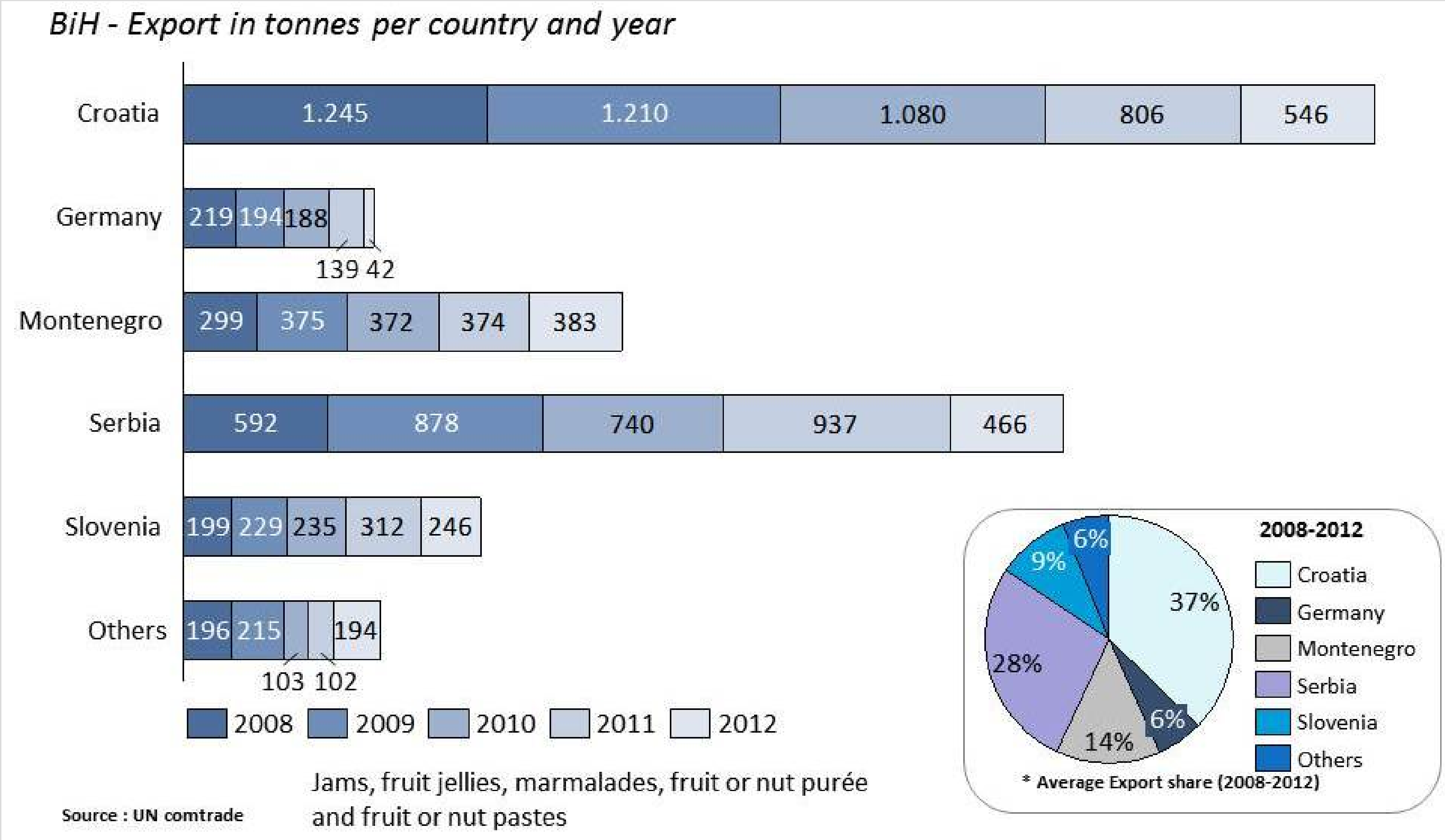
Fruit products – Jams, marmelades export



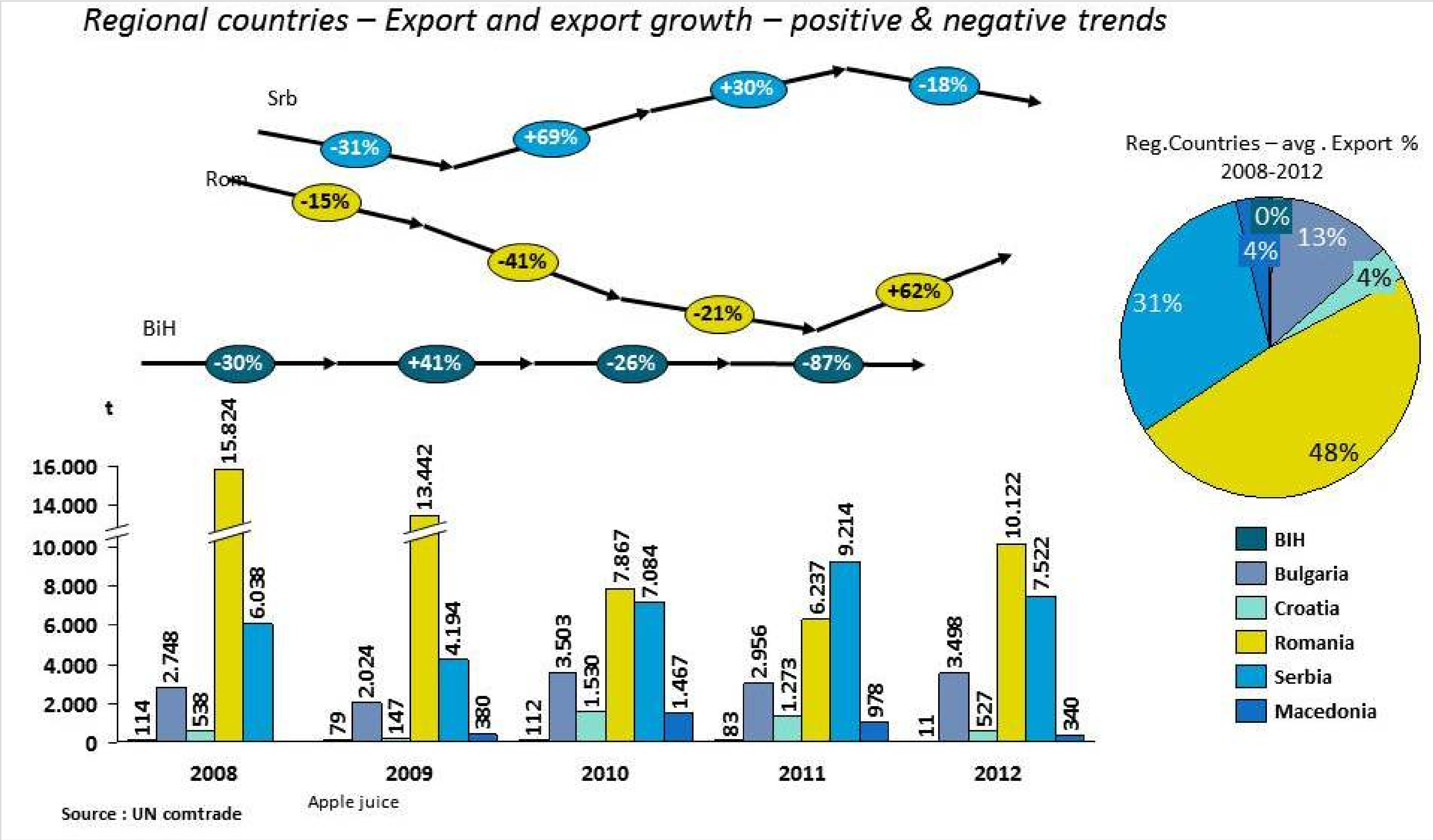
Fruit products – Key markets - Apple juice export per country



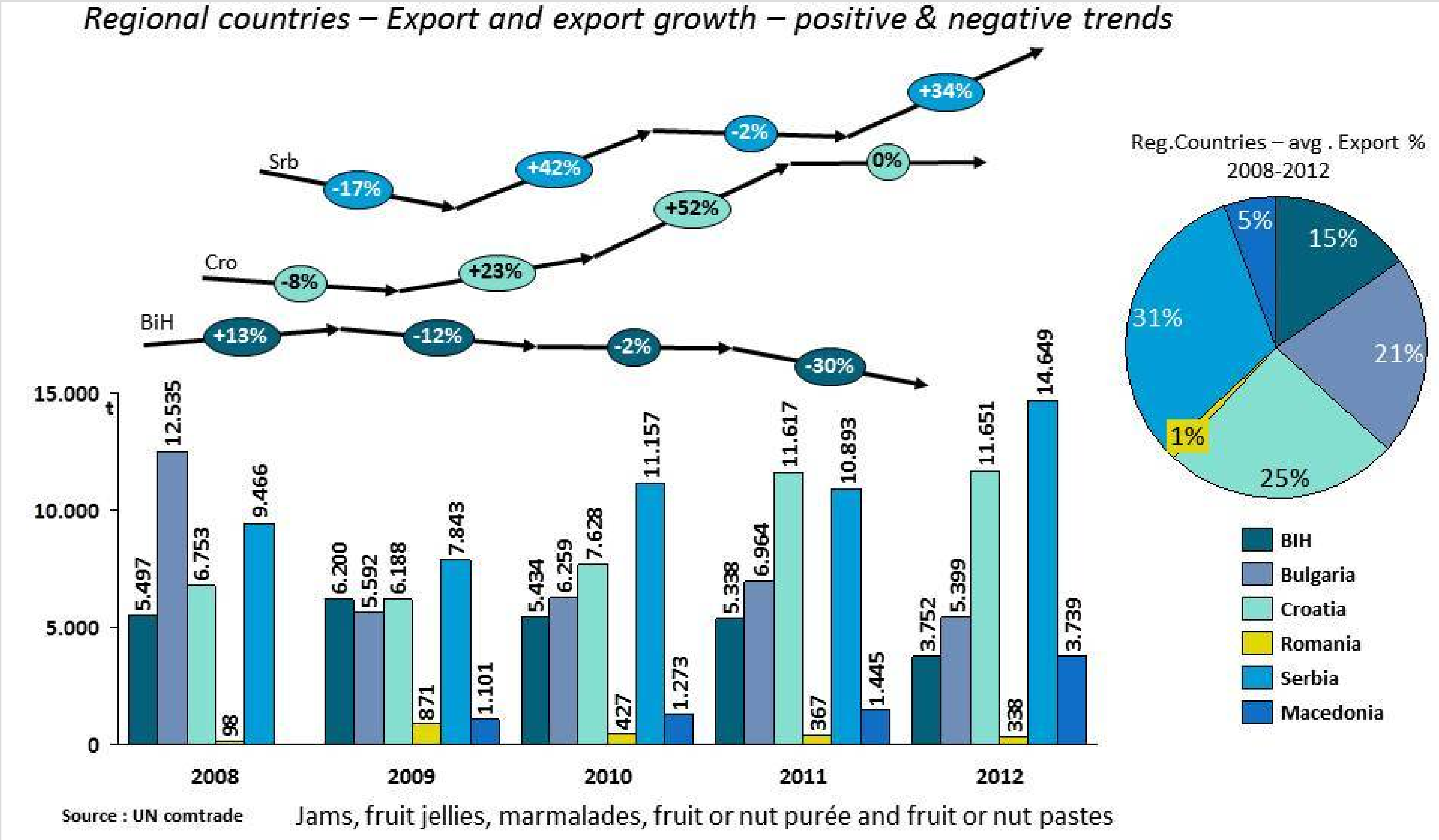
Fruit products – Key markets - Jams, marmalades per country



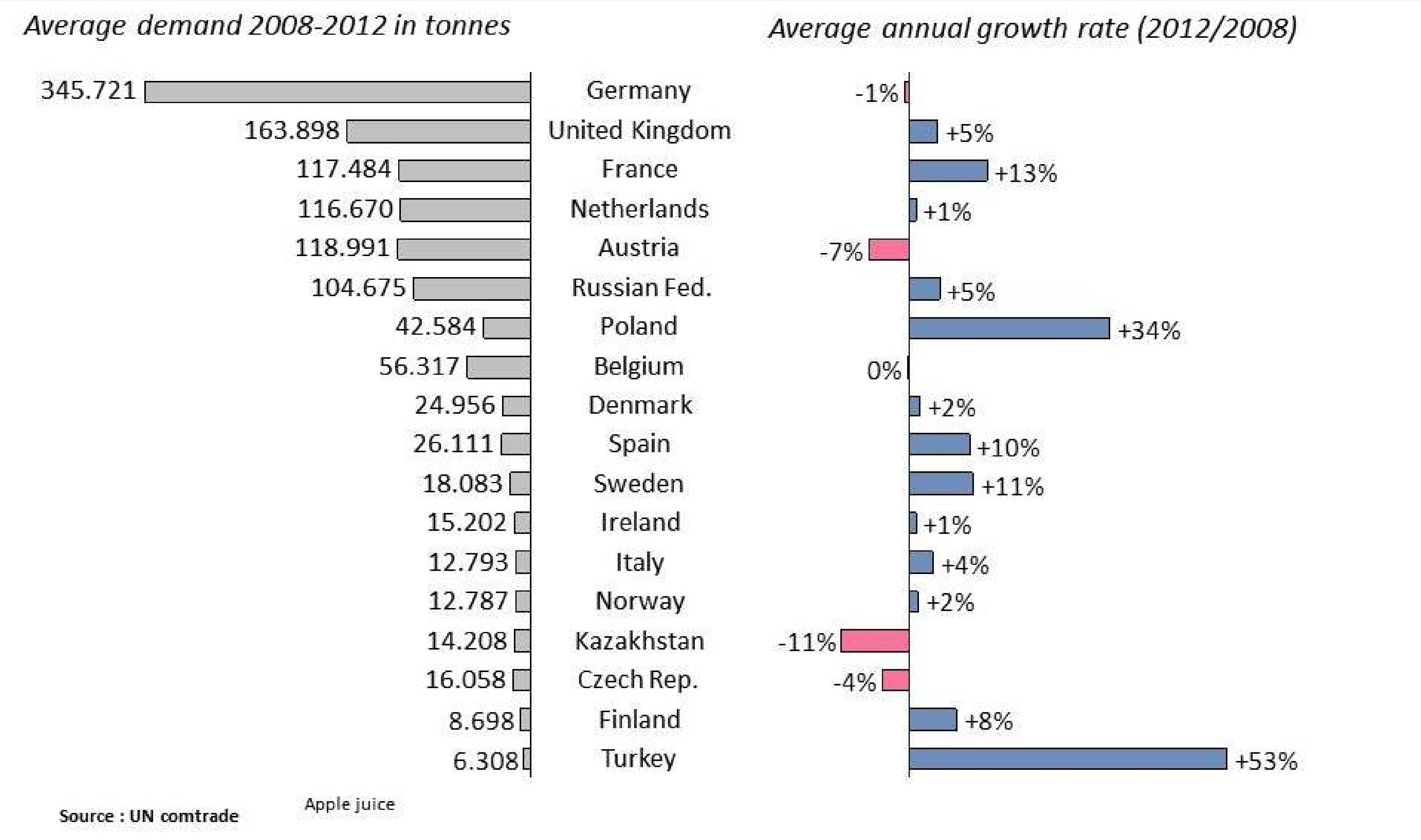
Competition for production of Apple juice – Regional countries export



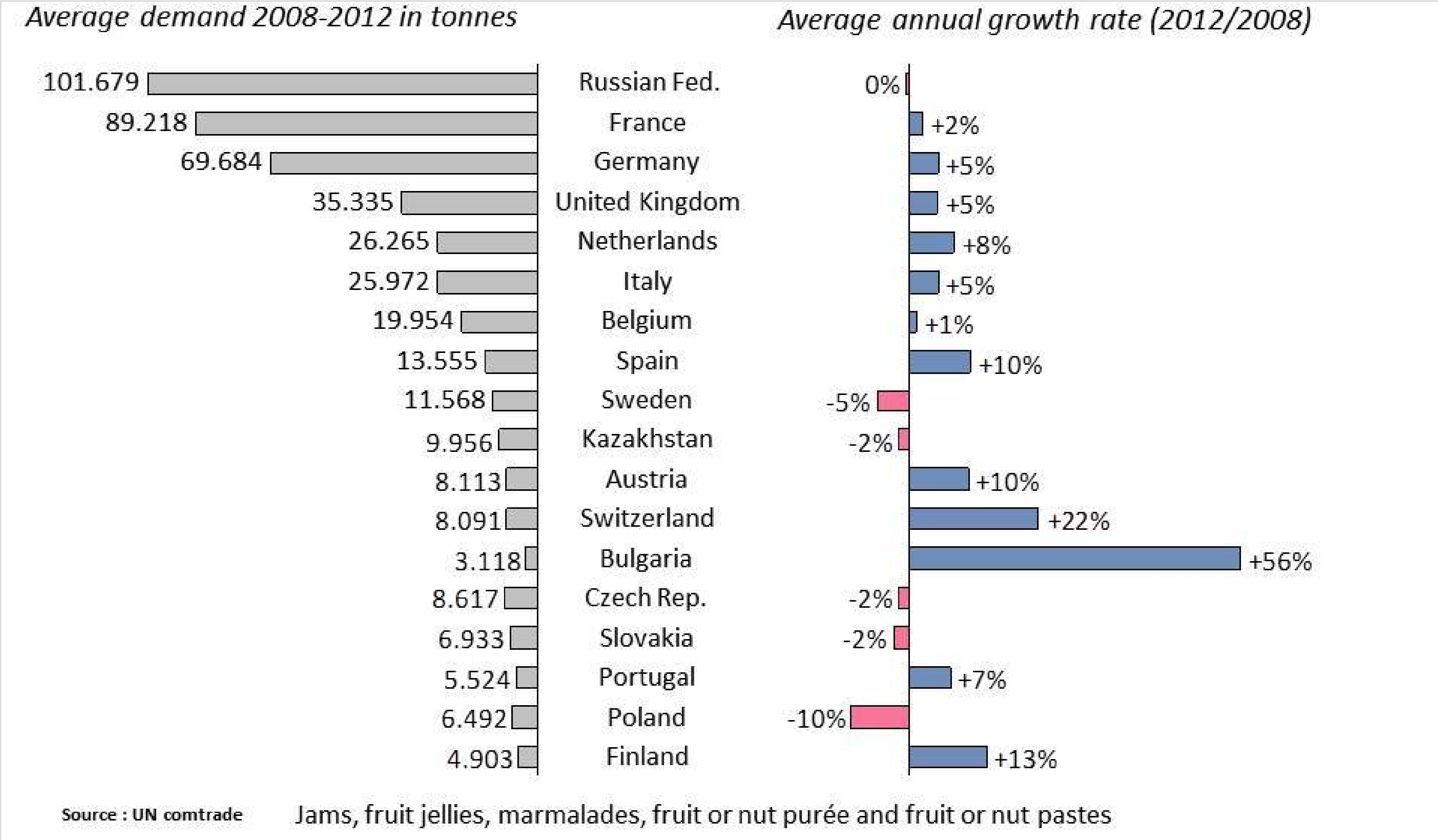
Competition for production of Jams, marmalades – Regional countries export



International Demand for apple juice



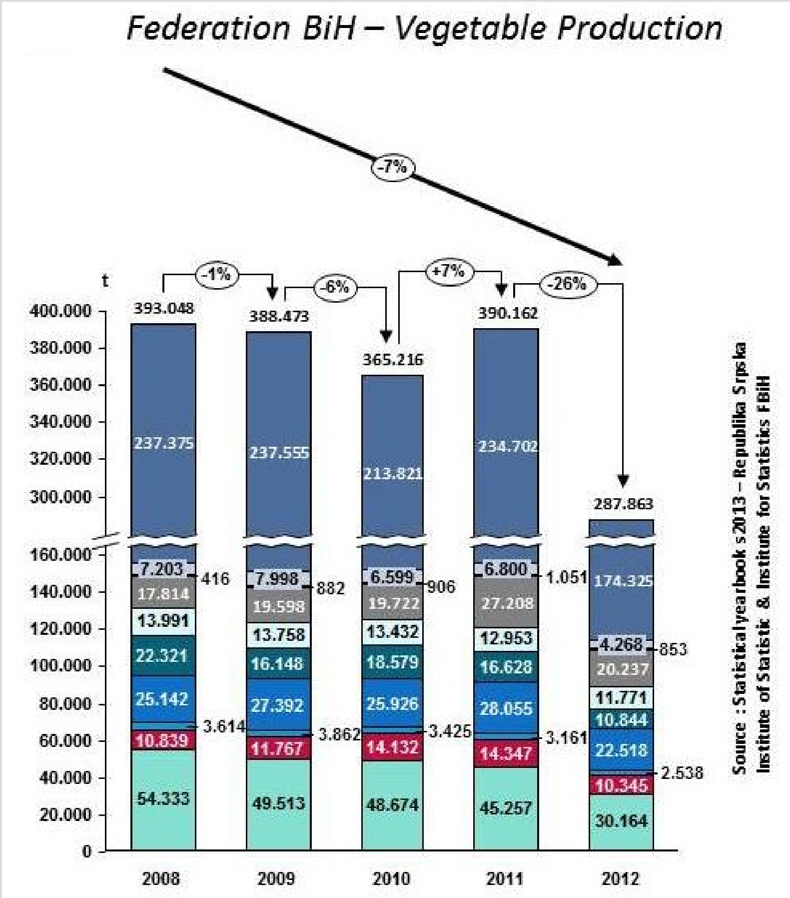
International Demand for Jams, marmalades

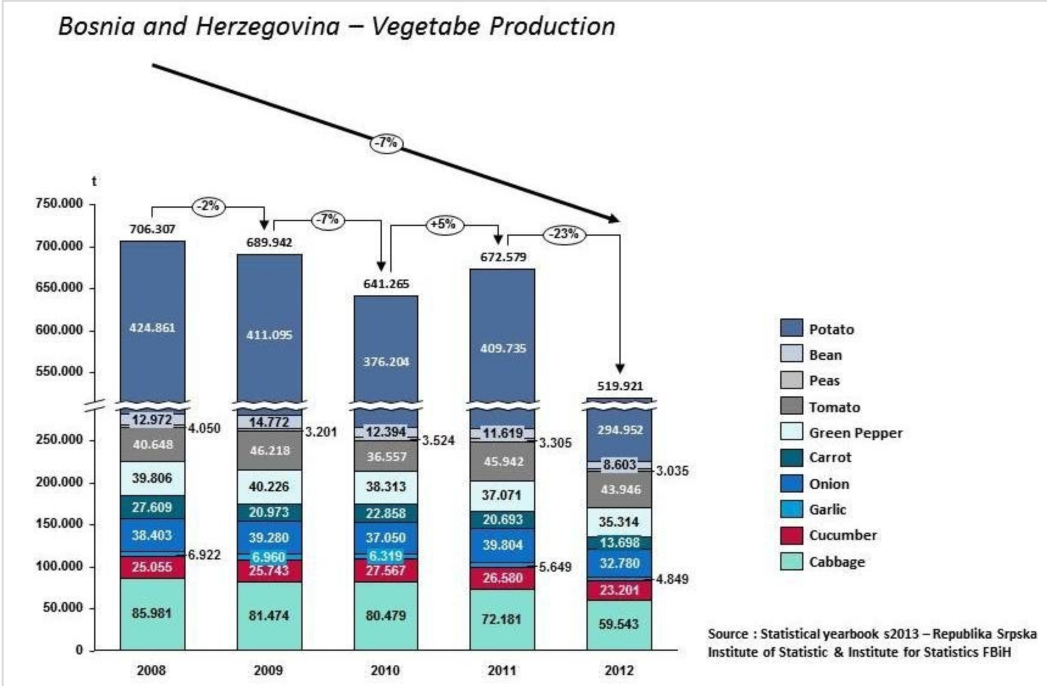


VEGETABLE – GENERAL OVERVIEW

Vegetable production in the Republika Srpska (Bosnia and Herzegovina) is shown in the two graphs. Production is expressed in tons and per year of production from 2008 to 2012. Growing or falling trend in production is showed for the reference period. The fall in production in the Republika Srpska of -26% in 2012 is a result of dry season and bad weather conditions across the region. The charts are representing the volume of production for of potatoes, beans, peas, tomatoes, green peppers, carrots, onions, garlic, cucumber and cabbage.

Production

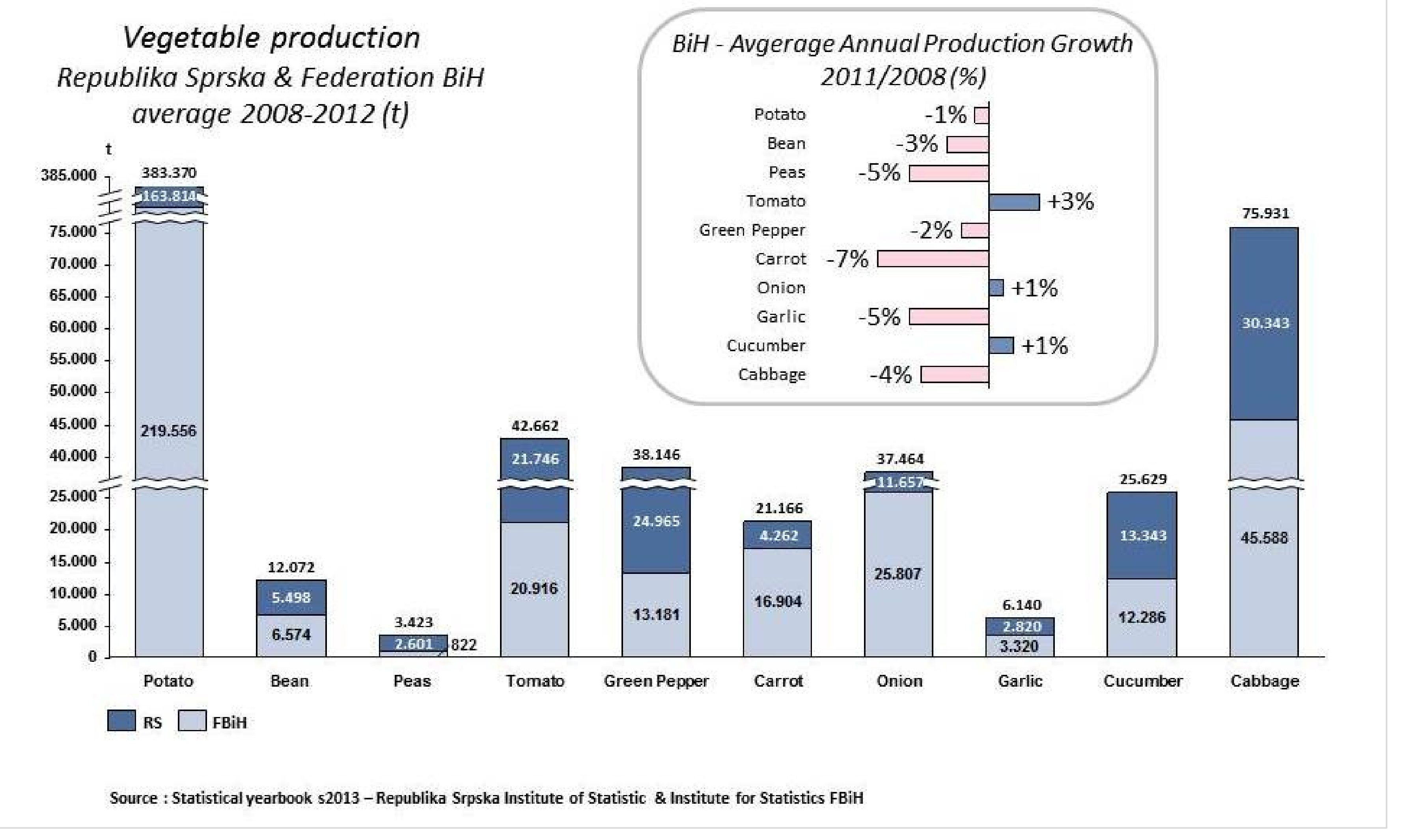




* Vegetable production in Federation BiH & BiH in tonnes based on statistical information published in Statistical Yearbook FBiH & RS for 2013

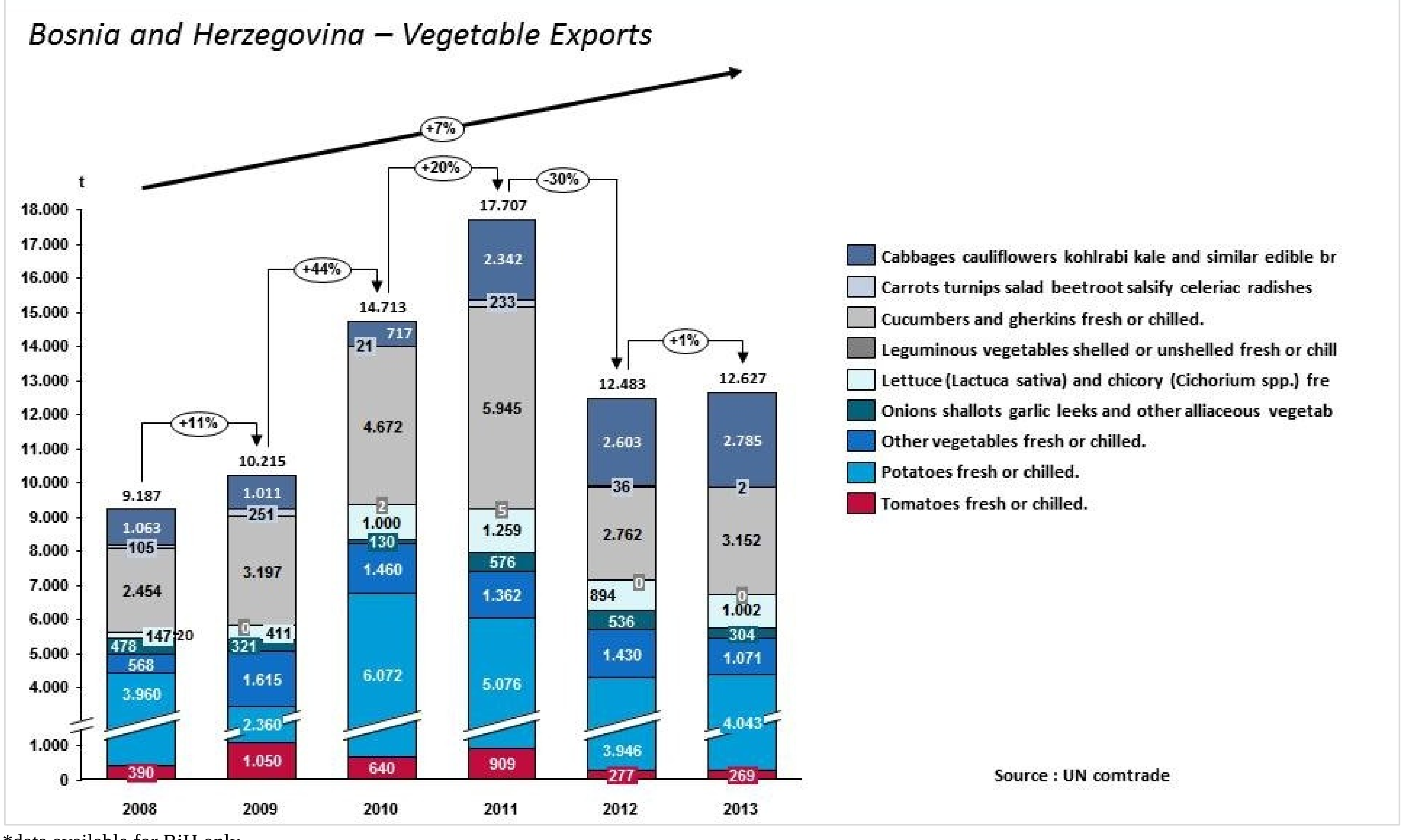
Vegetable Production

Statistical analysis of the average vegetables production in tons for the reference period of 2008-2012 showed the highest or lowest production values in the RS and FBiH. The average growth rate for the whole of BiH is given to each Vegetable (2011/2008) where negative average growth rate prevailing for the reference period.



Vegetable – export of fresh, frozen or dried

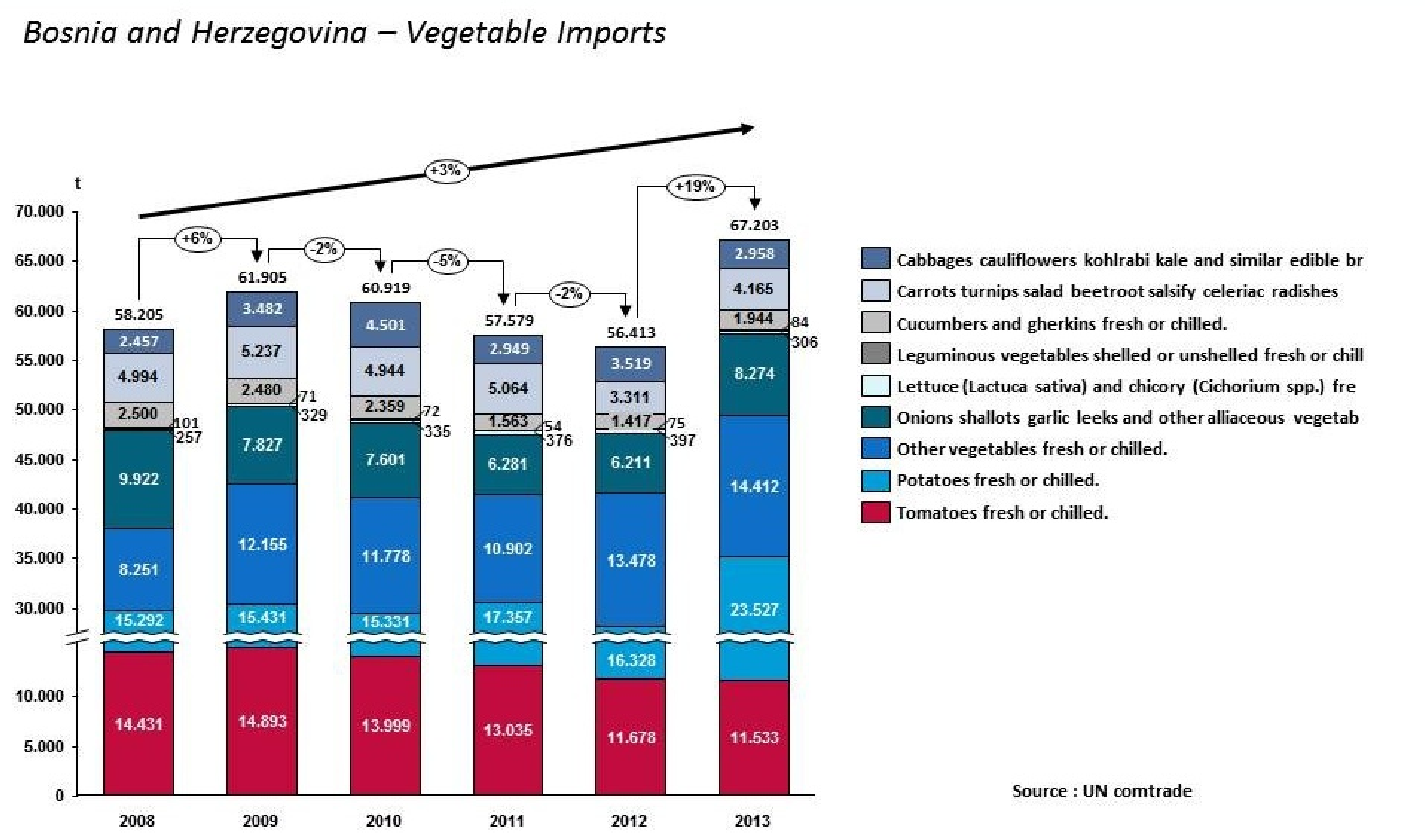
Exports of vegetables in BiH is shown the average positive growth rate of +7% (2013/2008). Slightly fewer exports is recorded in 2013 (that is at the same level as 2012 years).



*data available for BiH only

Vegetable – import of fresh, frozen or dried

Imports of vegetable in BiH is shown in the chart below, with an average positive growth rate of +3% (2013/2008).



*data available for BiH only

POTATO

Statistical analysis showed that potato is the strategic key product for the FBIH and BiH, especially for the spring (early) potatoes. Production of potato has an equable production in the reporting period 2008-2012, although in 2012, due to dry season and disease, production of potatoes were significantly reduced. The biggest potato production area in the RS is in Gradiska municipality, while in FBiH is in Tuzla Canton. BiH holds the 77th place world pototoes producers. The purchase price of pototoes is very good in comparison with other countries / producers .

Despite the reduction in the production of potatoes in 2012 and the decline of the average growth rate of -26% (2012/2011) in the RS, export is increasing so that for the reference period (2013/2012) we have an increase in the average exports growth rate of + 2 % .

The most important markets are: Serbia, Croatia, Montenegro and Macedonija. Croatia for the reference period 2008-2012 makes 60 % percent of the BiH market. Our biggest competitors in the region are Serbia and Romania with several times higher production of potatoes. Serbia and Romania have production decrease due to bad weather in 2012, while exports is on the rise (similar to BiH).

The largest regional exporters of potatoes are Serbia and Romania which makes a 31% of total exports of the Balkan countries share easch.

International demand for potatoes is large, while particular interest have Russian Federation, Belgium, Spain, Germany and the Netherlands.

Potato – market opportunity

Production Size[I] -FBIH

Segment/ Product	Year	Tons (000 t)	Growth
Potato	2009/2008	237,6/237,4	↑ 0%
	2010/2009	213,8/237,6	↓ -10,0%
	2011/2010	234,7/213,8	↑ 10%
	2012/2011	174,3/234,7	↓ -26%
	AVG. 2012/2008		↓ -7%

Exports[II] -FBIH

Segment/ Product	Year	Euro (000 €)	Growth
Potato	2009/2008	529/606	↓ -13%
	2010/2009	1157/529	↑ 118,5%
	2011/2010	1303/1157	↑ 13%
	2012/2011	837/1303	↓ -36%
	AVG. 2012/2008		↑ 8,4%

Key markets - name sofictication[III]-FBIH

Country	Year	Euro (000 €)	Growth
Serbia	2009/2008	0/35,8	↓ -100%
	2010/2009	no data	no data
	2011/2010	no data	no data
	2012/2011	3,1/7,7	↓ -60%
	AVG. 2012/2008		↓ -71%
Croatia	2009/2008	362/284,8	↑ 27%
	2010/2009	1000,1/362	↑ 176%
	2011/2010	1054,8/1000,1	↑ 5%
	2012/2011	720,4/1054,8	↓ -32%
	AVG. 2012/2008		↑ 26%
Other countries	2009/2008	167,2/274,6	↓ -39%
	2010/2009	156,5/167,2	↓ -6%
	2011/2010	240,8/156,5	↑ 54%
	2012/2011	113,5/240,8	↓ -53%
	AVG. 2012/2008		↓ -20%

Competition for production/processing[IV]

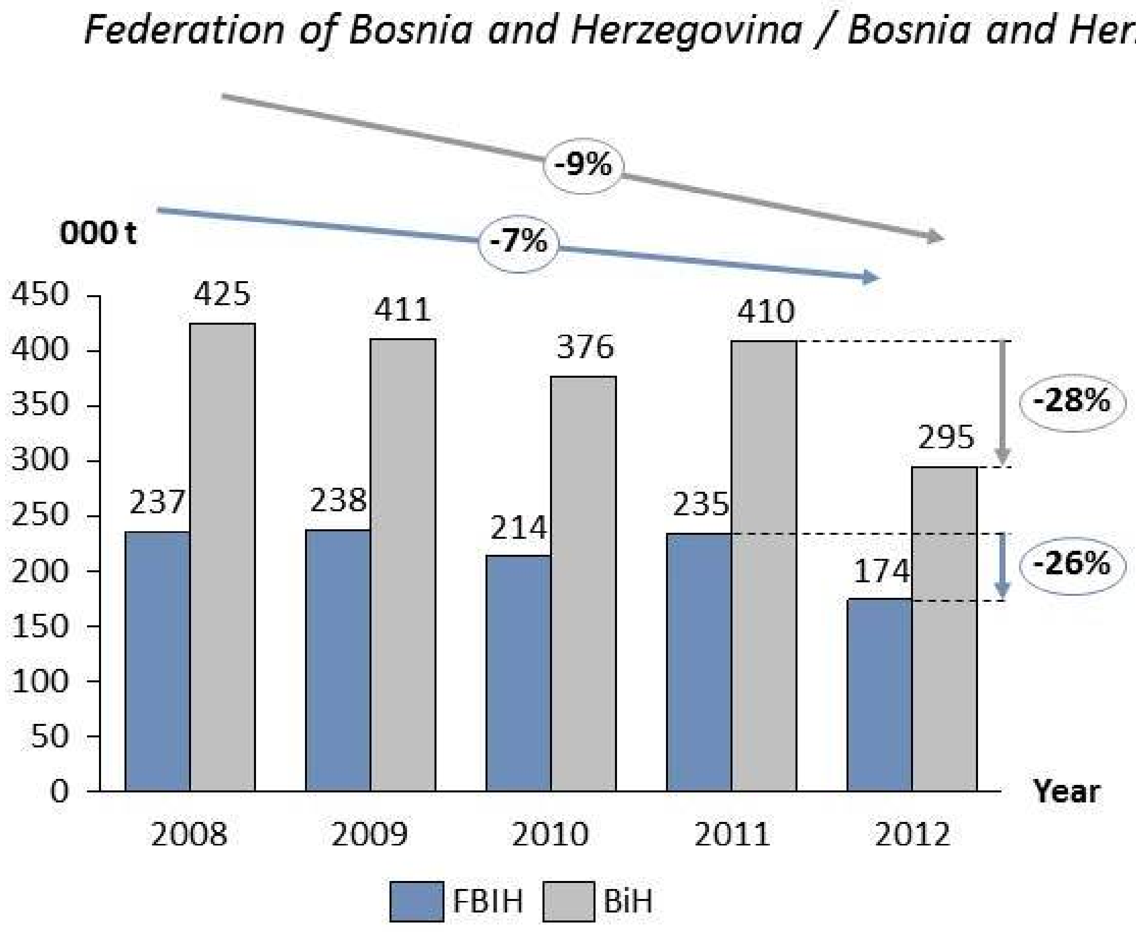
Country	Year	Size (000 t)	Growth
Romania	2009/2008	4004/3649	↑ 10%
	2010/2009	3284/4004	↓ -18%
	2011/2010	4077/3284	↑ 24%
	2012/2011	2465/4077	↓ -40%
	AVG. 2012/2008		↓ -9%
Serbia	2009/2008	898/844	↑ 6%
	2010/2009	887/898	↓ -1%
	2011/2010	892/887	↑ 0%
	2012/2011	578/892	↓ -35%
	AVG. 2012/2008		↓ -9%
Albania	2009/2008	200/190	↑ 5%
	2010/2009	208/200	↑ 4%
	2011/2010	230/208	↑ 11%
	2012/2011	233/230	↑ 1%
	AVG. 2012/2008		↑ 5%
Bulgaria	2009/2008	232/353	↓ -34%
	2010/2009	251/232	↑ 8%
	2011/2010	232/251	↓ -7%
	2012/2011	194/232	↓ -16%
	AVG. 2012/2008		↓ -14%
Macedonia	2009/2008	207/191	↑ 8%
	2010/2009	202/207	↓ -2%
	2011/2010	194/202	↓ -4%
	2012/2011	170/194	↓ -12%
	AVG. 2012/2008		↓ -3%
Croatia	2009/2008	270/256	↑ 6%
	2010/2009	179/270	↓ -34%
	2011/2010	168/179	↓ -6%
	2012/2011	151/168	↓ -10%
	AVG. 2012/2008		↓ -12%
Montenegro	2009/2008	156/134	↑ 17%
	2010/2009	149/156	↓ -5%
	2011/2010	180/149	↑ 21%
	2012/2011	133/180	↓ -26%
	AVG. 2012/2008		↓ 0%
BiH	2009/2008	414/429	↓ -3%
	2010/2009	379/414	↓ -8%
	2011/2010	413/379	↑ 9%
	2012/2011	300/413	↓ -27%
	AVG. 2012/2008		↓ -9%

International Demand[V] (avg. 2008-2011)

Country	Size (t)	Growth
Russian Federation	760.558	↑ 40%
Netherlands	1.234.995	↑ 6%
Belgium	1.346.584	↑ 3%
Spain	725.272	↓ -4%
Germany	586.615	↑ 8%
Italy	623.540	↑ 1%
United States of America	466.447	↓ -3%
France	411.246	↓ -5%
Portugal	290.837	↓ -2%
United Kingdom	324.851	↓ -19%
Canada	219.943	↑ 17%
Poland	177.190	↑ 42%
Greece	151.753	↑ 8%
Malaysia	155.631	↑ 10%
Kazakhstan	108.005	↑ 48%
Czech Republic	122.315	↑ 23%
Egypt	106.250	↑ 21%
Sri Lanka	115.858	↑ 9%
Nepal	76.010	↑ 41%
Austria	104.960	↑ 3%
Algeria	112.929	↓ -1%
Denmark	87.504	↑ 7%
Lebanon	96.897	↑ 3%
Mexico	85.855	↑ 12%
Romania	64.434	↑ 20%
Viet Nam	71.331	↑ 7%
Indonesia	32.533	↑ 114%
Senegal	72.259	↑ 3%
Slovakia	57.695	↑ 23%
Sweden	66.656	↓ -2%

I source: Statistics institute Republika Srpska, Statistics institute Federation BiH / Link - Chart name: *Production of potatoes*
II source: Indirect Taxation Authority of BiH / Link - Chart name: *Export of potatoes in 000€*
III source: Indirect Taxation Authority of BiH
IV source: FAOSTAT and Uncomtrade / Link - Chart name: *Competition for production of potatoes – Regional countries production charts*
V source: FAOSTAT and Uncomtrade / Link - Chart name: *International Demand for potatoes*

Production of potato

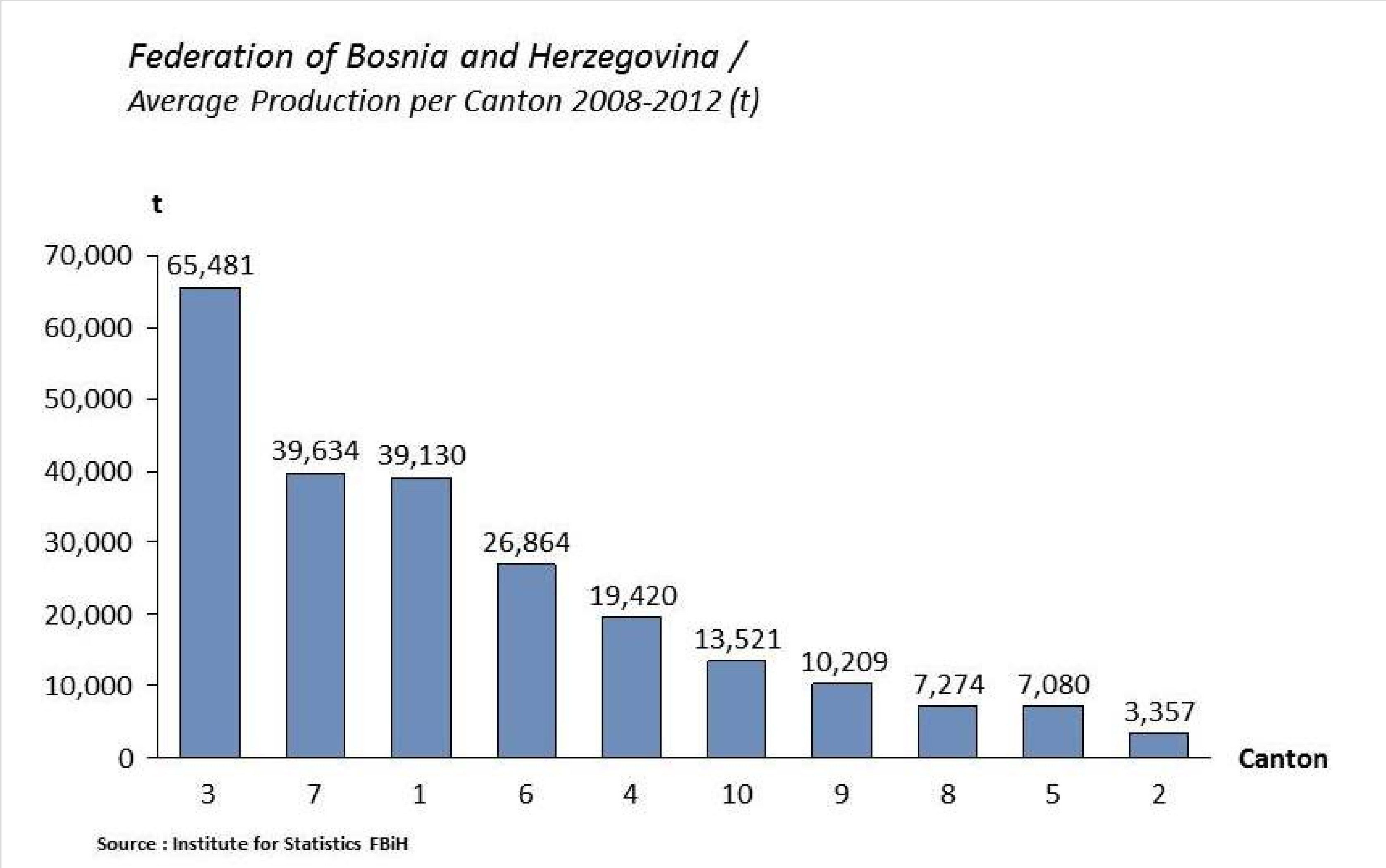


- Significant production decrease in 2012 for 26% (2012/2011) due to bad weather conditions (dry season)
- Stable production in 2009-2011
- Average annual growth rate is negative (2012/2008 for FBIH is -7% and for BiH is -9%)

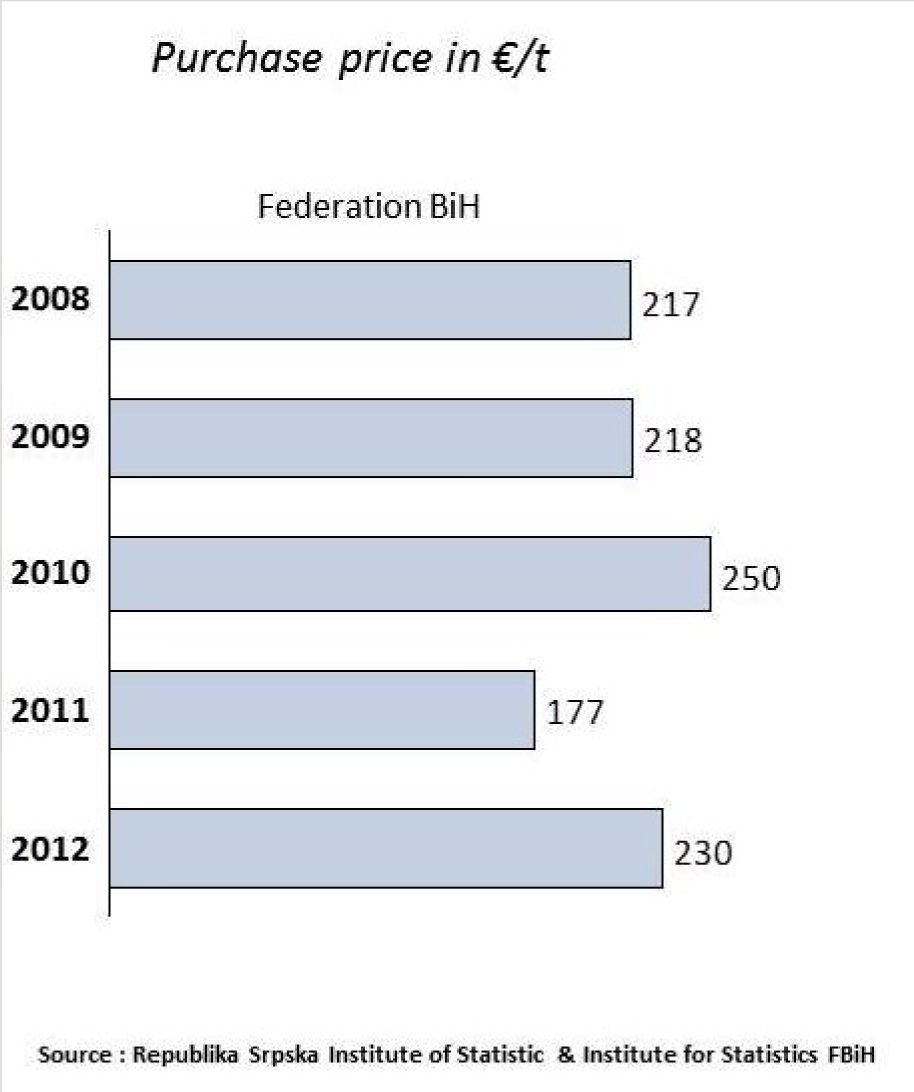
Source : Statistical yearbook s2013 – Republika Srpska Institute of Statistic & Institute for Statistics FBiH

* Production of fresh potato showed in 000 tones

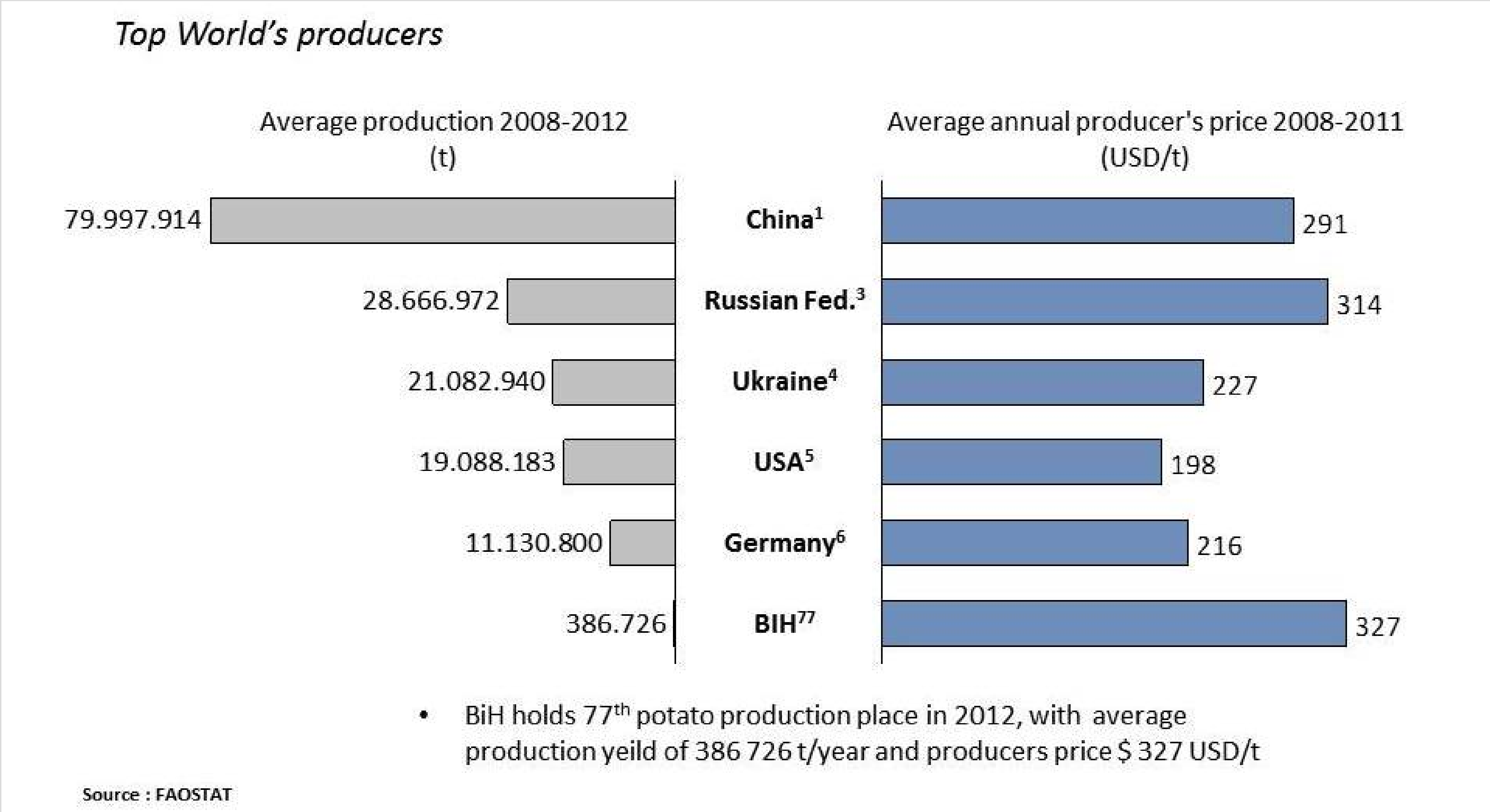
Production of potato per Canton



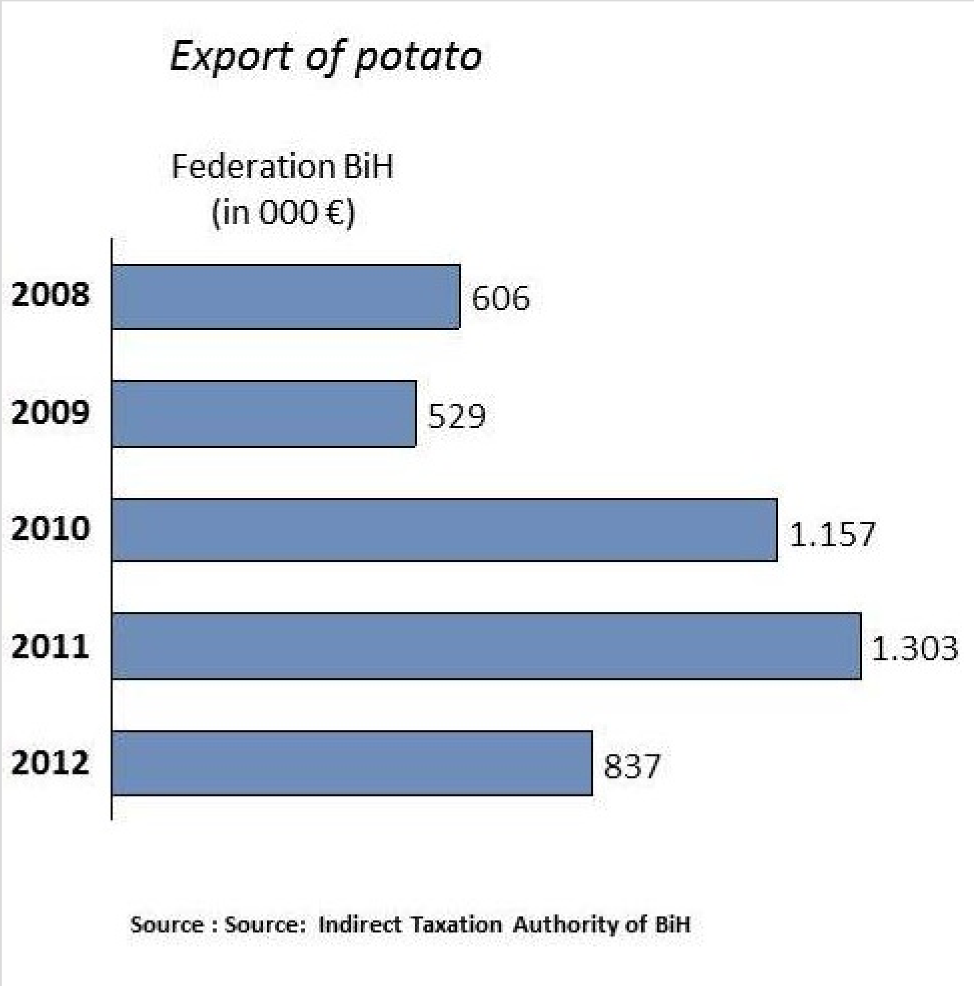
Production of potato – purchase price



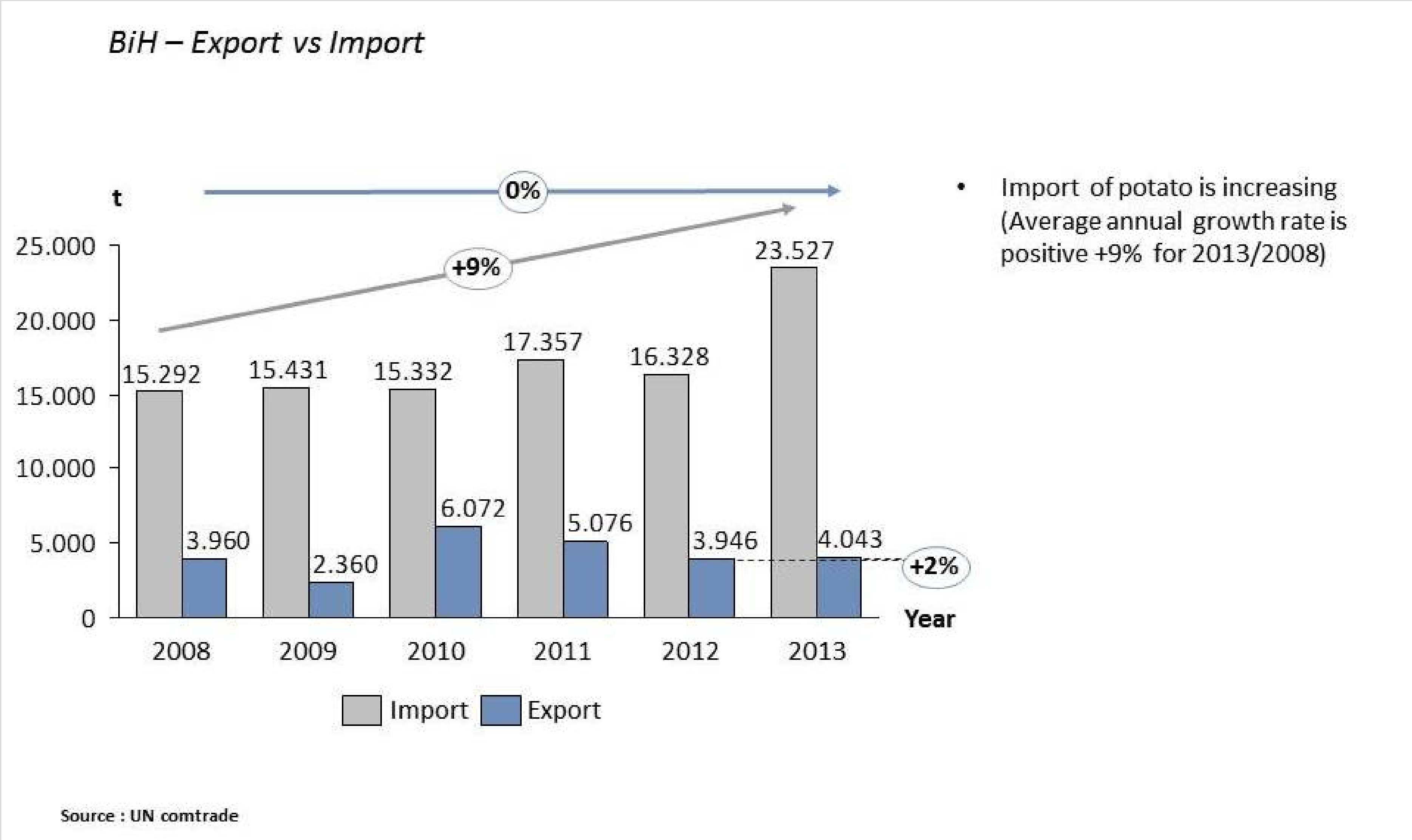
Production of potato – top world's producers



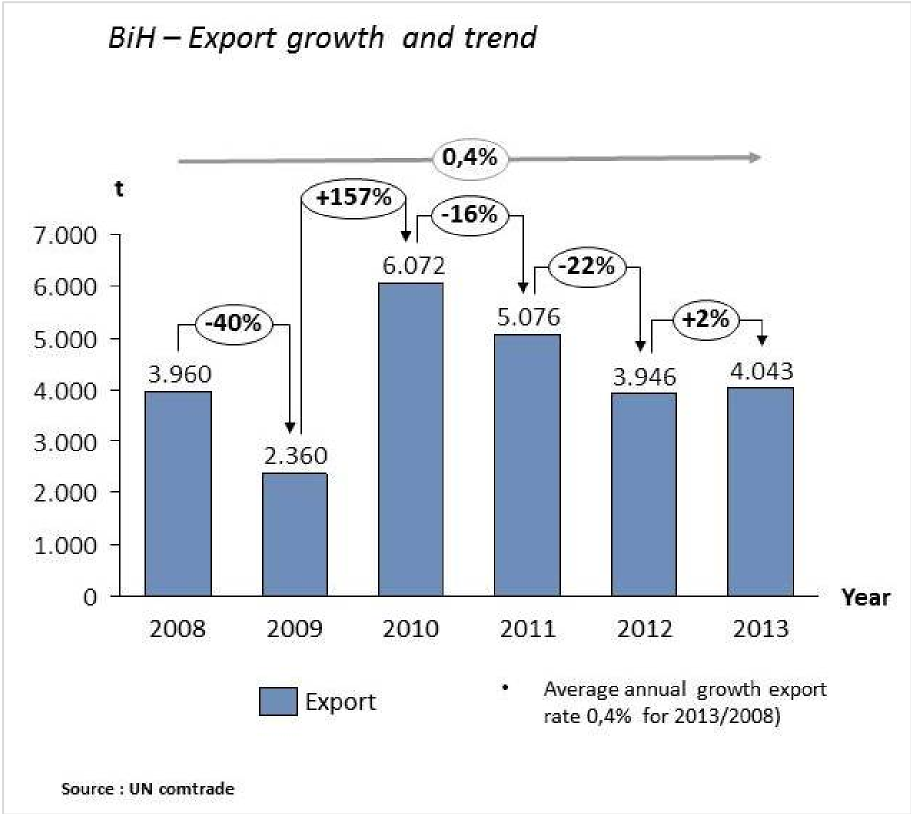
Export of potato in 000 €

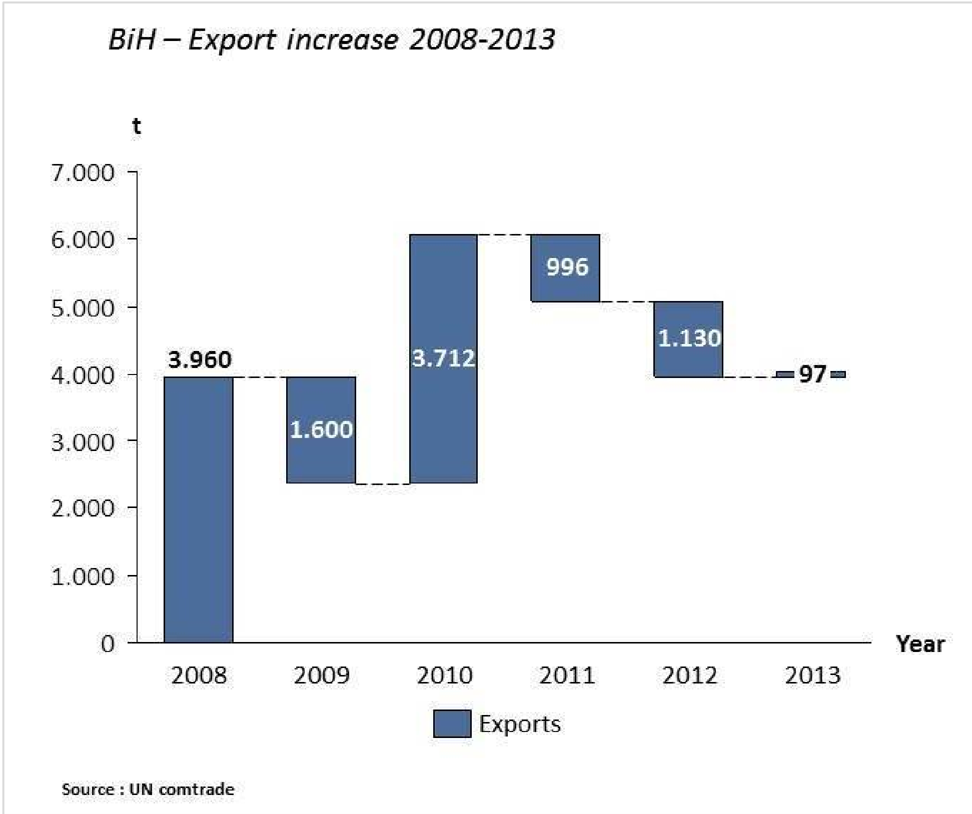


Export vs Import of potato

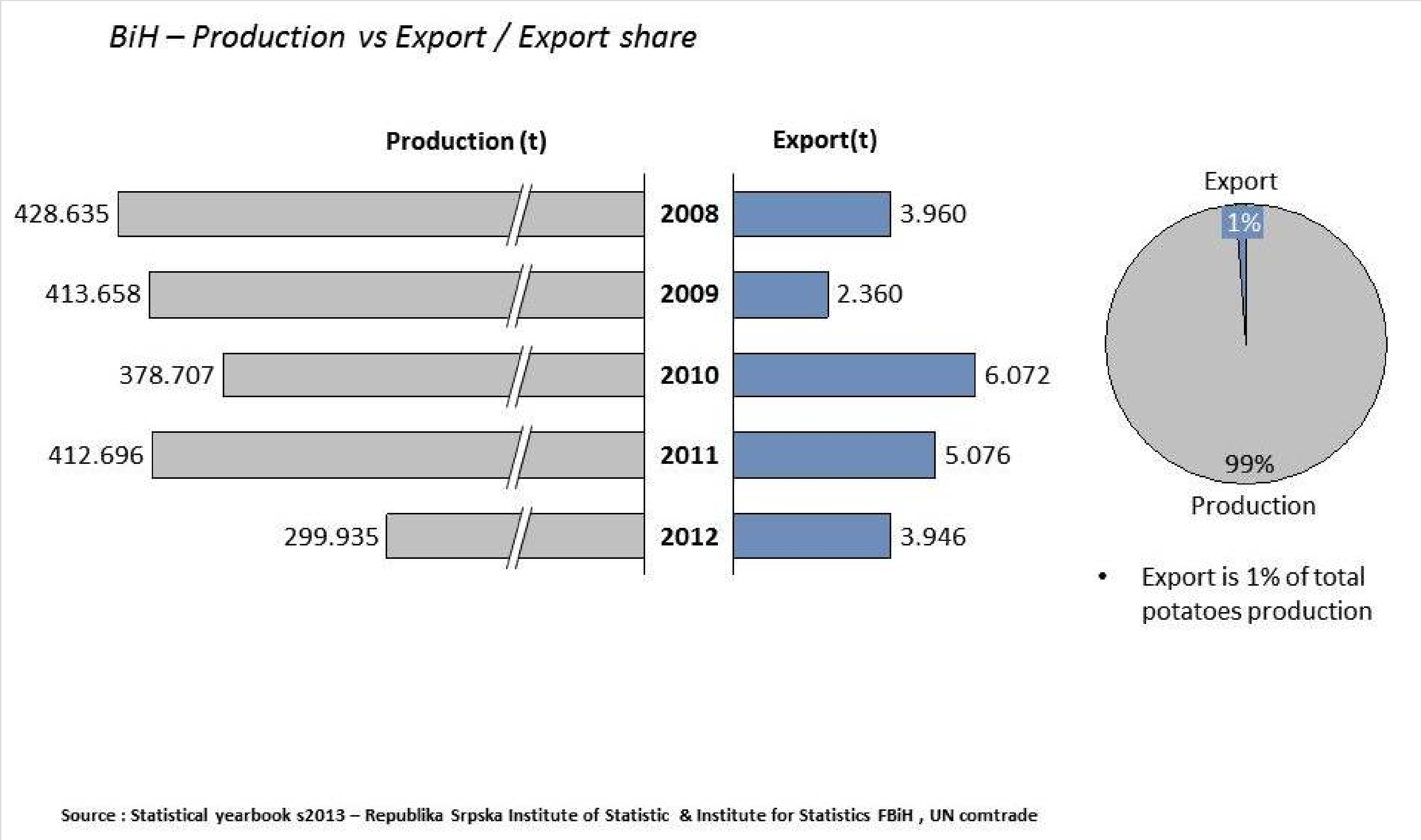


Export of potatoes growth and trend

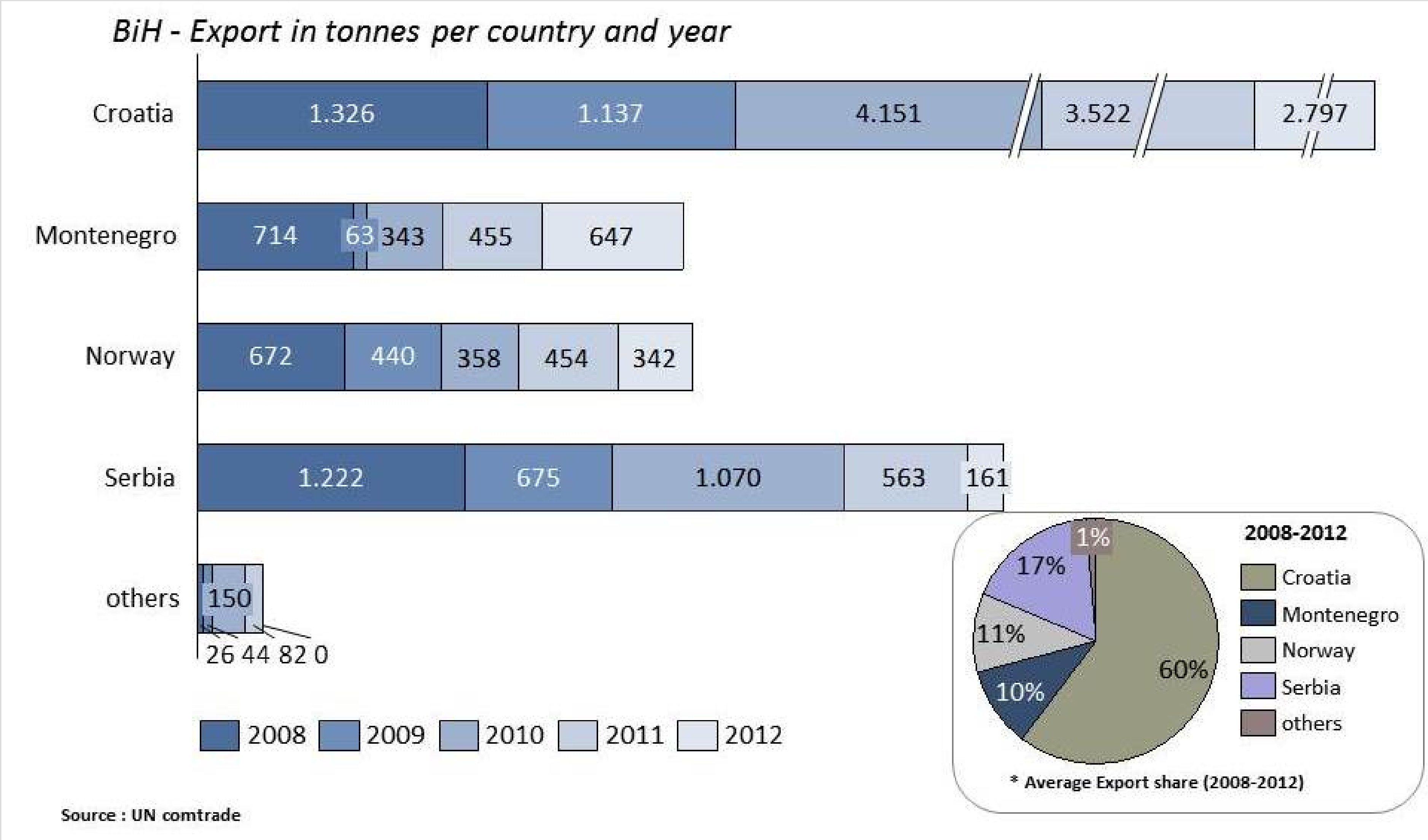




Export vs Production of potato



Key markets - Export of potatoes per country



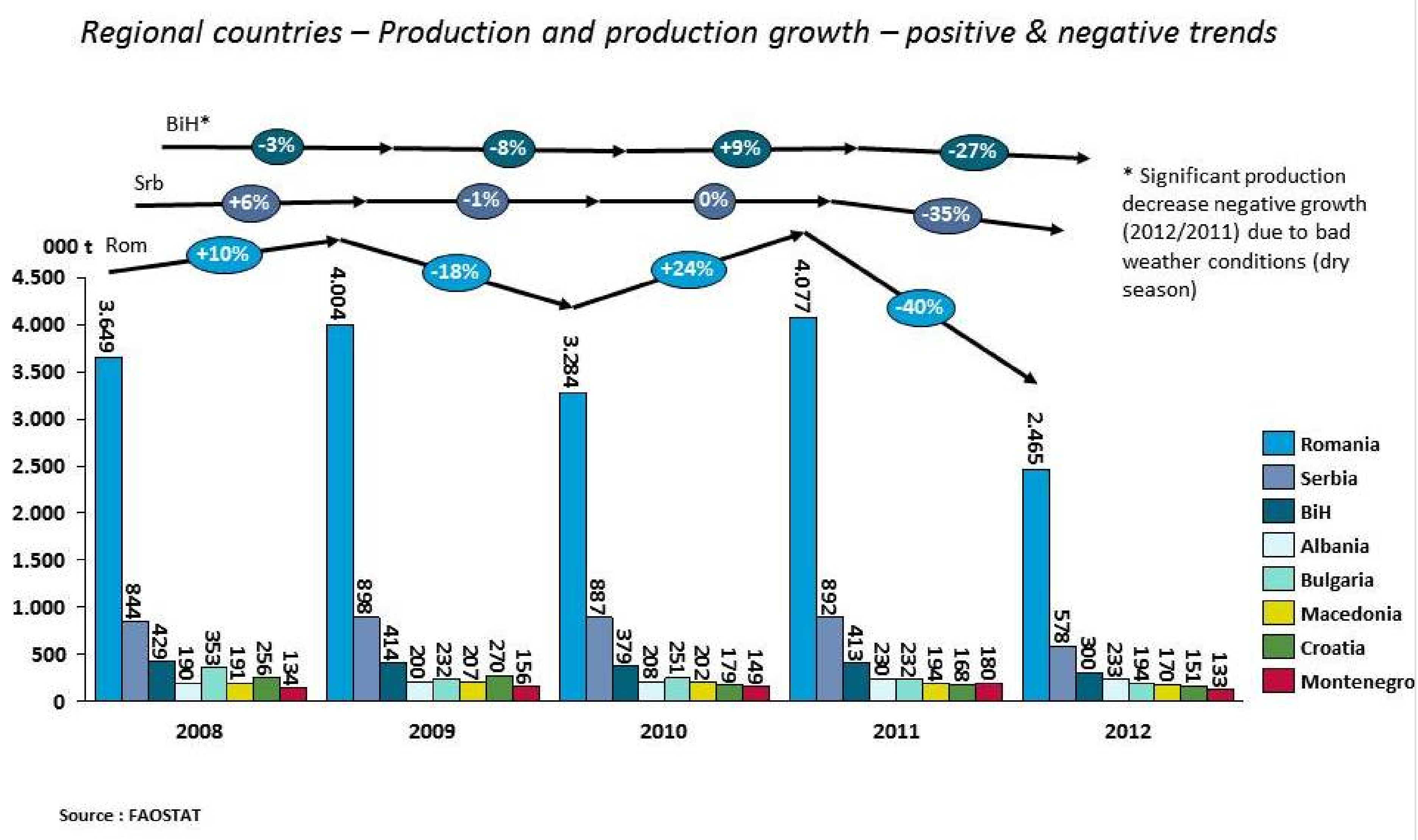
Competition for production of potatoes – Regional countries production

Regional countries – average production 2008-2012 (t)

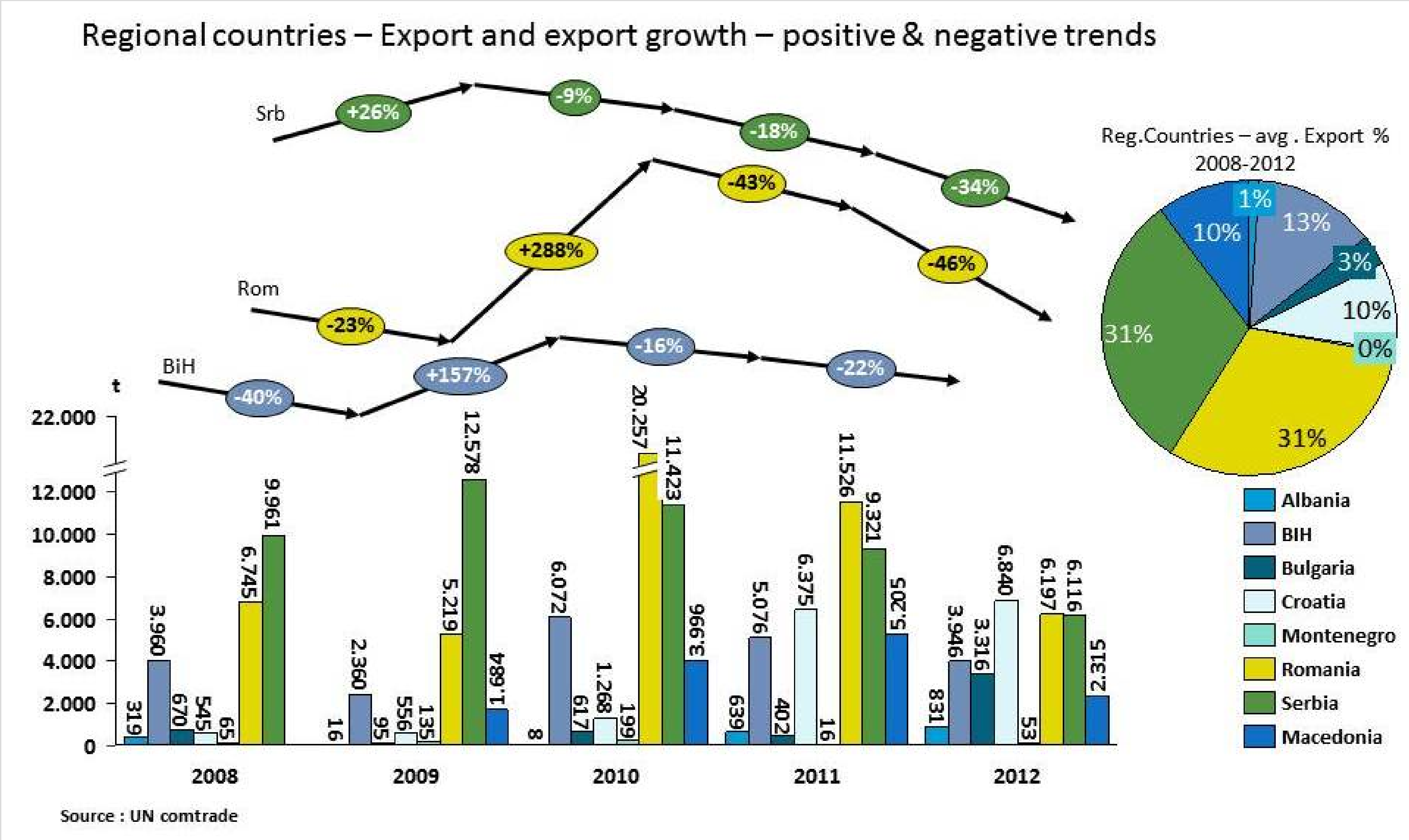
Regional Country & world's prod. place	Av. Prod. 2008-2012 (t)
Romania[27]	3.495.717
Serbia[59]	819.734
BiH[77]	386.726
Albania[84]	212.220
Bulgaria[90]	252.481
Macedonia[92]	192.883
Croatia[94]	204.644
Montenegro[98]	150.508

Source : FAOSTAT

Competition for production of potatoes – Regional countries production charts

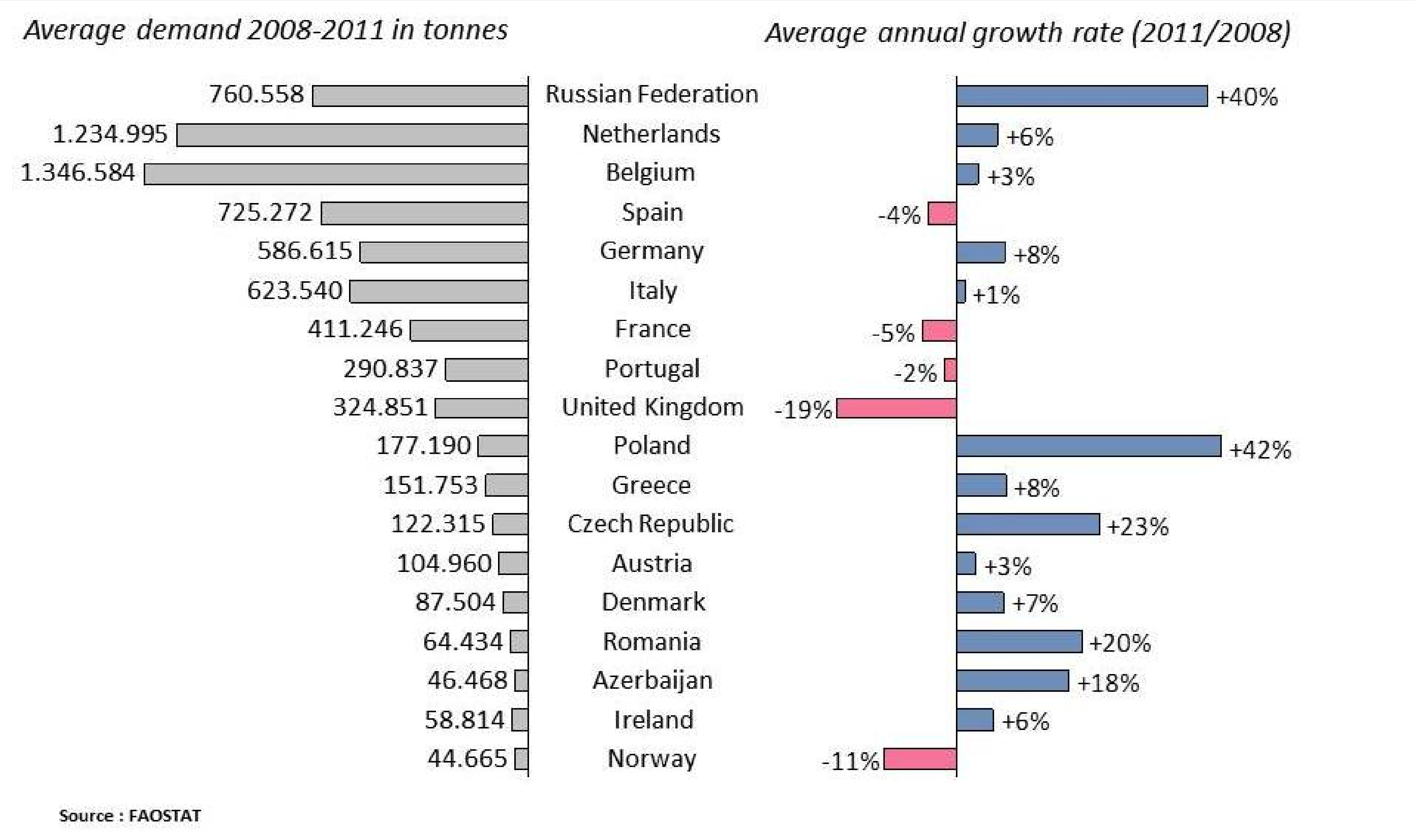


Competition for production of potatoes – Regional countries export to the World



* Serbia and Romania are sharing first Balkan's export country place with 31% of total export Balkan countries share each. (2008-2012)

International Demand for potatoes



CABBAGE

Statistical analysis showed that cabbage is the strategic key product for the FBIH and BiH. Production of cabbage has an equable production in the reporting period 2008-2012. The biggest cabbage production area in the RS is in Bijeljina municipality, while in FBiH is in Herzegovina - Neretva Canton. BiH holds the 59th place world cabbage producers. The purchase price of cabbages is very good in comparison with other countries / producers.

Export of cabbage is raising, so, for the reference period 2012/2008, we have an increase in the average growth rate of + 15 %.

The most important markets are : Serbia , Slovenia , Romania and Croatia , which for the reference period 2008-2012 makes 68 % percent of the BiH market . Our biggest competitors in the region are Serbia, Macedonia and Romania with several times higher production of cabbage. Serbia and Romania have production decrease due to bad weather in 2012, but also the export of cabbage (similar to BiH).

The largest regional exporter of cabbage is Macedonia, which has a share of 80 % of the total share exports of the Balkan countries (Romania , Bosnia, Serbia , Croatia , Macedonia , Montenegro , Albania and Bulgaria) .

International demand for cabbage is great, while particular interest have Russian Federation, United Kingdom , Germany and the Netherlands.

Cabbage – market opportunity

Segment/ Product	Production Size[I] -FBIH			Exports[II] -FBIH		
	Year	Tons (000 t)	Growth	Year	Euro (000 €)	Growth
Cabbage	2009/2008	49,5/54,3	↓ -9%	2009/2008	34/59	↓ -42%
	2010/2009	48,7/49,5	↓ -1,7%	2010/2009	47/34	↑ 37%
	2011/2010	45,3/48,7	↓ -7%	2011/2010	205/47	↑ 336%
	2012/2011	30,2/45,3	↓ -33%	2012/2011	104/205	↓ -49%
	AVG. 2012/2008		↓ **-14%**	**AVG. 2012/2008**		↑ **15,2%**

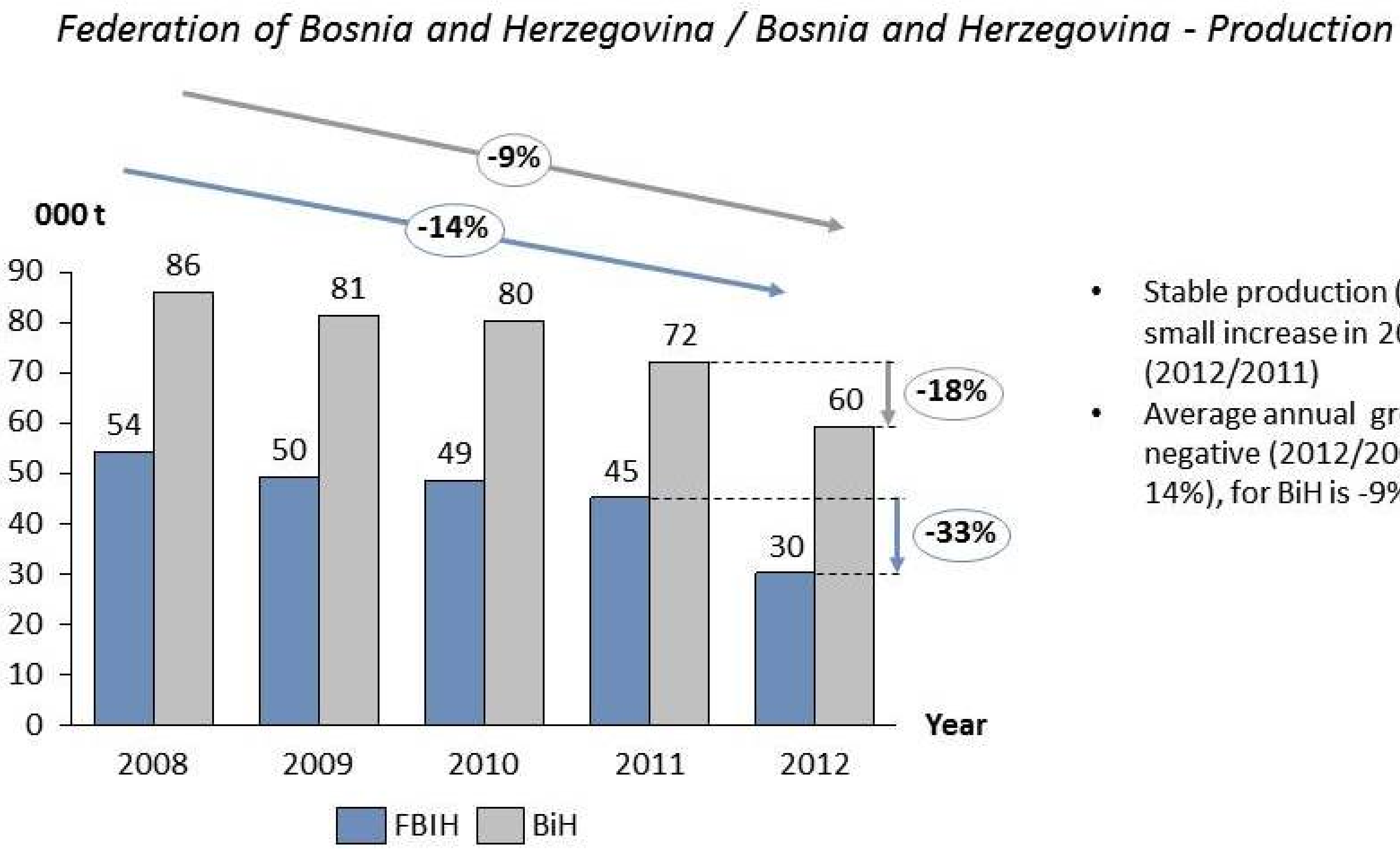
Key markets - name sofictication[III]-FBIH			
Country	Year	Euro (000 €)	Growth
Croatia	2009/2008	34,3/58,3	↓ -41%
	2010/2009	46,5/34,3	↑ 36%
	2011/2010	101,2/46,5	↑ 118%
	2012/2011	104,3/101,2	↑ 3%
	VG. 2012/2008		↑ 16%
Other countries	2009/2008	0/1	↓ -100%
	2010/2009	no data	no data
	2011/2010	103,8/0,5	↑ 20200%
	2012/2011	0/103,8	↓ -100%
	AVG. 2012/2008		↓ -100%

Competition for production/processing [IV]			
Country	Year	Size (000 t)	Growth
Romania	2009/2008	1004/968	↑ 4%
	2010/2009	984/1004	↓ -2%
	2011/2010	1028/984	↑ 4%
	2012/2011	990/1028	↓ -4%
	AVG. 2012/2008		↑ 1%
Serbia	2009/2008	326/301	↑ 9%
	2010/2009	337/326	↑ 3%
	2011/2010	315/337	↓ -6%
	2012/2011	266/315	↓ -16%
	AVG. 2012/2008		↓ -3%
Macedonia	2009/2008	112/94	↑ 19%
	2010/2009	149/112	↑ 33%
	2011/2010	143/149	↓ -4%
	2012/2011	129/143	↓ -10%
	AVG. 2012/2008		↑ 8%
Croatia	2009/2008	67/51	↑ 32%
	2010/2009	37/67	↓ -45%
	2011/2010	39/37	↑ 6%
	2012/2011	23/39	↓ -41%
	AVG. 2012/2008		↓ -18%
Bulgaria	2009/2008	39/65	↓ -39%
	2010/2009	79/39	↑ 100%
	2011/2010	45/79	↓ -43%
	2012/2011	47/45	↑ 6%
	AVG. 2012/2008		↓ -8%
Montenegro	2009/2008	50/47	↑ 6%
	2010/2009	56/50	↑ 11%
	2011/2010	54/56	↓ -3%
	2012/2011	47/54	↓ -13%
	AVG. 2012/2008		↓ 0%
Albania	2009/2008	27/30	↓ -12%
	2010/2009	36/27	↑ 34%
	2011/2010	45/36	↑ 27%
	2012/2011	47/45	↑ 3%
	AVG. 2012/2008		↑ 11%
BiH	2009/2008	82/86	↓ -5%
	2010/2009	81/82	↓ -1%
	2011/2010	72/81	↓ -10%
	2012/2011	62/72	↓ -14%
	AVG. 2012/2008		↓ -8%

International Demand [V] (avg. 2008-2011)		
Country	Size (t)	Growth
China Hong Kong SAR	346.062	↑ 12%
Russian Fed.	245.232	↑ 10%
USA	224.910	↑ 13%
Germany	224.061	↑ 3%
Canada	224.759	↑ 4%
United Kingdom	166.524	↑ 5%
Netherlands	97.709	↑ 17%
Malaysia	112.737	↑ 10%
France	87.165	↑ 1%
Singapore	76.418	↑ 3%
Czech Rep.	73.955	↑ 1%
Thailand	52.675	↑ 25%
Japan	51.579	↑ 18%
Kazakhstan	30.193	↑ 73%
Belgium	47.563	↑ 2%
Slovakia	47.202	↓ 0%
El Salvador	47.954	↓ -5%
Poland	30.603	↑ 12%
Rep. of Korea	23.191	↑ 62%
Sweden	35.806	↑ 2%
Italy	32.375	↑ 14%
Azerbaijan	19.541	↑ 64%
Lithuania	34.430	↓ -24%
Denmark	29.701	↓ -10%
Ireland	21.730	↑ 8%
Switzerland	23.736	↓ -2%
Romania	16.443	↑ 25%
Austria	22.237	↓ 0%
Ukraine	13.018	↑ 27%
Norway	15.003	↑ 2%

I source: Statistics institute Republika Srpska, Statistics institute Federation BiH / Link - Chart name: *Production of cabbages*
II source: Indirect Taxation Authority of BiH / Link - Chart name: *Export of cabbages in 000€*
III source: Indirect Taxation Authority of BiH
IV source: FAOSTAT and Uncomtrade / Link - Chart name: *Competition for production of cabbages – Regional countries production charts*
V source: FAOSTAT and Uncomtrade / Link - Chart name: *International Demand for cabbages*

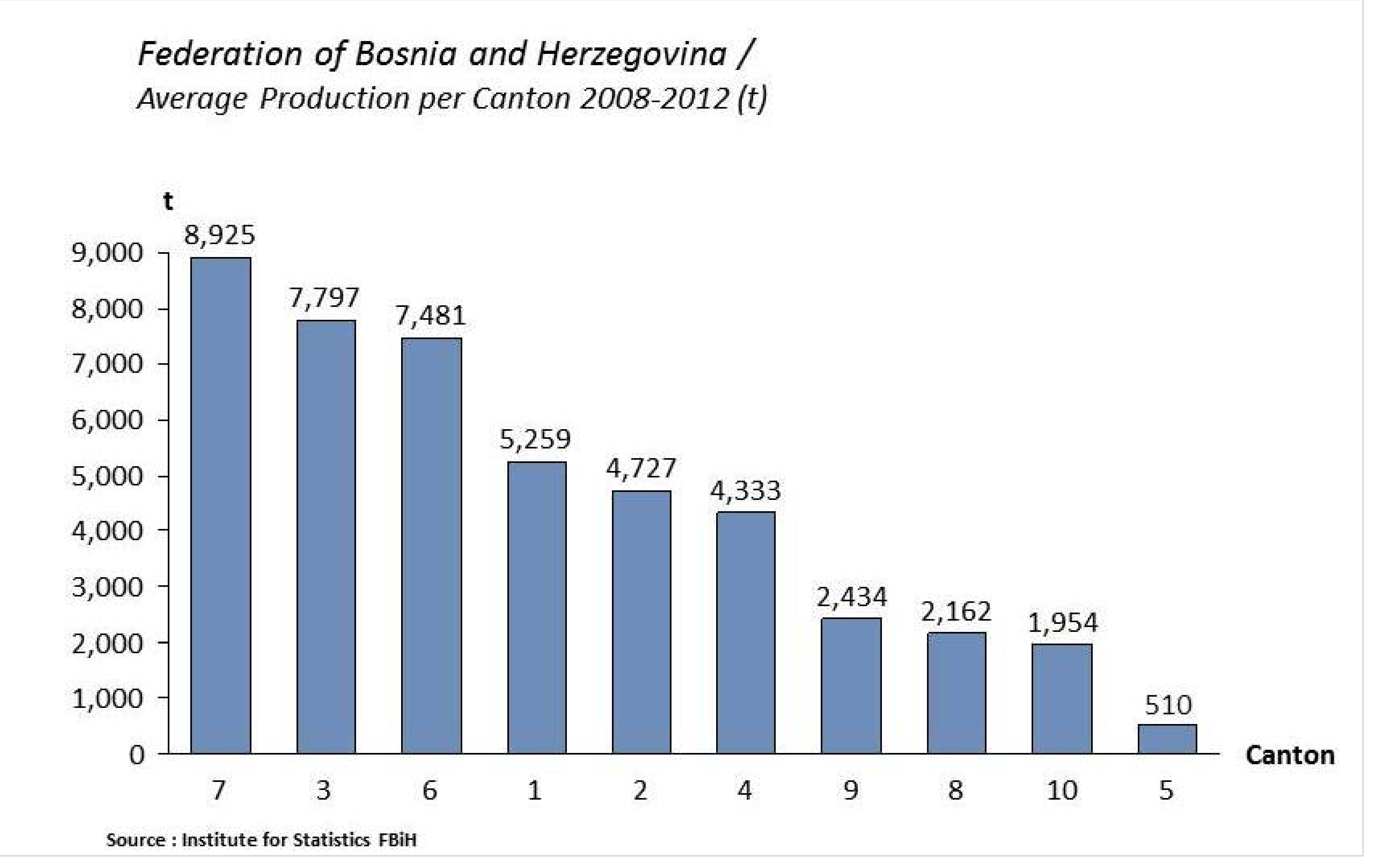
Production of cabbage



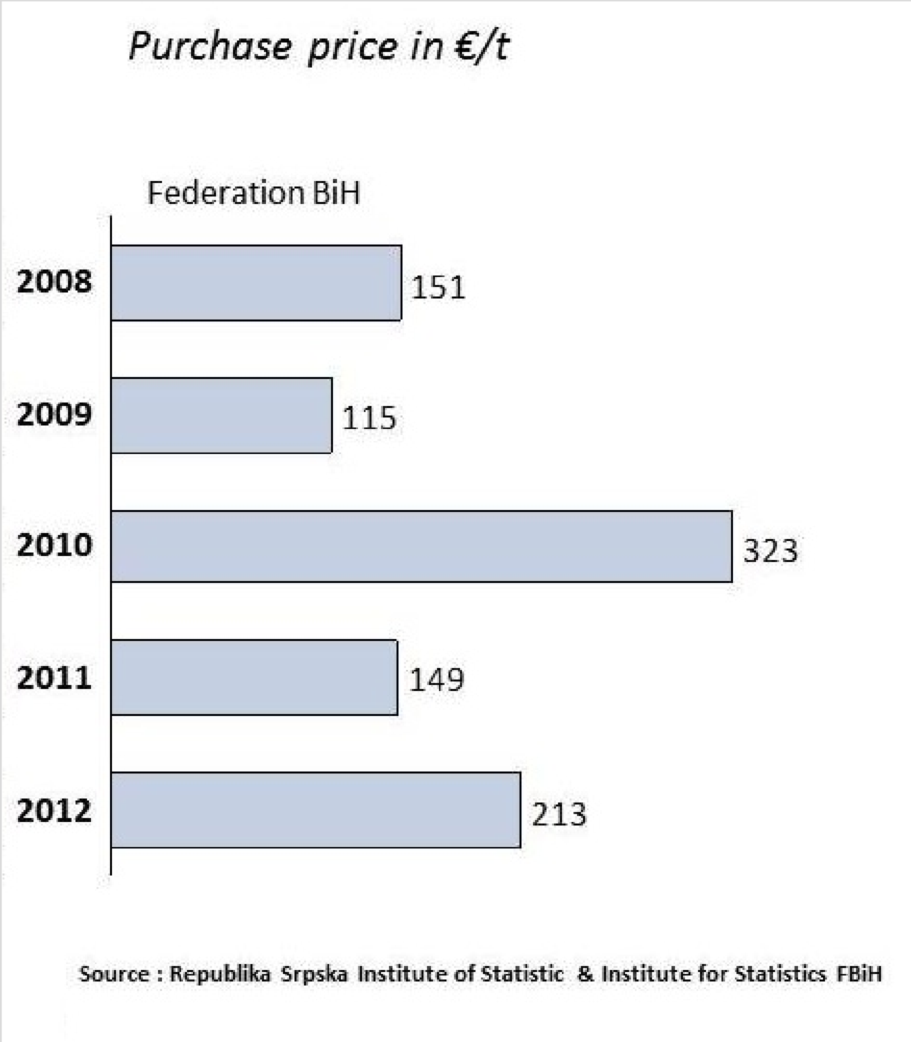
- Stable production (2008-2010), small increase in 2012 for 9% (2012/2011)
- Average annual growth rate is negative (2012/2008) for FBIH is -14%), for BiH is -9%.

Source : Statistical yearbook s2013 – Republika Srpska Institute of Statistic & Institute for Statistics FBiH

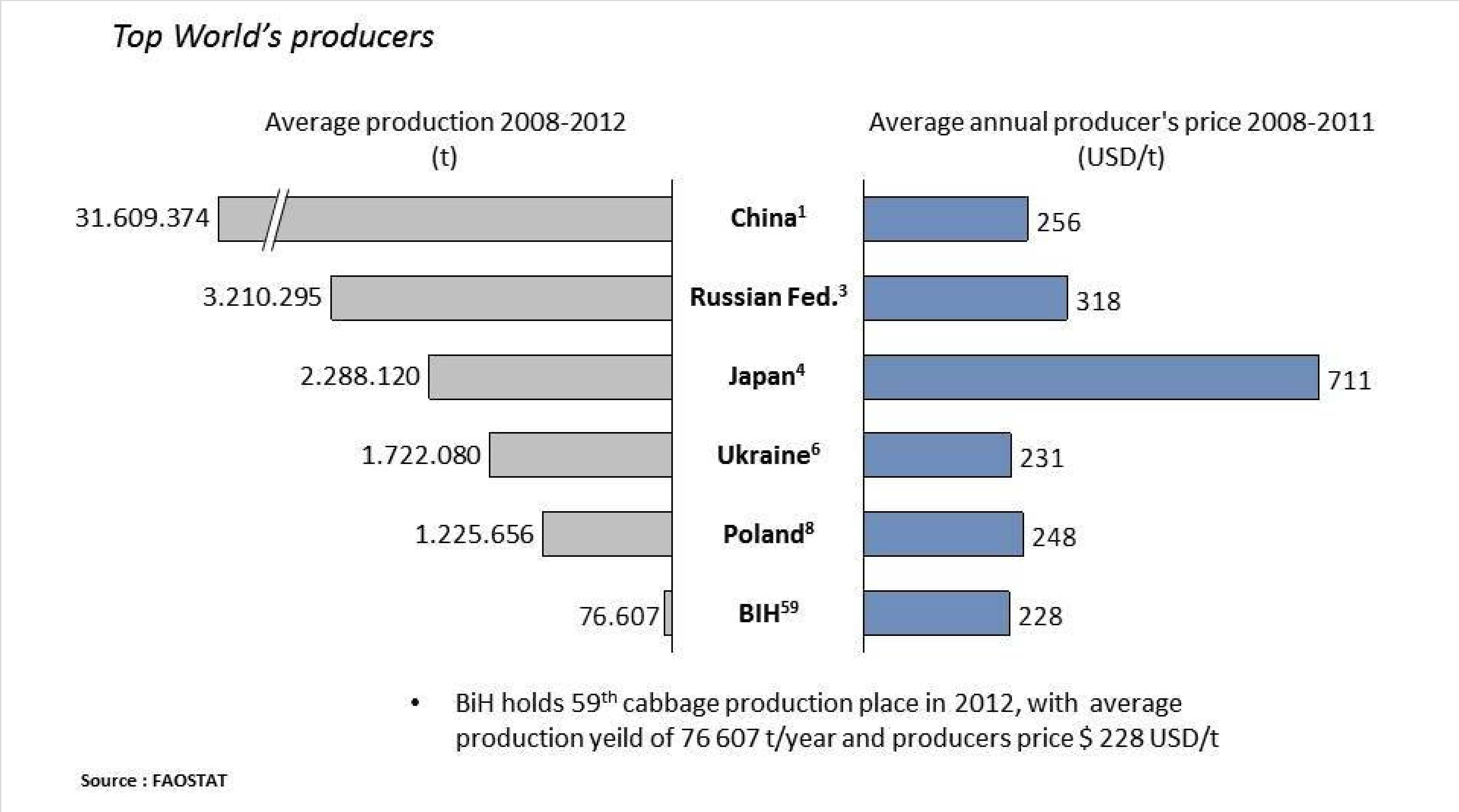
Production of cabbage per Canton



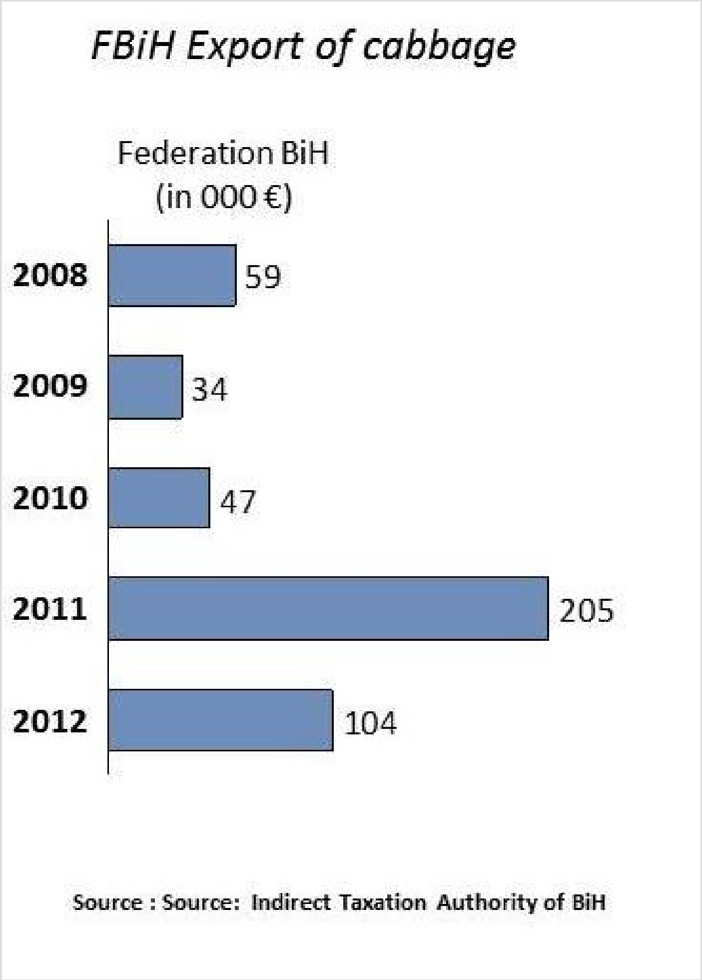
Production of cabbage – purchase price



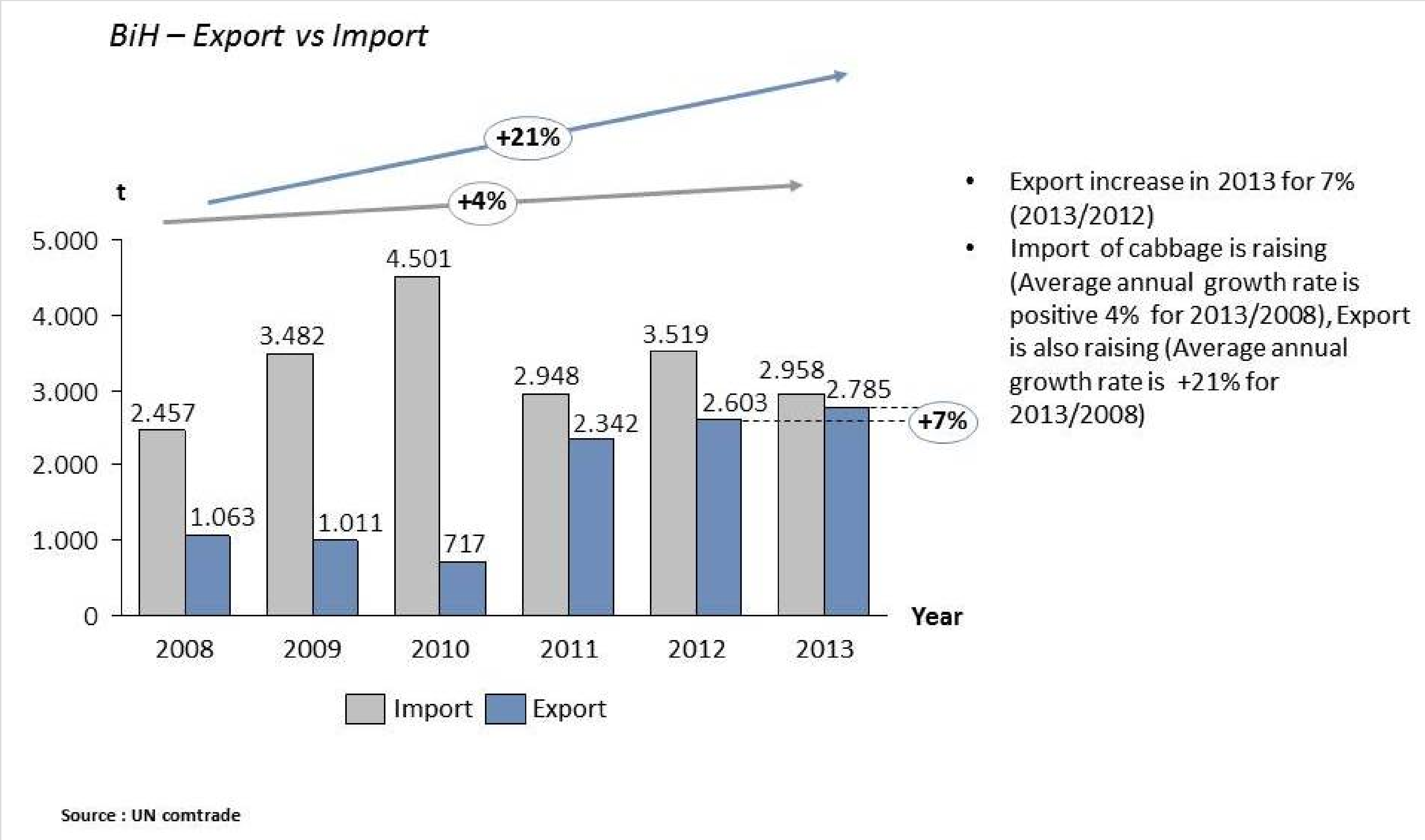
Production of cabbage – top world's producers



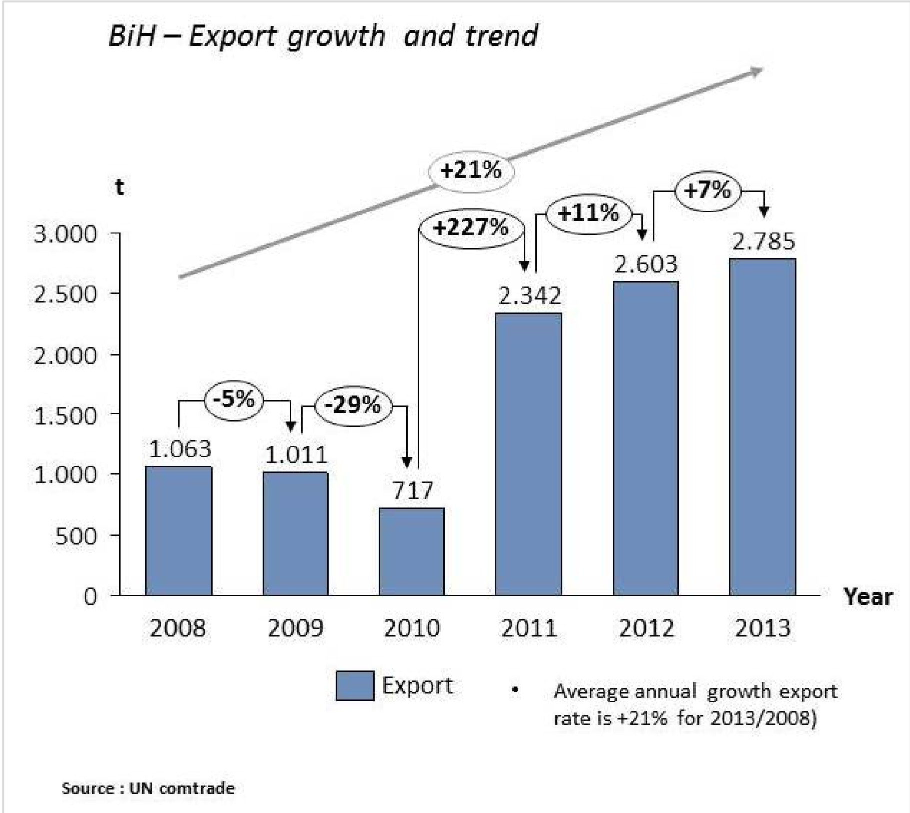
Export of cabbage in 000€



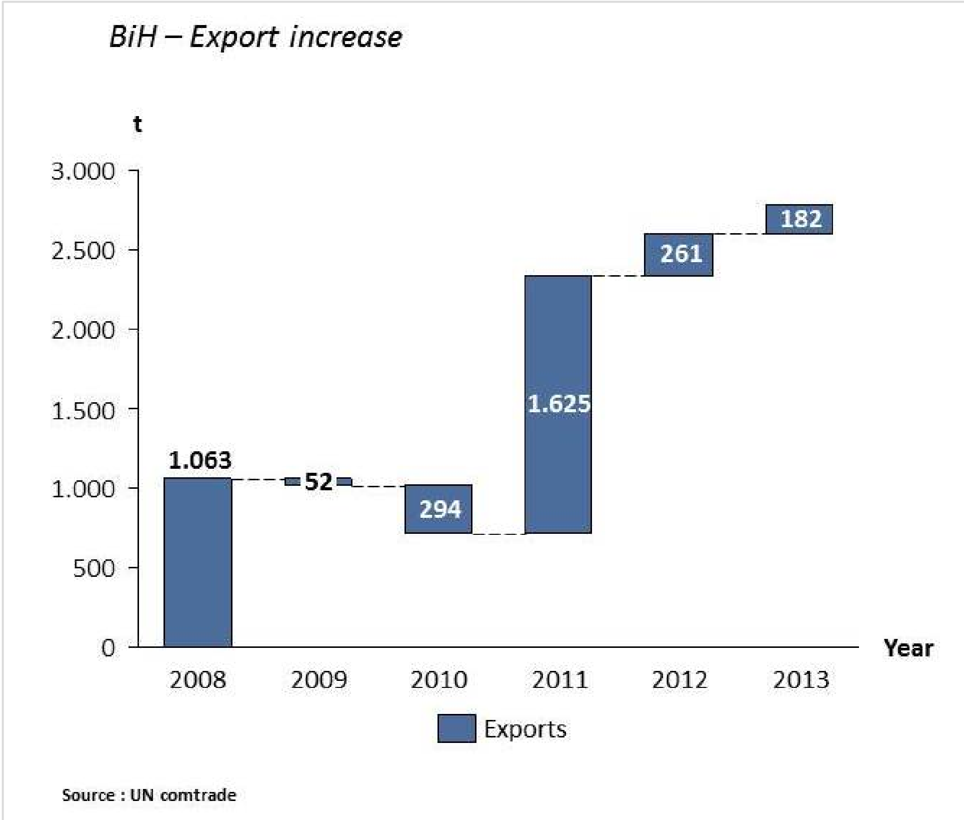
Export vs Import of cabbage



Export of cabbage growth and trend



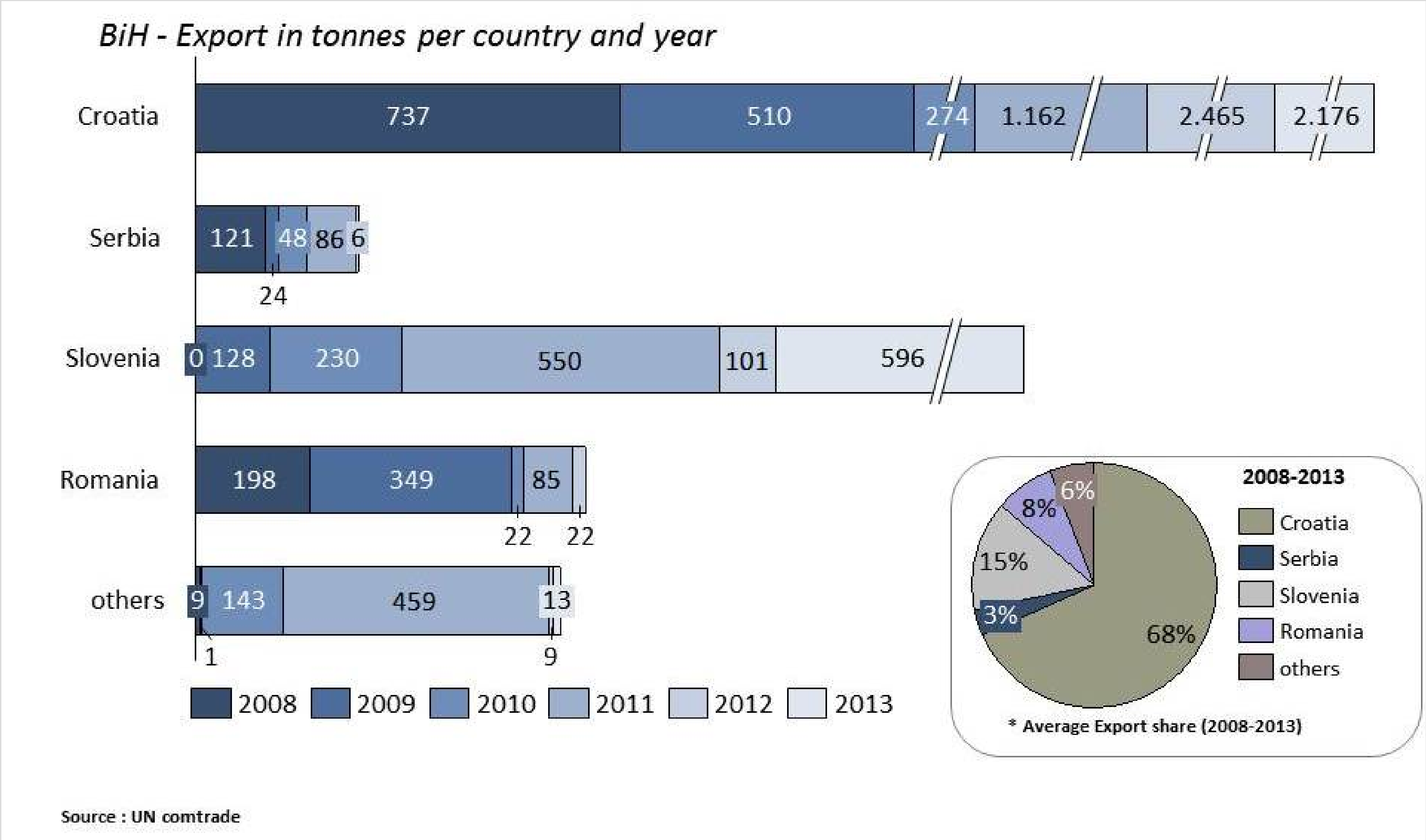
* Export per year is raising



* waterfall chart is showing increase in tons year by year

Export vs Production of cabbage

Key markets - Export of cabbage per country



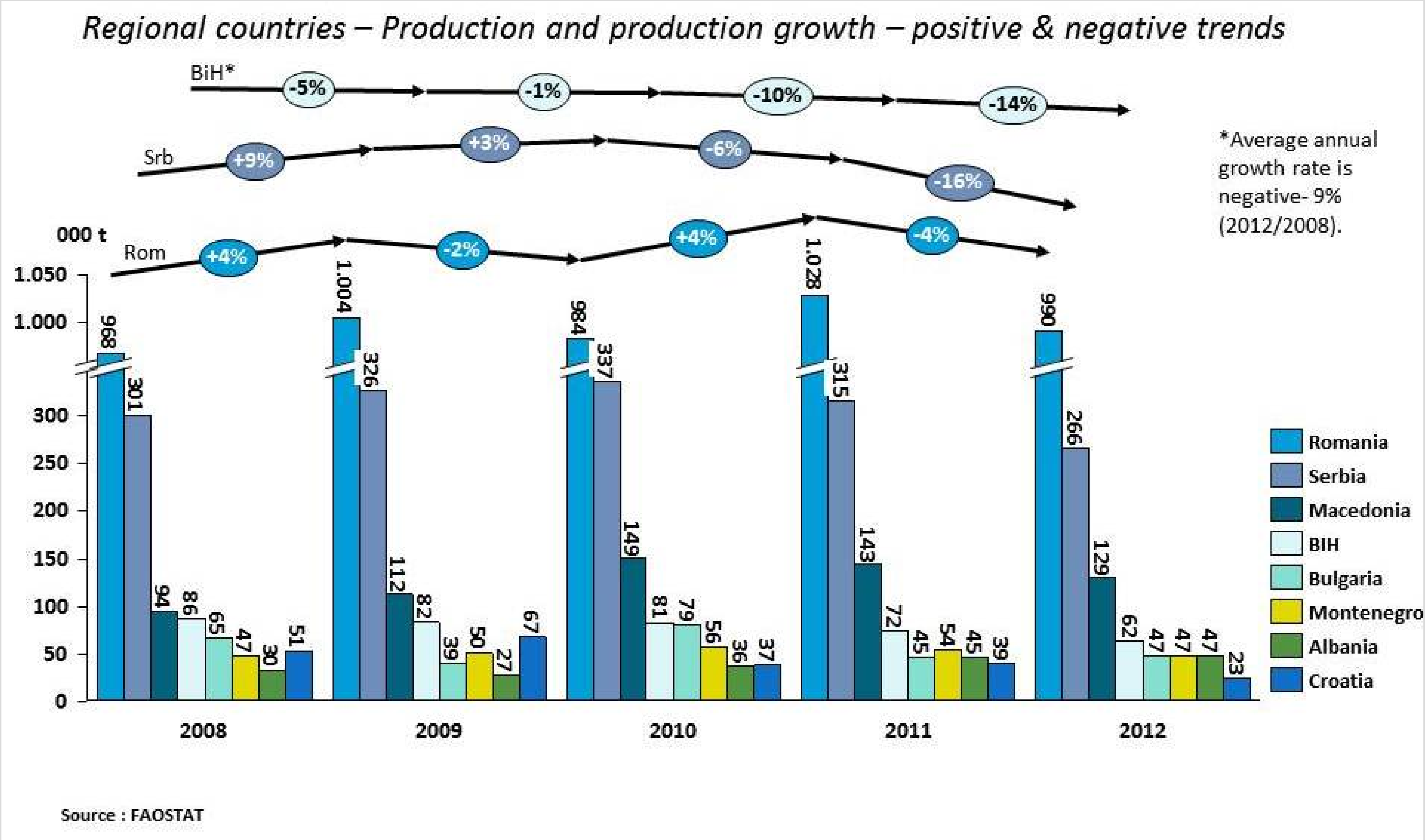
Competition for production of cabbage – Regional countries production

Regional countries – average production 2008-2012 (t)

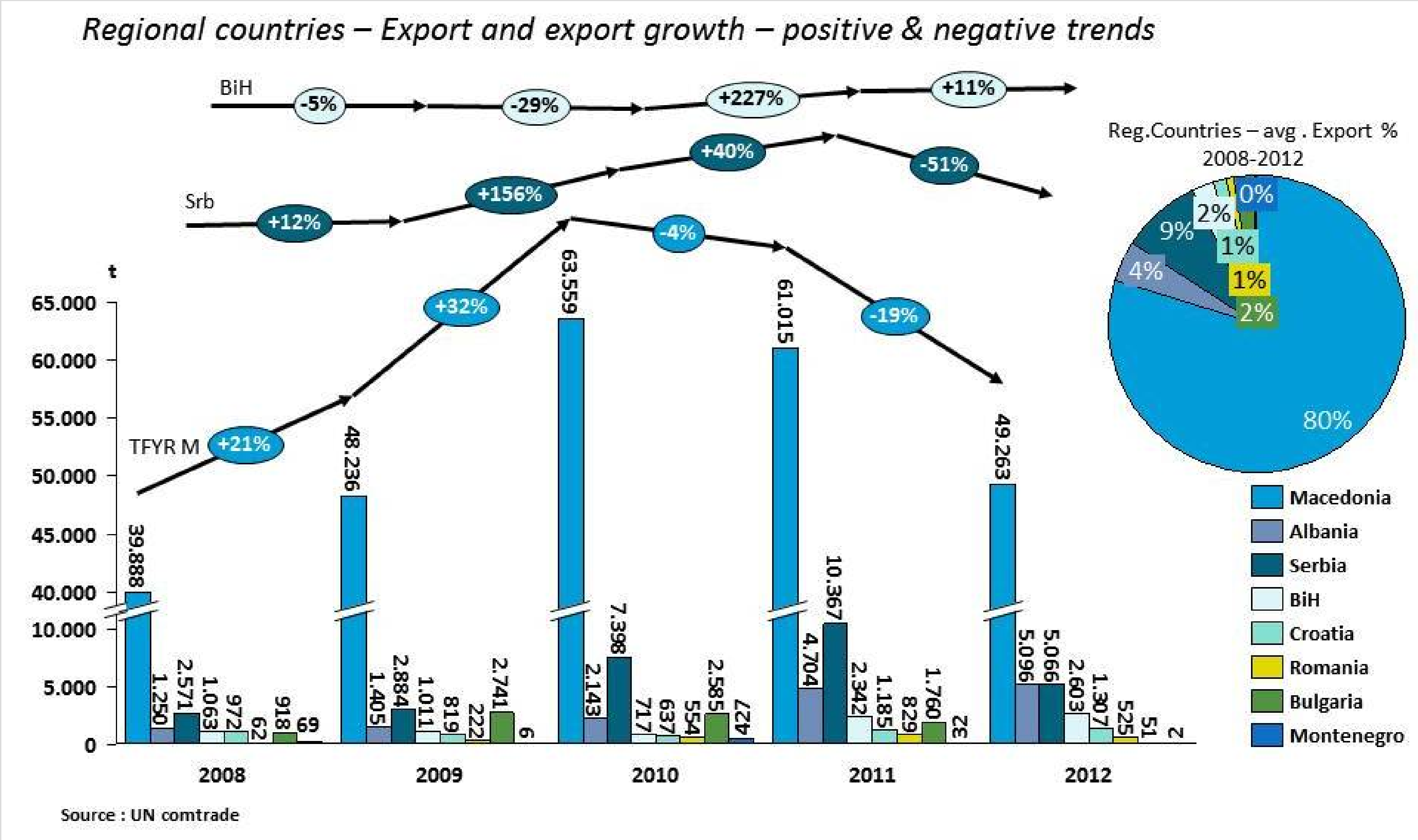
Regional Country & world's prod. place	Av. Prod. 2008-2012 (t)
Romania[9]	994.693
Serbia[26]	309.020
Macedonia[39]	125.281
BIH[59]	76.607
Bulgaria[66]	55.031
Montenegro[68]	50.656
Albania[69]	37.011
Croatia[88]	43.203

Source : FAOSTAT

Competition for production of cabbage – Regional countries production charts

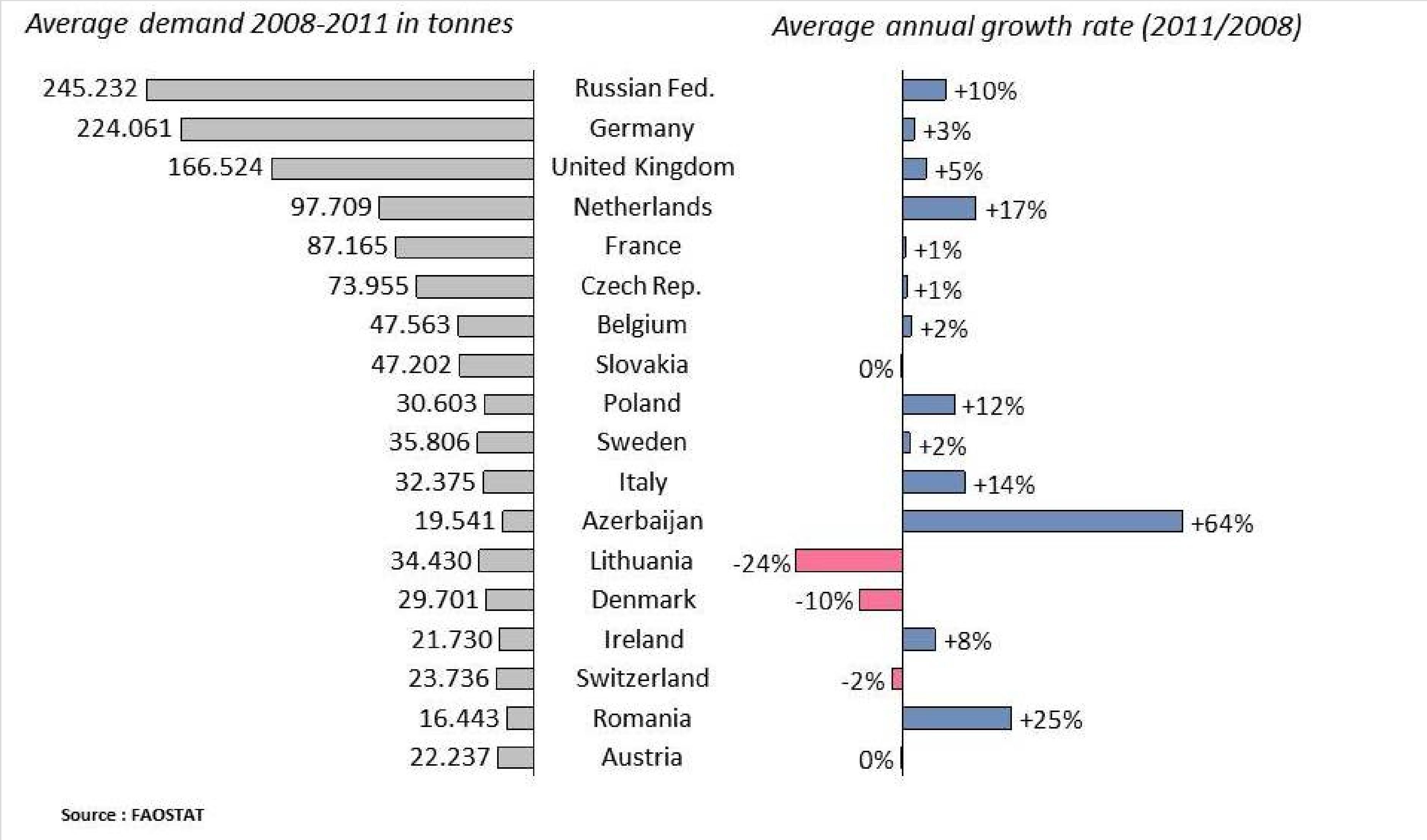


Competition for production of cabbage – Regional countries export to the World



* The very first Balkan's export country place holds Macedonia with 80% of total export Balkan countries share. (2008-2012)

International Demand for cabbage



GREEN PEPPERS

Statistical analysis showed that green pepper is the strategic key product for the FBIH and BiH. Production of green pepper has an equable production in the reporting period 2008-2012. The biggest green pepper production area in the RS is in Bijeljina municipality, while in FBiH is in Herzegovina - Neretva Canton. BiH holds the 46th place world green peppers producers. The purchase price of green peppers is very good in comparison with other countries / producers .

Despite the reduction of green peppers in 2012 year and the decline of the average growth rate of 2012/2011 of -9% in the RS , the export is increasing so that for the reference period 2012/2008 , we have an increase in the average growth rate of exports to + 27% .

The most important market is Croatia, while a smaller portion have Slovenia and Serbia. Croatia for the reference period 2008-2012, is representing 80 % percent of the BiH market . Our biggest competitors in the region are: Romania, Macedonia and Serbia with several times higher production of green peppers.

The largest regional exporters of green peppers is Macedonia, which has a share of 66 % of the total exports share of the Balkan countries (Romania, Bosnia, Serbia, Croatia, Macedonia, Montenegro, Albania and Bulgaria) .

International demand for green pepper is great, while particular interest have Germany, Netherlands, Russian Federation, France.

Green pepper – market opportunity

Segment/ Product	Production Size[I] -FBIH Year	Tons (000 t)	Growth	Exports[II] -FBIH Year	Euro (000 €)	Growth
Green Pepper	2009/2008	13,8/14	↓ -2%	2009/2008	414/130	↑ 219%
	2010/2009	13,4/13,8	↓ -2,4%	2010/2009	462/414	↑ 11%
	2011/2010	13/13,4	↓ -4%	2011/2010	499/462	↑ 8%
	2012/2011	11,8/13	↓ -9%	2012/2011	335/499	↓ -33%
	AVG. 2012/2008		↓ **-4%**	**AVG. 2012/2008**		↑ **27%**

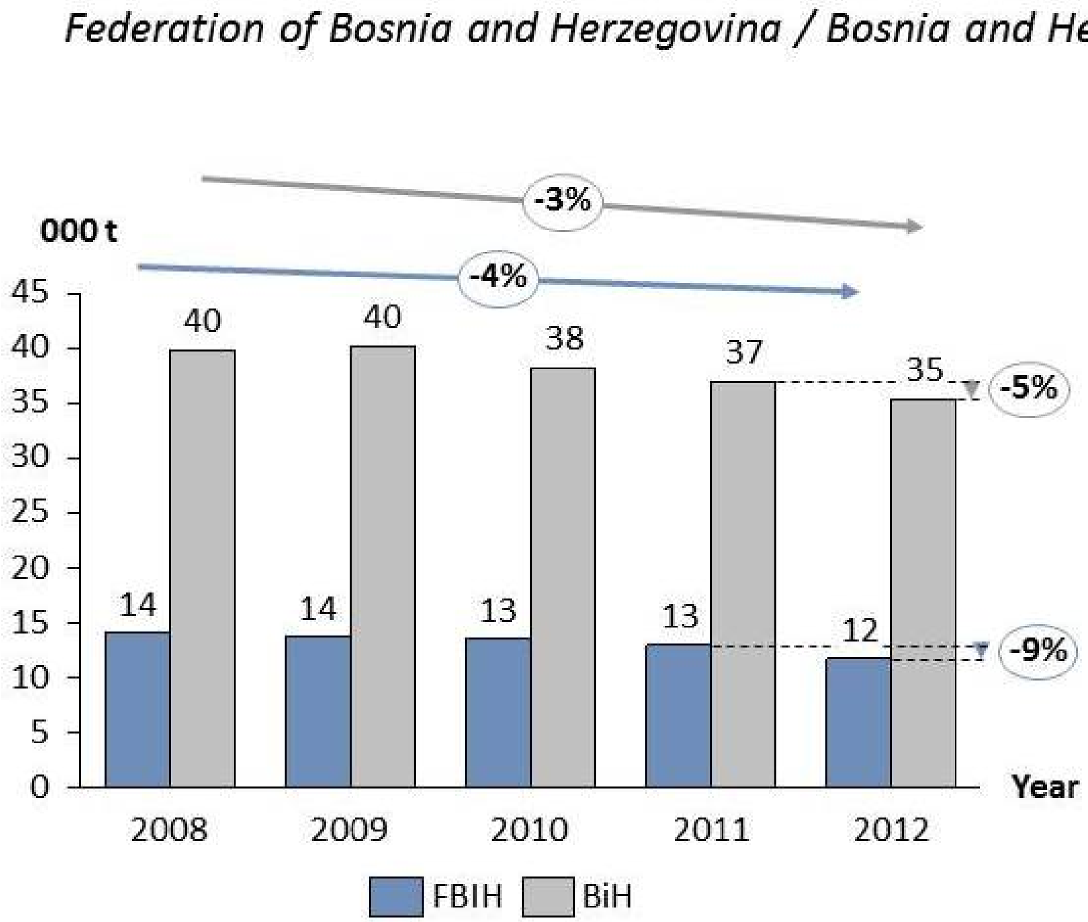
Key markets - name sofictication[III] -FBIH Country	Year	Euro (000 €)	Growth
Croatia	2009/2008	410,1/128,3	↑ 220%
	2010/2009	458,6/410,1	↑ 12%
	2011/2010	496,5/458,6	↑ 8%
	2012/2011	327,7/496,5	↓ -34%
	AVG. 2012/2008		↑ **26%**
Other countries	2009/2008	no data	no data
	2010/2009	3,1/4,1	↓ -25%
	2011/2010	2,6/3,1	↓ -17%
	2012/2011	7,2/2,6	↑ 180%
	AVG. 2012/2008		↑ **21%**

Competition for production/processing [IV] Country	Year	Size (000 t)	Growth
Romania	2009/2008	246/239	↑ 3%
	2010/2009	243/246	↓ -1%
	2011/2010	254/243	↑ 4%
	2012/2011	207/254	↓ -18%
	AVG. 2012/2008		↓ **-3%**
Serbia	2009/2008	171/151	↑ 13%
	2010/2009	155/171	↓ -10%
	2011/2010	145/155	↓ -6%
	2012/2011	130/145	↓ -10%
	AVG. 2012/2008		↓ **-4%**
Macedonia	2009/2008	155/142	↑ 9%
	2010/2009	168/155	↑ 9%
	2011/2010	154/168	↓ -9%
	2012/2011	166/154	↑ 8%
	AVG. 2012/2008		↑ **4%**
Albania	2009/2008	52/47	↑ 11%
	2010/2009	65/52	↑ 27%
	2011/2010	64/65	↓ -3%
	2012/2011	65/64	↑ 3%
	AVG. 2012/2008		↑ **9%**
Croatia	2009/2008	36/35	↑ 4%
	2010/2009	19/36	↓ -48%
	2011/2010	20/19	↑ 8%
	2012/2011	15/20	↓ -27%
	AVG. 2012/2008		↓ **-20%**
Bulgaria	2009/2008	71/60	↑ 20%
	2010/2009	69/71	↓ -3%
	2011/2010	66/69	↓ -4%
	2012/2011	47/66	↓ -29%
	AVG. 2012/2008		↓ **-6%**
Montenegro	2009/2008	18/18	↓ -1%
	2010/2009	18/18	↑ 0%
	2011/2010	18/18	↓ -3%
	2012/2011	17/18	↓ -5%
	AVG. 2012/2008		↓ **-2%**
BiH	2009/2008	40/40	↑ 1%
	2010/2009	38/40	↓ -5%
	2011/2010	37/38	↓ -3%
	2012/2011	35/37	↓ -5%
	AVG. 2012/2008		↓ **-3%**

International Demand [V] (avg. 2008-2011) Country	Size (t)	Growth
USA	740.782	↑ 13%
Germany	330.815	↑ 4%
United Kingdom	150.263	↑ 2%
Netherlands	110.591	↑ 14%
France	133.699	↑ 3%
Russian Federation	111.918	↑ 14%
Canada	114.315	↑ 3%
Italy	80.993	↑ 7%
Czech Rep.	49.968	↑ 3%
Poland	42.775	↑ 8%
Malaysia	41.878	↑ 1%
Lithuania	24.918	↑ 52%
Belgium	27.333	↑ 24%
Japan	26.991	↑ 14%
Sweden	33.785	↑ 1%
Austria	30.691	↑ 4%
Switzerland	27.652	↑ 4%
Kazakhstan	12.760	↑ 84%
Denmark	25.921	↓ -3%
Spain	28.658	↓ -8%
Romania	16.498	↑ 5%
Singapore	15.953	↑ 7%
Norway	15.214	↑ 5%
Bulgaria	21.453	↓ -19%
Slovakia	15.588	↓ -3%
Finland	12.624	↑ 8%
Portugal	12.161	↑ 6%
Ireland	12.820	↑ 9%
Ukraine	10.300	↑ 4%

I source: Statistics institute Republika Srpska, Statistics institute Federation BiH / Link - Chart name: *Production of green peppers*
II source: Indirect Taxation Authority of BiH / Link - Chart name: *Export of green peppers in 000€*
III source: Indirect Taxation Authority of BiH
IV source: FAOSTAT and Uncomtrade / Link - Chart name: *Competition for production of green peppers – Regional countries production charts*
V source: FAOSTAT and Uncomtrade / Link - Chart name: *International Demand for green peppers*

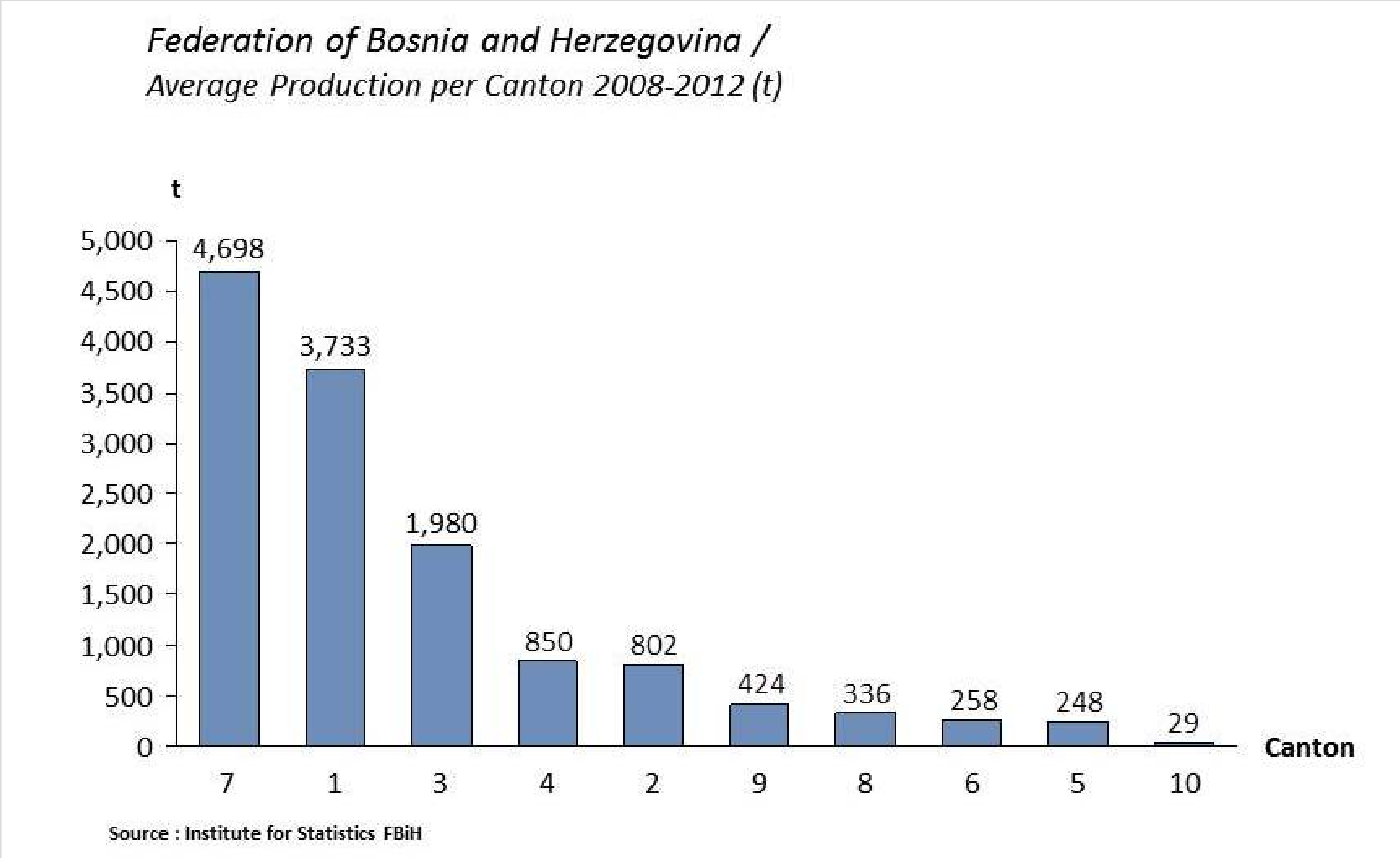
Production of Green Pepper



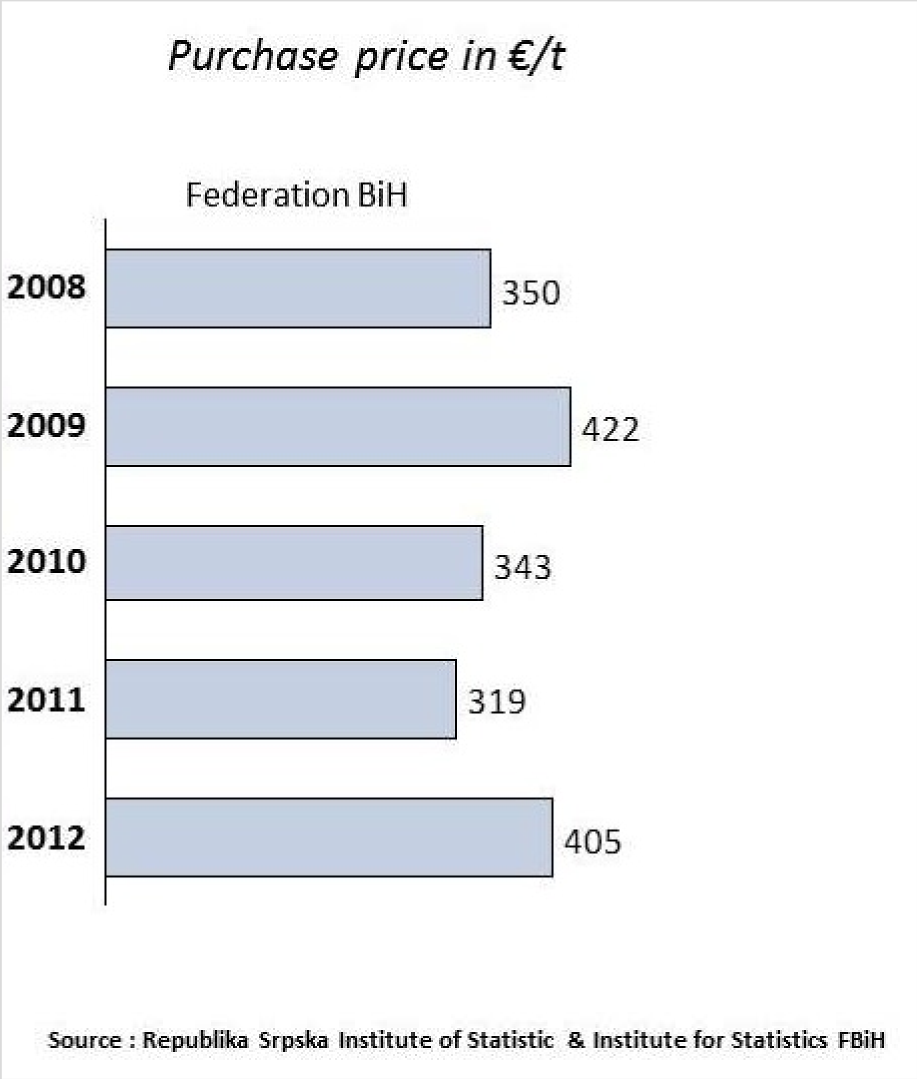
- Stable production, small decrease in 2012 for 9% (2012/2011)
- Average annual growth rate is negative (2012/2008) for FBIH is -4%), for BiH is -3%.

Source : Statistical yearbook s2013 – Republika Srpska Institute of Statistic & Institute for Statistics FBiH

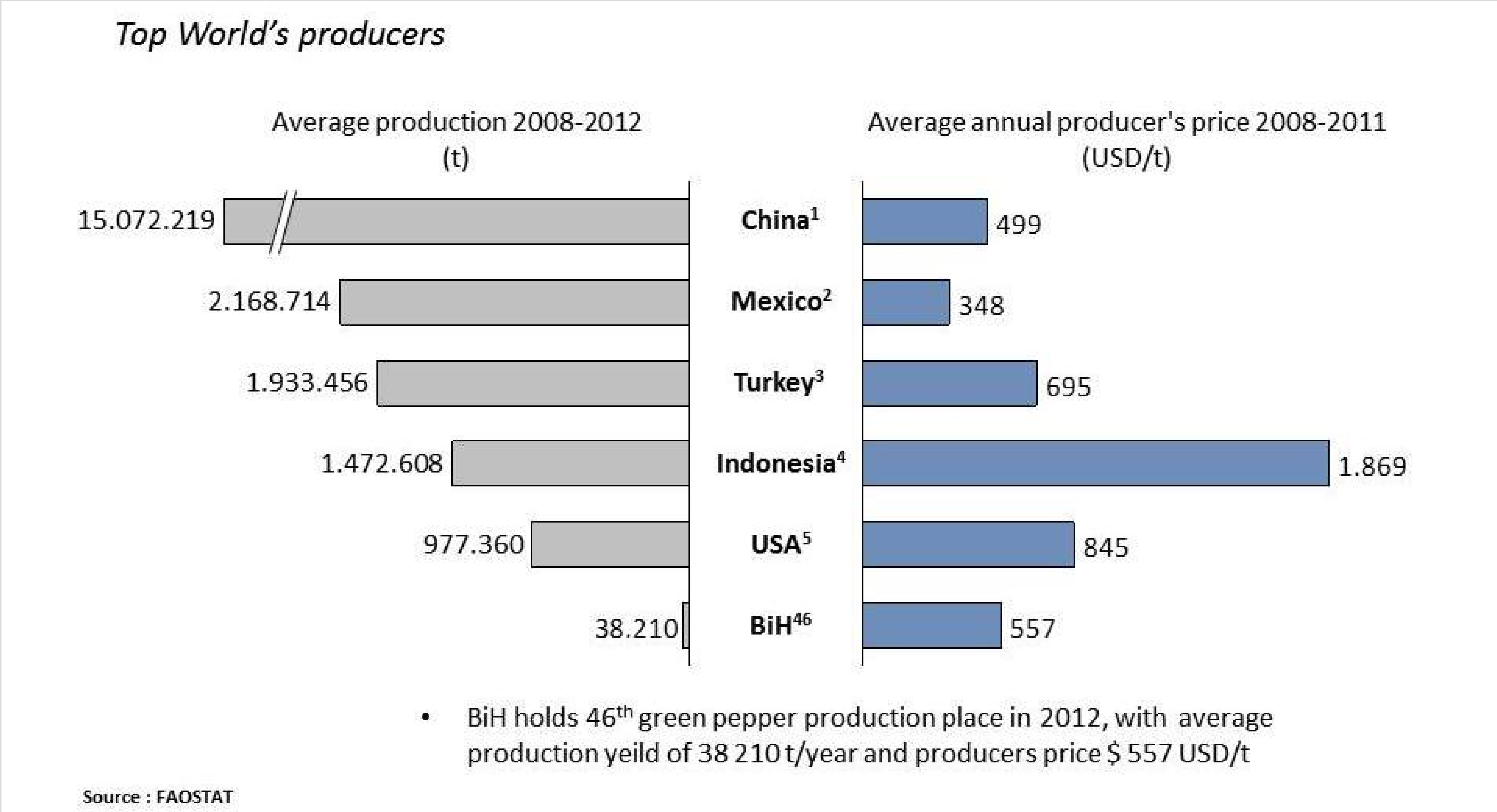
Production of Green Pepper per Canton



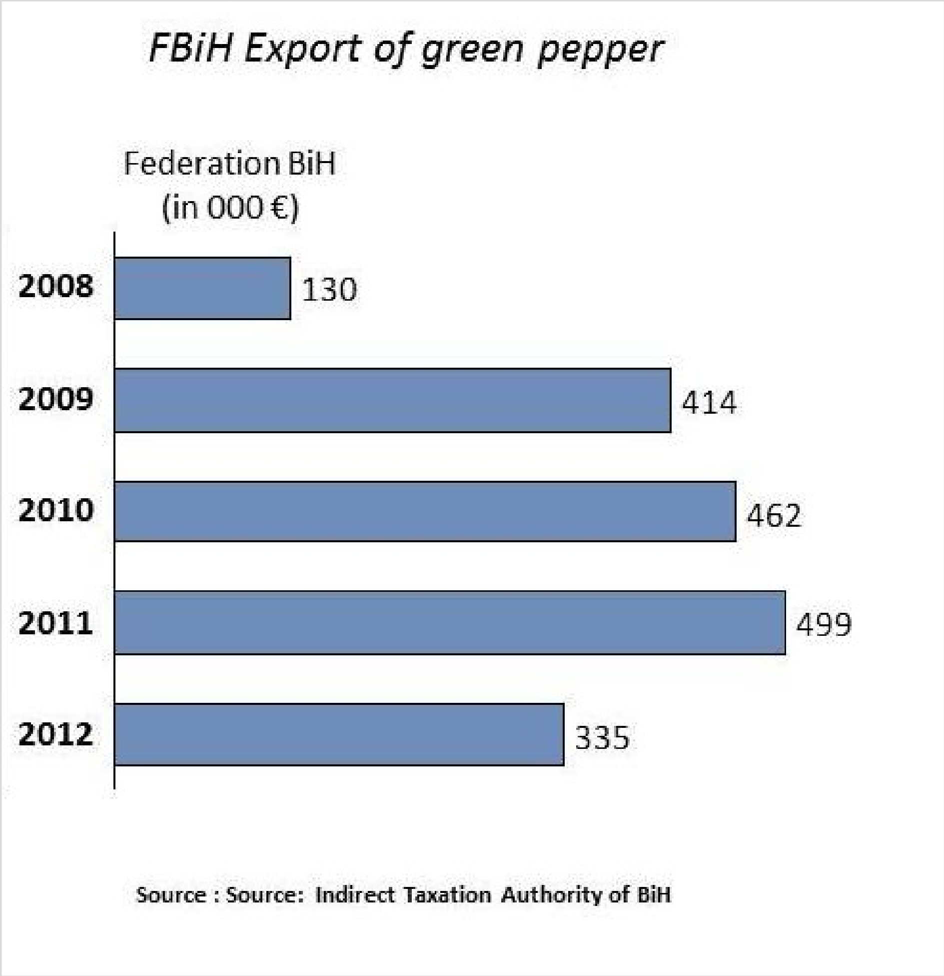
Production of green pepper – purchase price



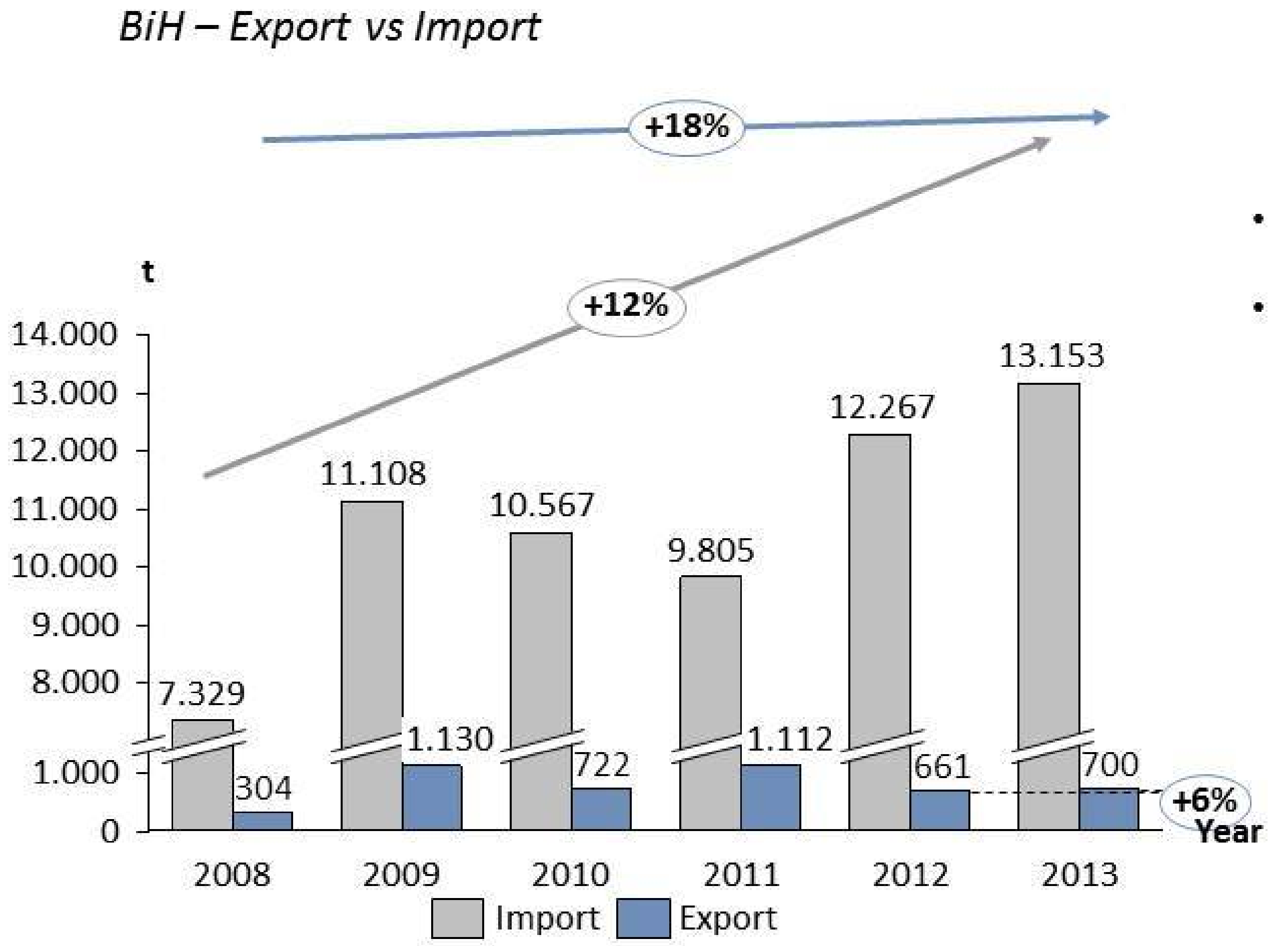
Production of green pepper – top world's producers



Export of green pepper in 000€



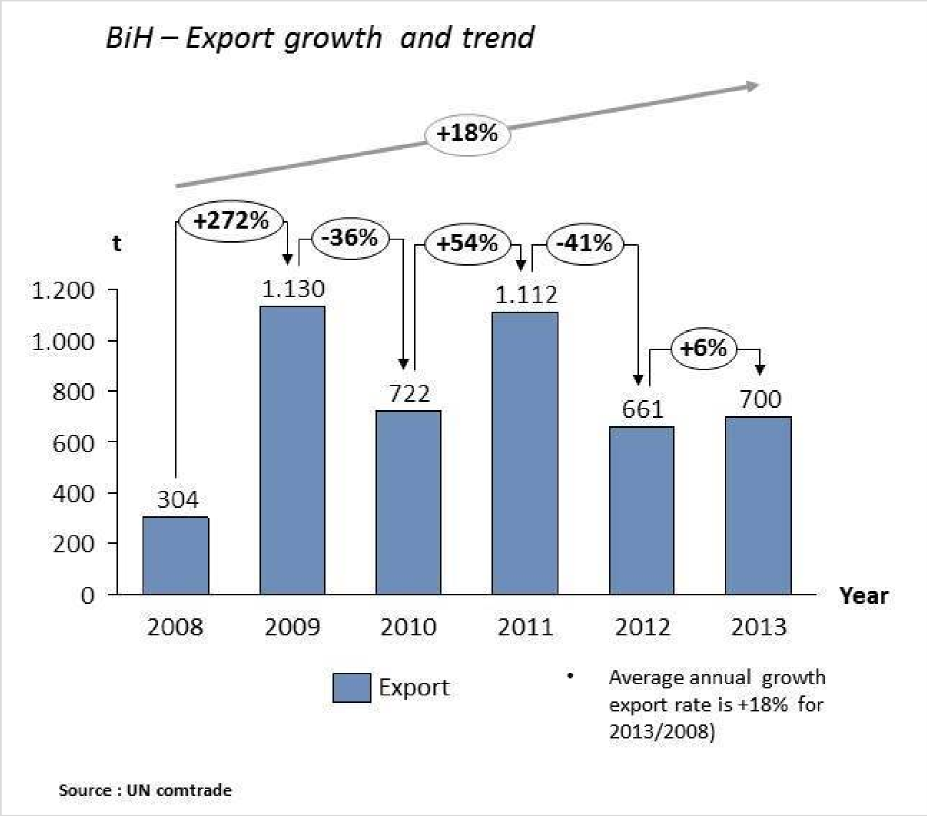
Export vs Import of green pepper

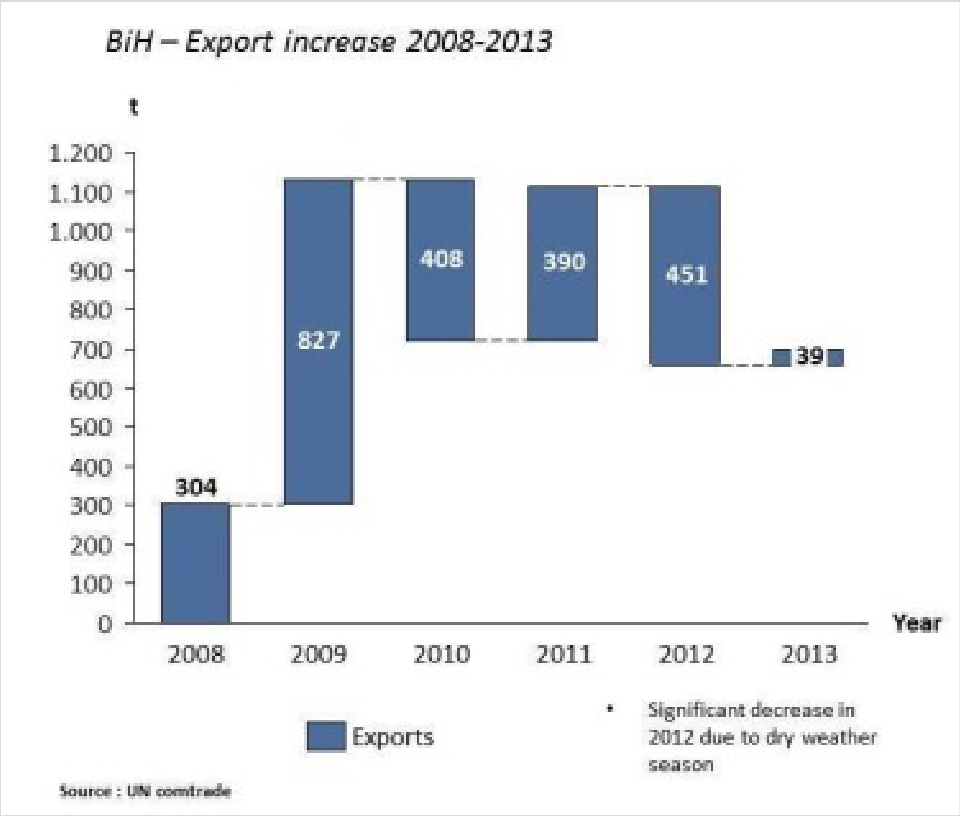


- Export increase in 2013 for 6% (2013/2012)
- Import of green pepper is raising (Average annual growth rate is positive +12% for 2013/2008), Export is raising (Average annual growth rate is +18% for 2013/2008).

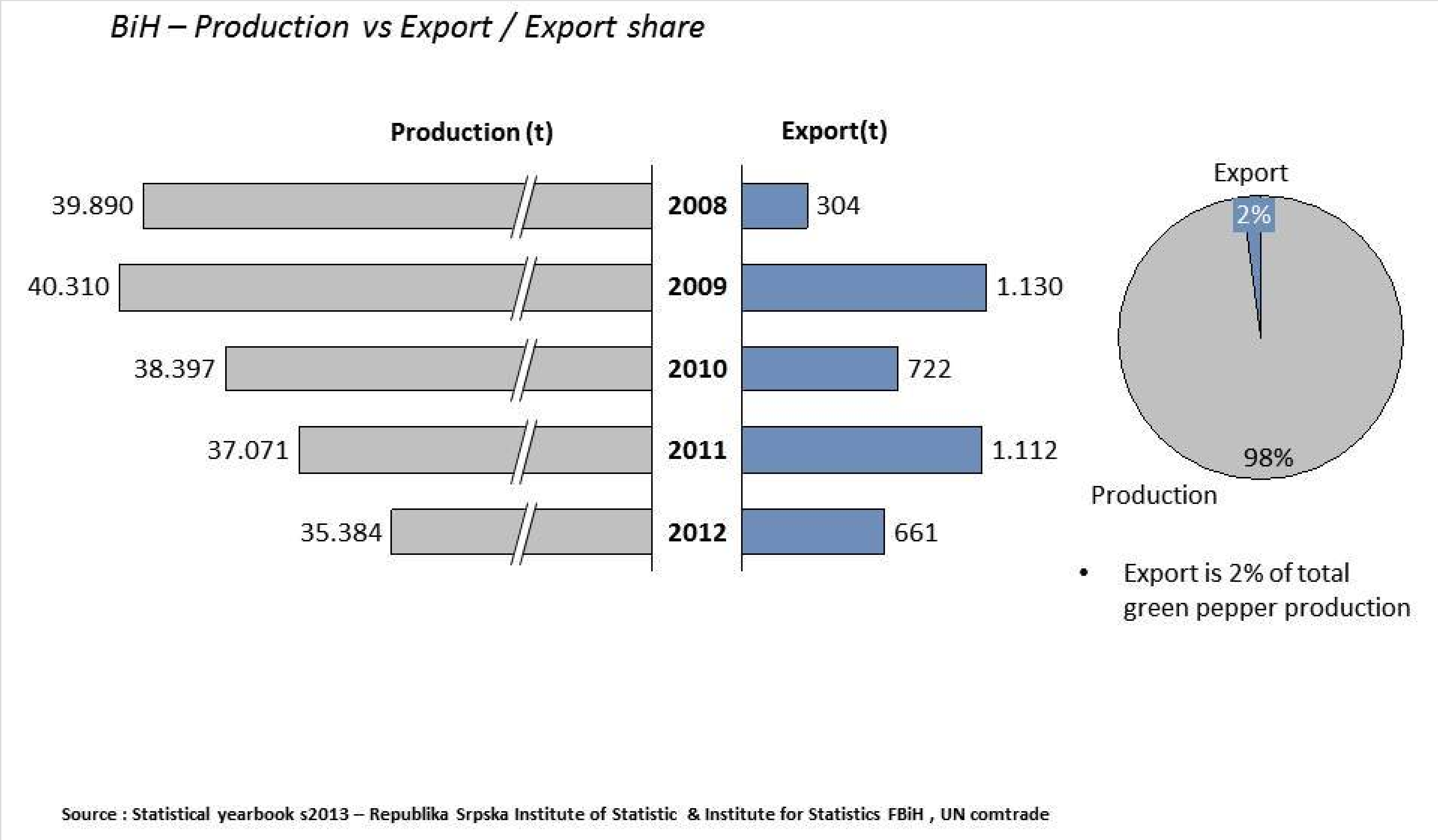
Source : UN comtrade

Export of green pepper growth and trend

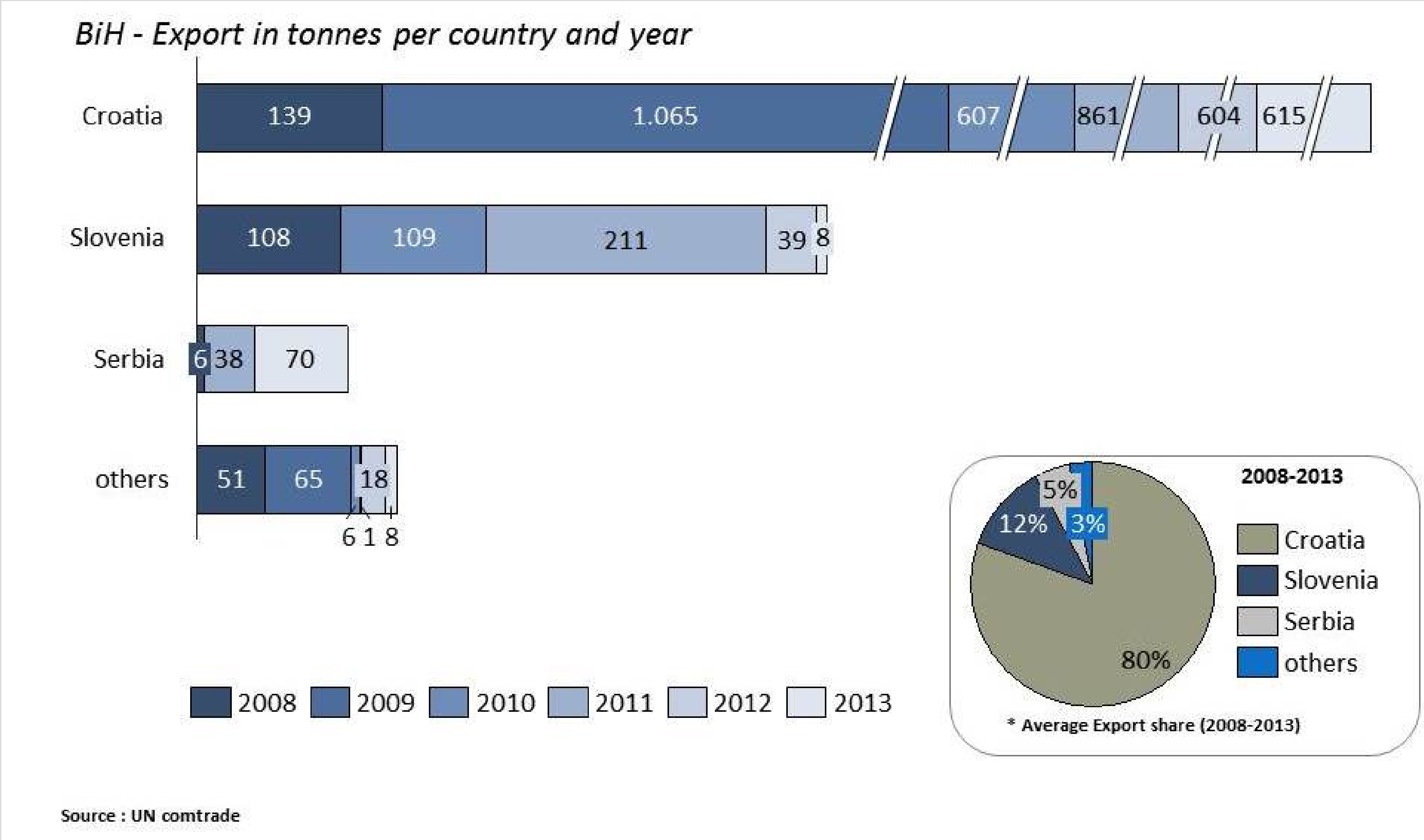




Export vs Production of green pepper



Key markets - Export of green pepper per country



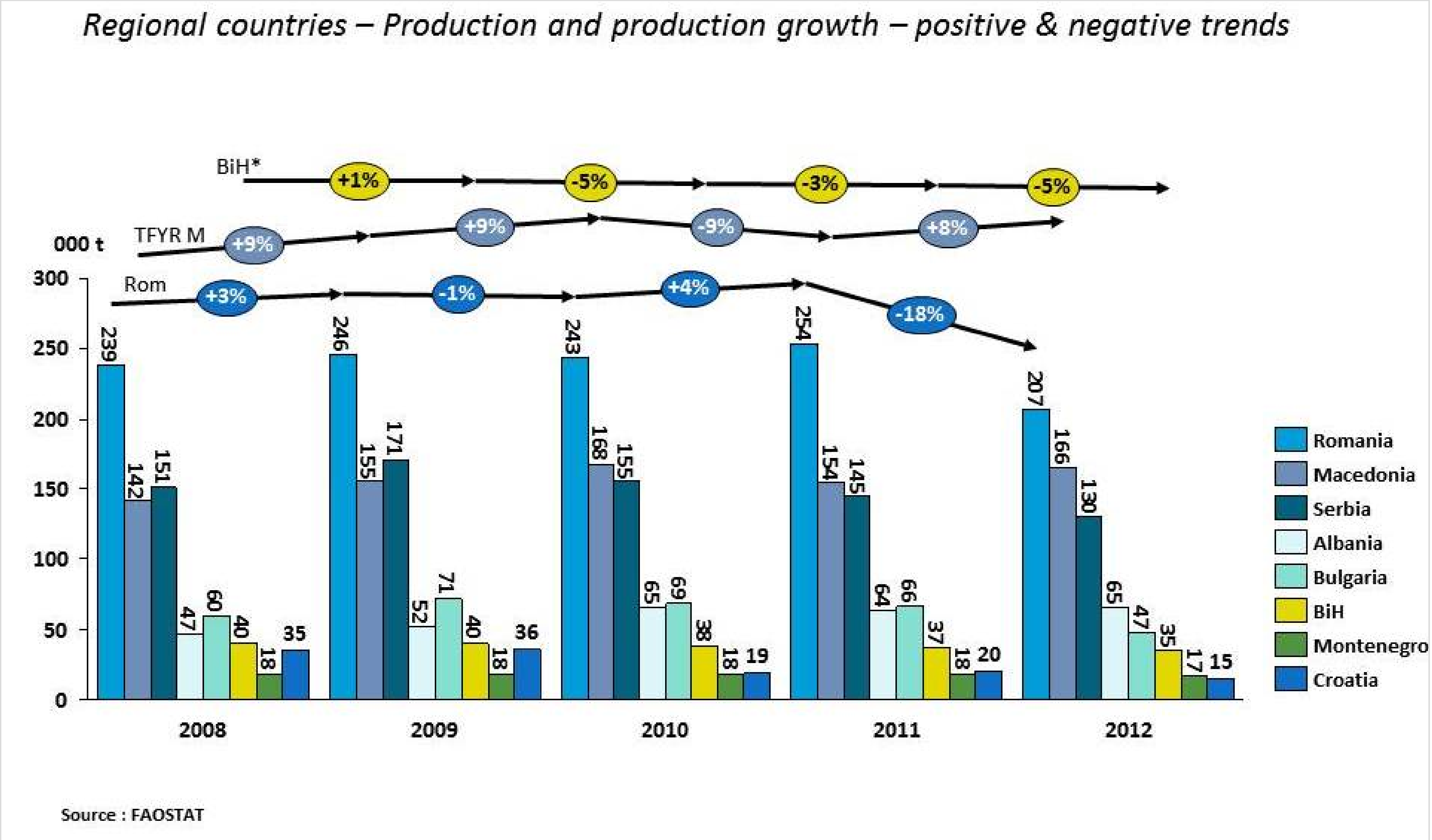
Competition for production of green pepper – Regional countries production

Regional countries – average production 2008-2012 (t)

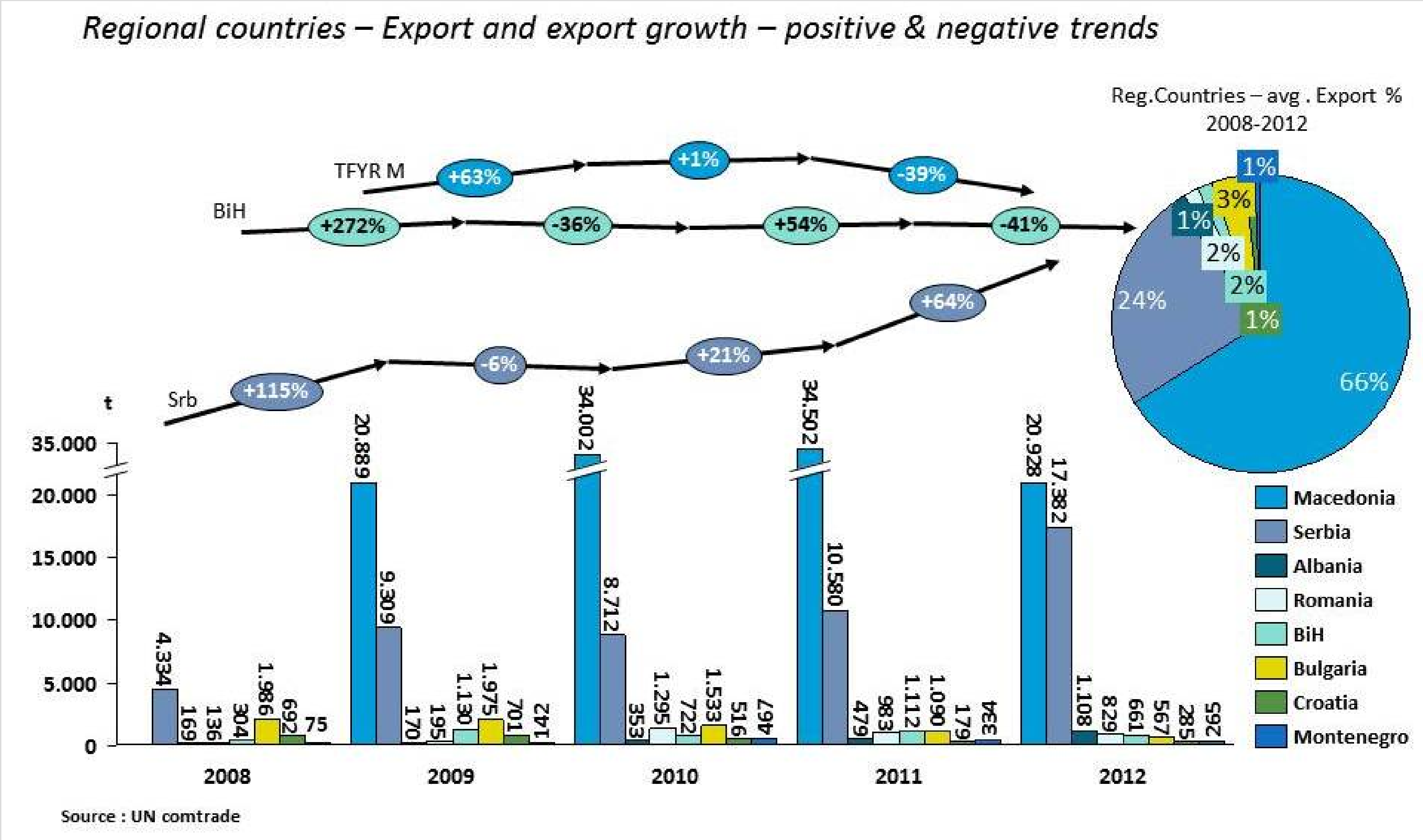
Regional Country & world's prod. place	Av. Prod. 2008-2012 (t)
Romania[15]	237.683
Macedonia[20]	156.948
Serbia[24]	150.589
Albania[32]	58.586
Bulgaria[43]	62.692
BiH[46]	38.210
Montenegro[65]	17.821
Croatia[69]	24.789

Source : FAOSTAT

Competition for production of green pepper – Regional countries production charts

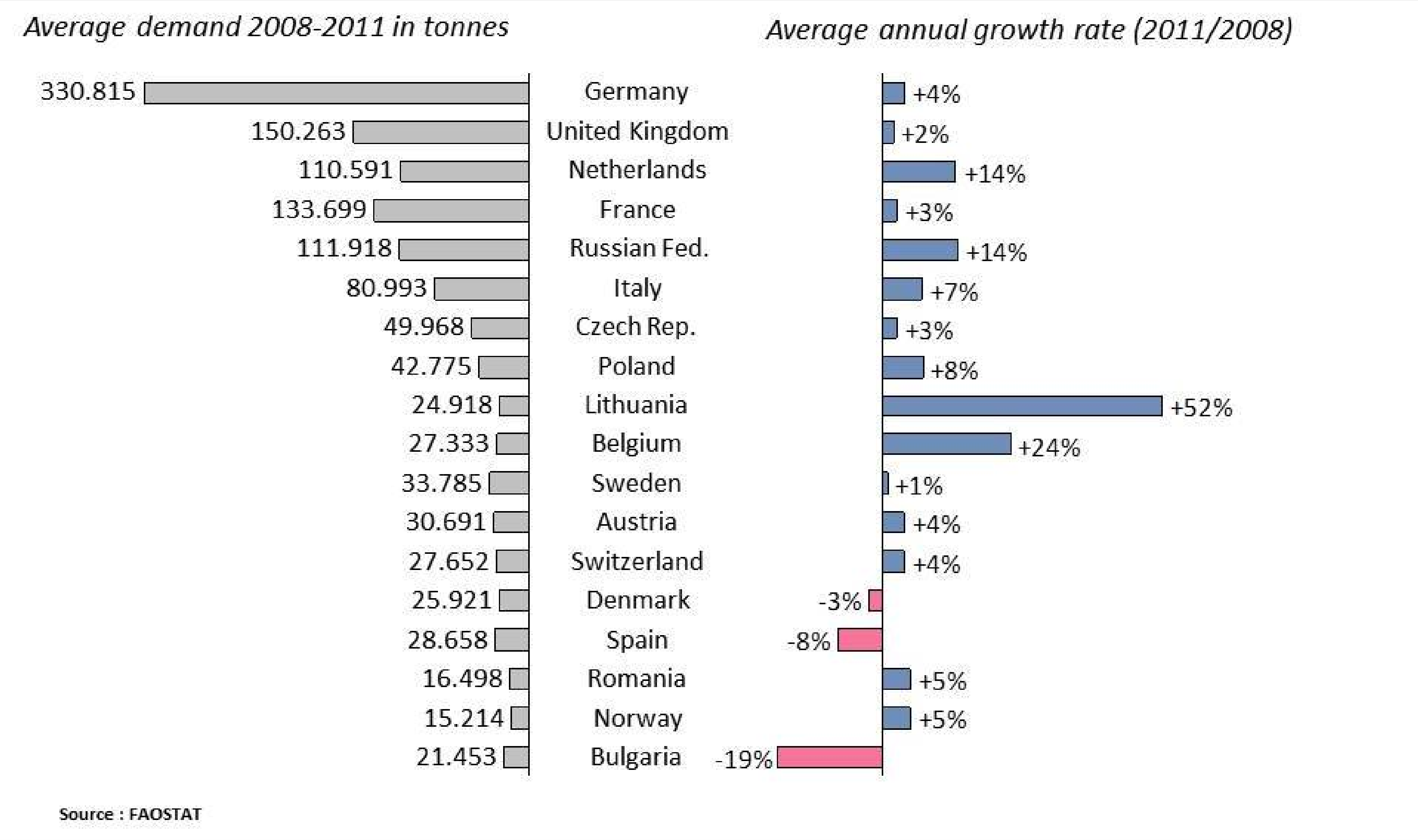


Competition for production of green pepper – Regional countries export to the World



* The very first Balkan's export country place holds Macedonia with 66% of total export Balkan countries share. (2008-2012)

International Demand for green pepper



CUCUMBER

Statistical analysis showed that cucumber is the strategic key product for the FBiH and BiH. Production of cucumber has an equable production in the reporting period 2008-2012. The biggest cucumber production area in the RS is in Bijeljina municipality, while in FBiH is in Una- Sana Canton. BiH holds the 68th place world cucumber producers. The purchase price of cucumbers is very good in comparison with other countries / producers .

Despite the reduction of cucumbers in 2012 and the decline of the average growth rate of -1% (2012/2011) in the FBiH, the export is increasing so that for the reference period 2012/2008, we have an increase in the average growth rate of exports to + 155 % .

The most important markets are : Serbia , Croatia , Slovenia and Germany . Croatia for the reference period 2008-2012 makes 64% percent of the BiH market. Almost all Balkan countries produce more cucumbers from Bosnia and Herzegovina.

The largest regional exporters of cucumbers are Makednija , Serbia and Romania .

International demand for cucumbers is great, while particular interest have Germany, Netherlands , Russian Federation and United States.

Cucumber– market opportunity

Segment/ Product	Production Size[I] -FBIH Year	Tons (000 t)	Growth	Exports[II] -FBIH Year	Euro (000 €)	Growth
Cucumber	2009/2008	11,8/10,8	↑ 9%	2009/2008	153/18	↑ 731%
	2010/2009	14,1/11,8	↑ 20,1%	2010/2009	347/153	↑ 127%
	2011/2010	14,3/14,1	↑ 2%	2011/2010	1166/347	↑ 236%
	2012/2011	10,3/14,3	↓ -28%	2012/2011	780/1166	↓ -33%
	AVG. 2012/2008		↓ -1%	**AVG. 2012/2008**		↑ 155%

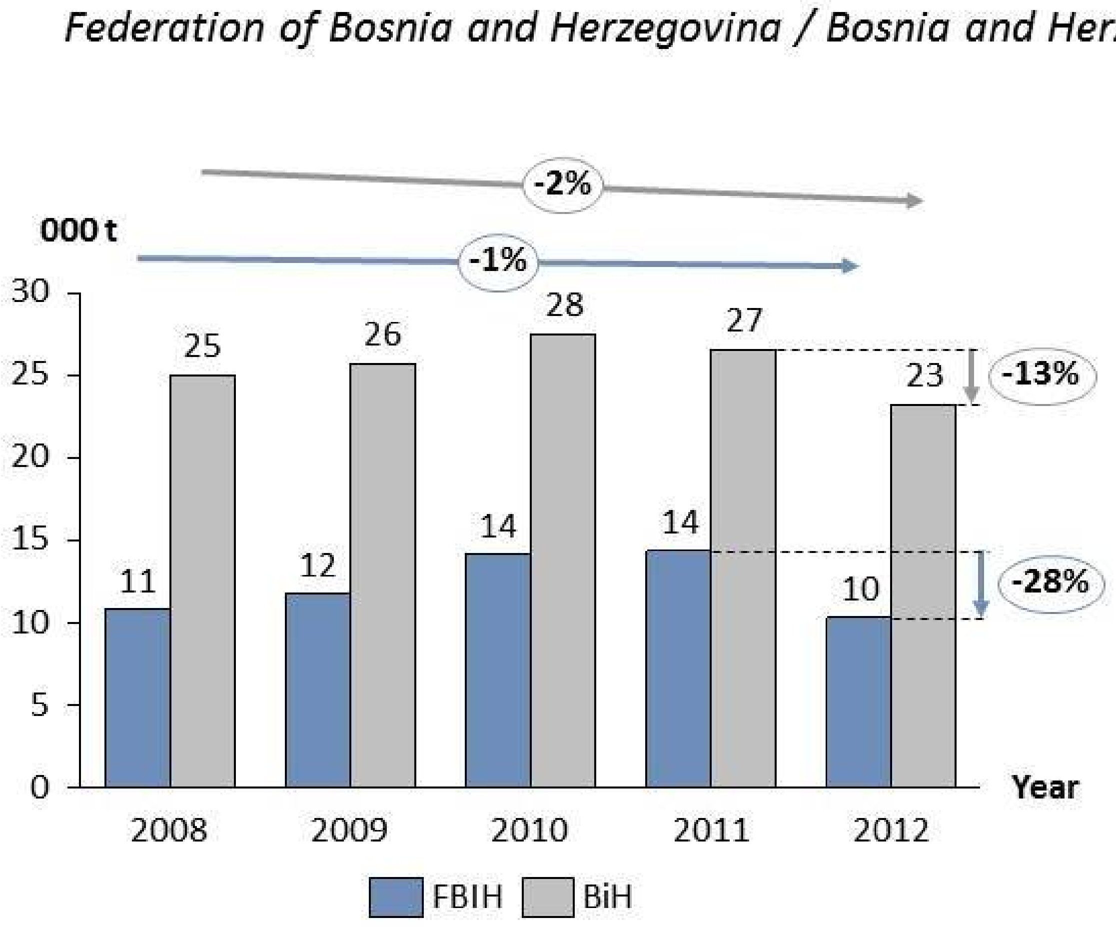
Key markets - name sofictication[III]-FBIH Country	Year	Euro (000 €)	Growth
Croatia	2009/2008	126,3/18,4	↑ 586%
	2010/2009	335,4/126,3	↑ 166%
	2011/2010	831,4/335,4	↑ 148%
	2012/2011	568,6/831,4	↓ -32%
	AVG. 2012/2008		↑ 136%
Other countries	2009/2008	no data	no data
	2010/2009	11,8/26,6	↓ -56%
	2011/2010	247/11,8	↑ 2000%
	2012/2011	180,5/247	↓ -27%
	AVG. 2012/2008		↑ 89%

Competition for production/processing[IV] Country	Year	Size (000 t)	Growth
Romania	2009/2008	176/174	↑ 2%
	2010/2009	172/176	↓ -3%
	2011/2010	196/172	↑ 14%
	2012/2011	159/196	↓ -19%
	AVG. 2012/2008		↓ -2%
Albania	2009/2008	61/56	↑ 9%
	2010/2009	69/61	↑ 13%
	2011/2010	72/69	↑ 4%
	2012/2011	74/72	↑ 3%
	AVG. 2012/2008		↑ 7%
Serbia	2009/2008	67/62	↑ 8%
	2010/2009	70/67	↑ 5%
	2011/2010	72/70	↑ 2%
	2012/2011	55/72	↓ -23%
	AVG. 2012/2008		↓ -3%
Macedonia	2009/2008	41/41	↑ 2%
	2010/2009	47/41	↑ 12%
	2011/2010	50/47	↑ 7%
	2012/2011	50/50	↑ 0%
	VG. 2012/2008		↑ 5%
Croatia	2009/2008	15/15	↓ -2%
	2010/2009	11/15	↓ -25%
	2011/2010	11/11	↑ 2%
	2012/2011	7/11	↓ -39%
	VG. 2012/2008		↓ -18%
Bulgaria	2009/2008	78/63	↑ 25%
	2010/2009	66/78	↓ -16%
	2011/2010	59/66	↓ -10%
	2012/2011	38/59	↓ -36%
	VG. 2012/2008		↓ -12%
BiH	2009/2008	26/25	↑ 3%
	2010/2009	28/26	↑ 7%
	2011/2010	27/28	↓ -4%
	2012/2011	23/27	↓ -13%
	VG. 2012/2008		↓ -2%

International Demand[V] (avg. 2008-2011) Country	Size (t)	Growth
USA	554.244	↑ 6%
Germany	482.756	↑ 2%
Russian Fed.	174.271	↑ 8%
United Kingdom	139.462	↑ 0%
Netherlands	80.095	↑ 19%
Czech Republic	76.978	↑ 2%
France	70.901	↑ 0%
Iraq	75.123	↑ 29%
Belgium	47.095	↑ 17%
Canada	47.297	↑ 2%
Syrian Arab Republic	25.676	↑ 48%
Poland	37.277	↑ 1%
Azerbaijan	11.554	↑ 108%
Denmark	28.276	↑ 9%
Sweden	28.095	↑ 1%
Singapore	23.802	↑ 4%
Austria	26.495	↓ -3%
Kazakhstan	8.337	↑ 60%
Switzerland	15.670	↑ 5%
Slovakia	13.900	↑ 1%
Italy	13.816	↑ 1%
Malaysia	13.549	↓ -4%
Lithuania	10.766	↑ 5%
Ukraine	9.769	↑ 8%
Hungary	13.810	↓ -10%
Bulgaria	10.502	↑ 7%
Finland	11.154	↓ -7%
United Arab Emirates	7.551	↑ 20%
Romania	8.200	↓ 0%
Norway	6.860	↑ 1%

I source: Statistics institute Republika Srpska, Statistics institute Federation BiH / Link - Chart name: *Production of cucumbers*
II source: Indirect Taxation Authority of BiH / Link - Chart name: *Export of cucumbers in 000€*
III source: Indirect Taxation Authority of BiH
IV source: FAOSTAT and Uncomtrade / Link - Chart name: *Competition for production of cucumbers – Regional countries production charts*
V source: FAOSTAT and Uncomtrade / Link - Chart name: *International Demand for cucumbers*

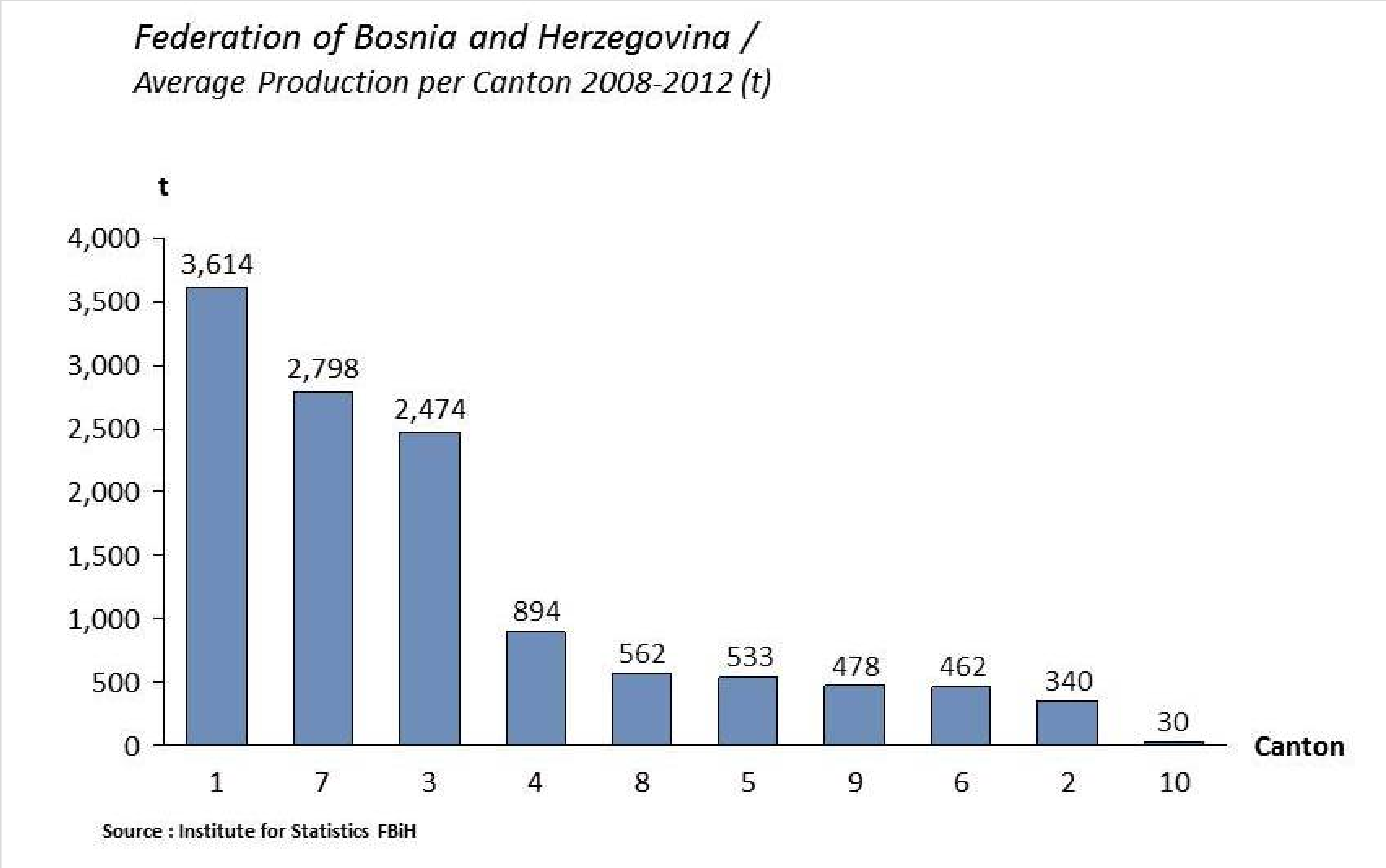
Production of Cucumber



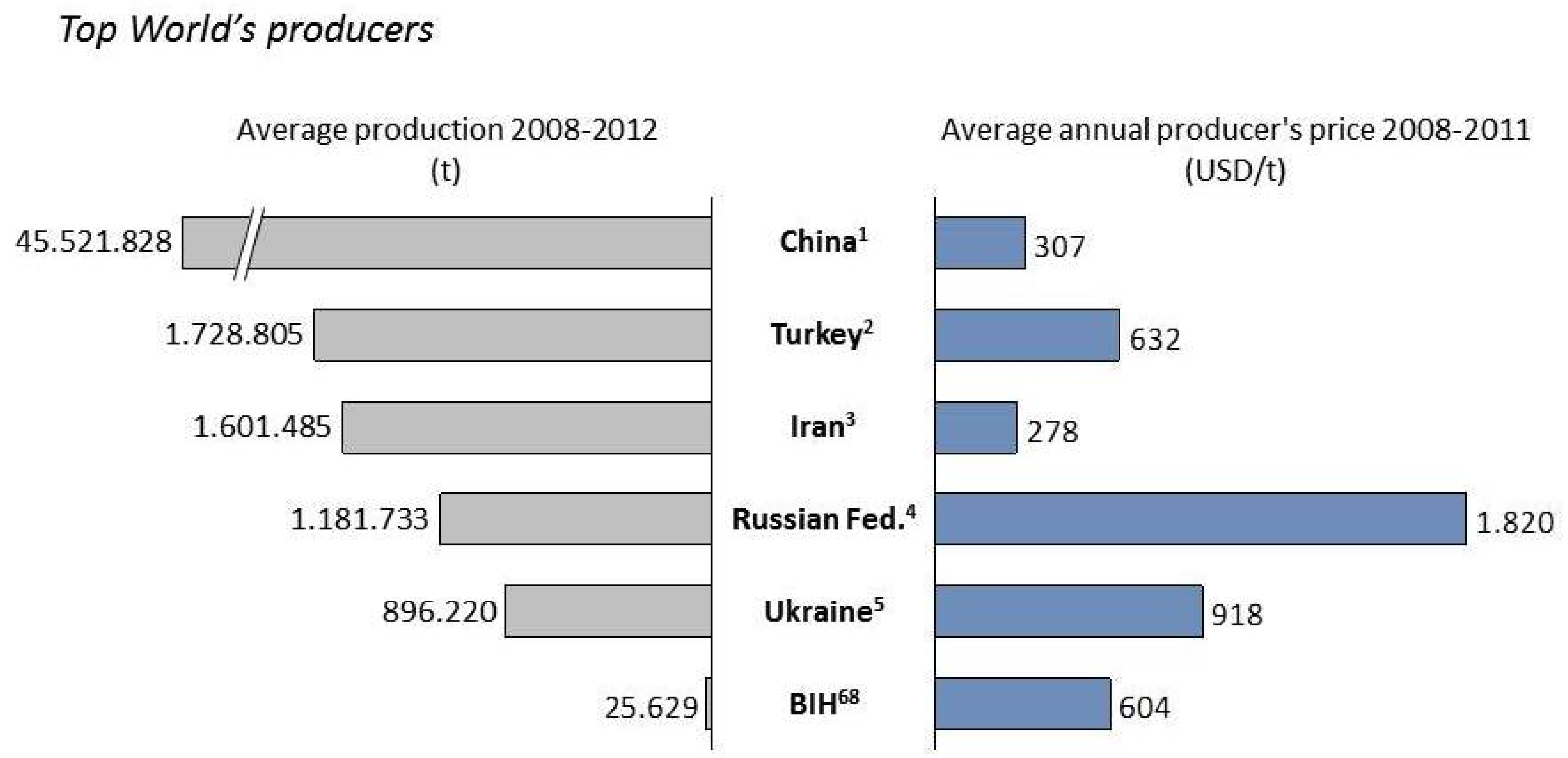
- Stable production, large decrease in 2012 for 28% (2012/2011) due to bad weather conditions (dry season)
- Average annual growth rate is negative (2012/2008 for FBIH is -1%)

Source : Statistical yearbook s2013 – Republika Srpska Institute of Statistic & Institute for Statistics FBiH

Production of cucumber per Canton



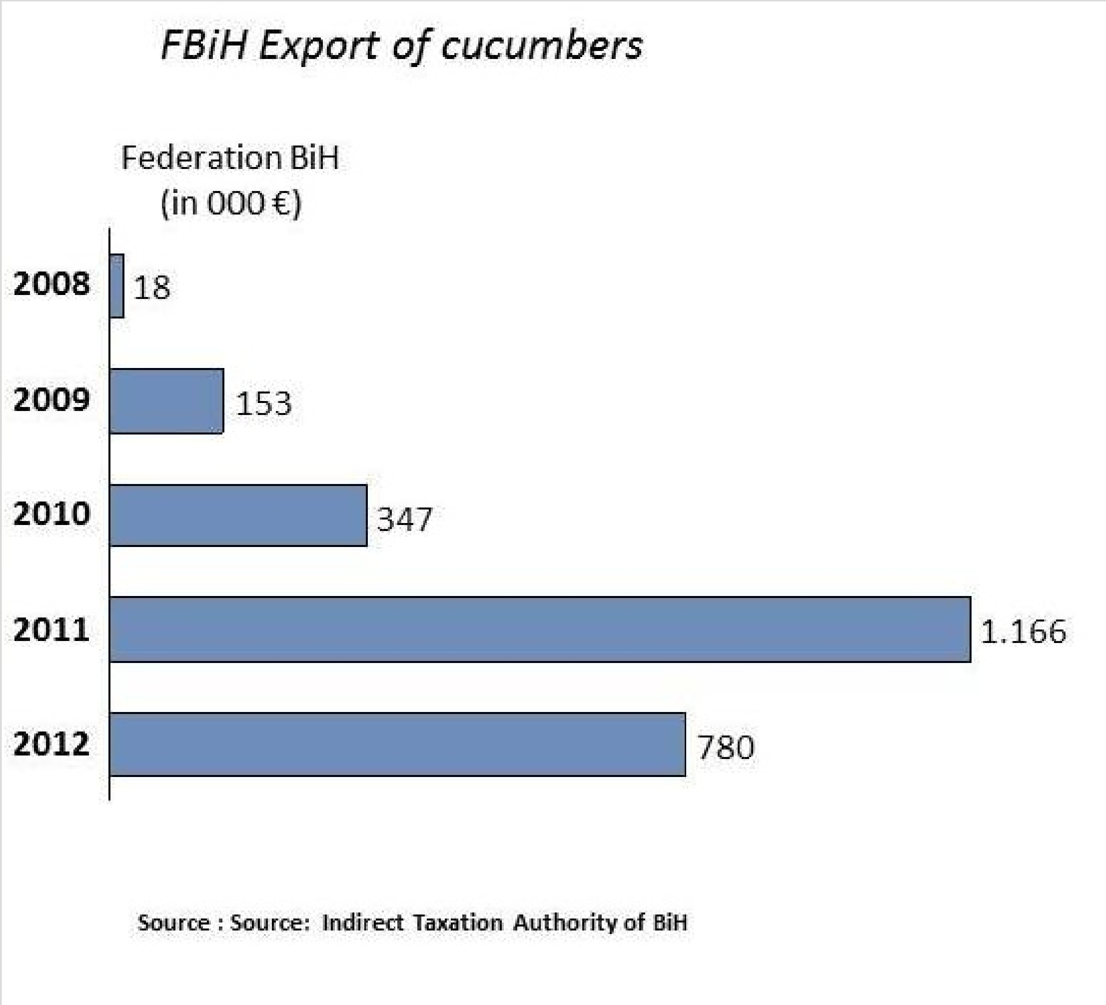
Production of cucumber – top world's producers



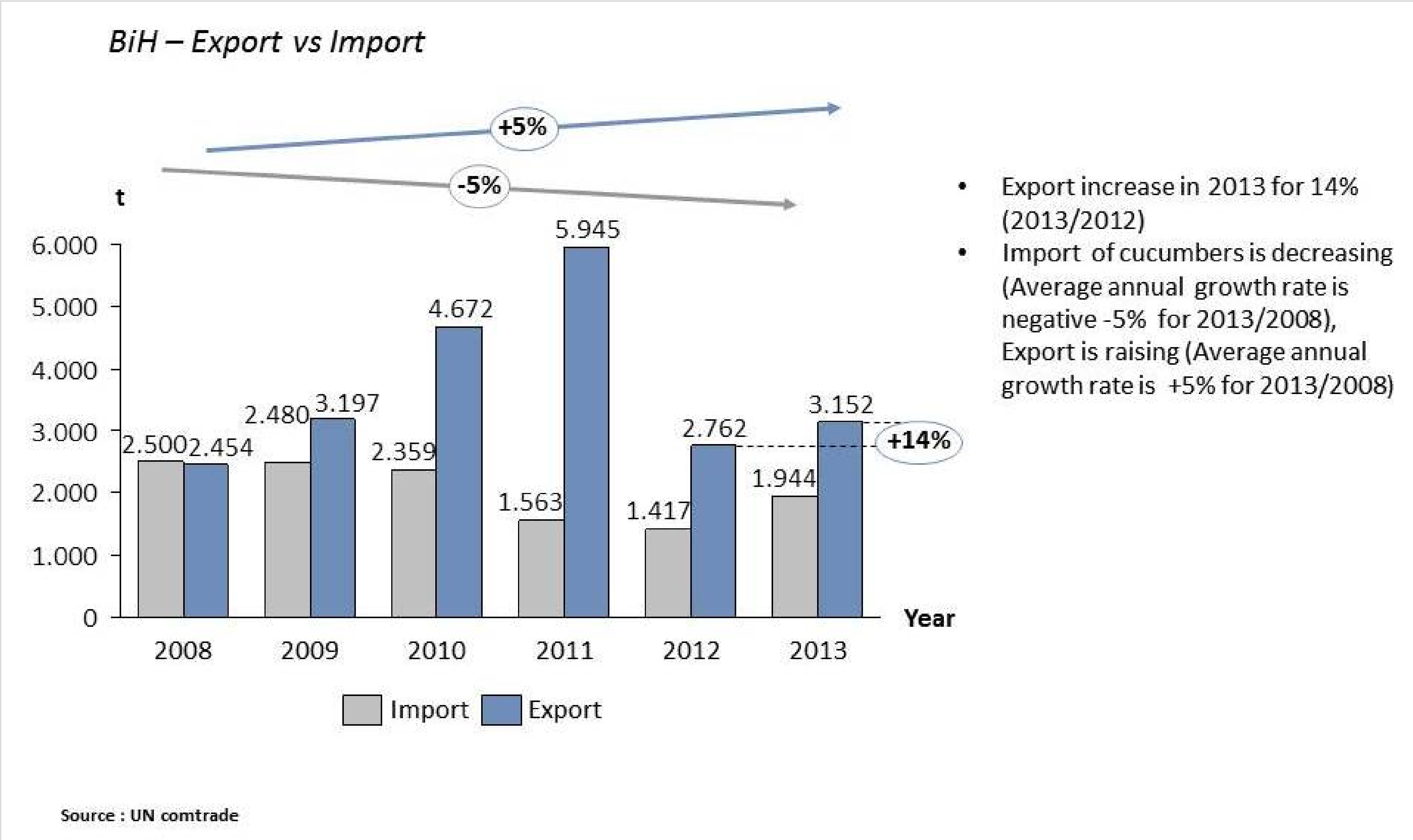
- BiH holds 68th cucumbers production place in 2012, with average production yeild of 25 629 t/year and producers price $ 604 USD/t

Source : FAOSTAT

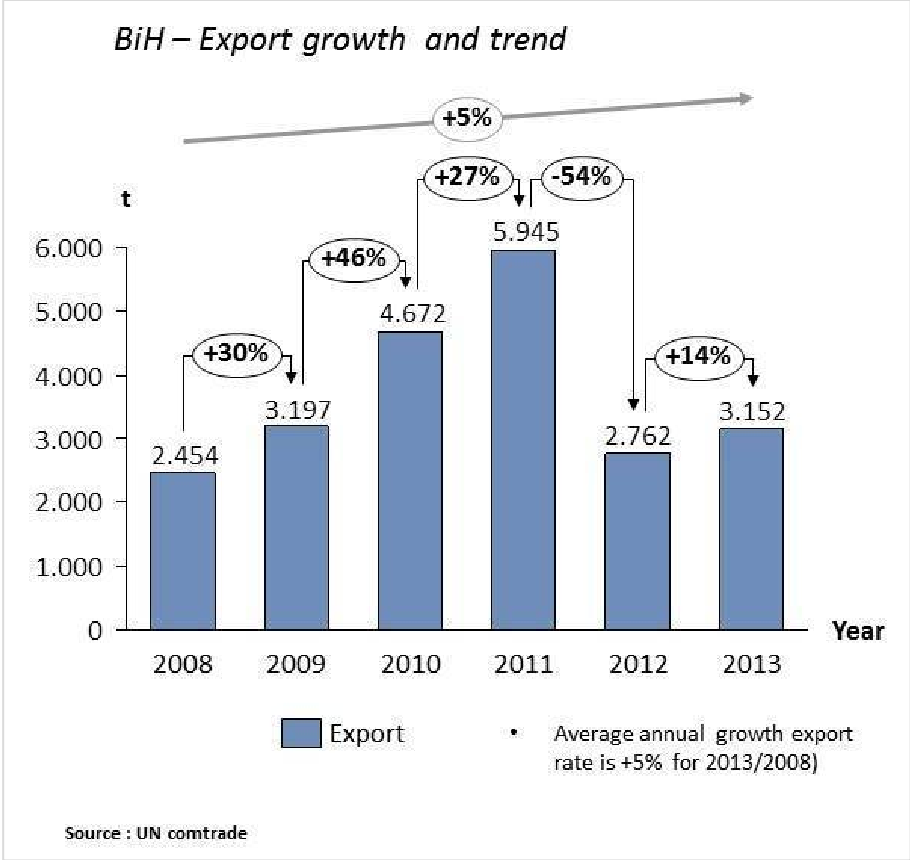
Export of cucumber in 000€

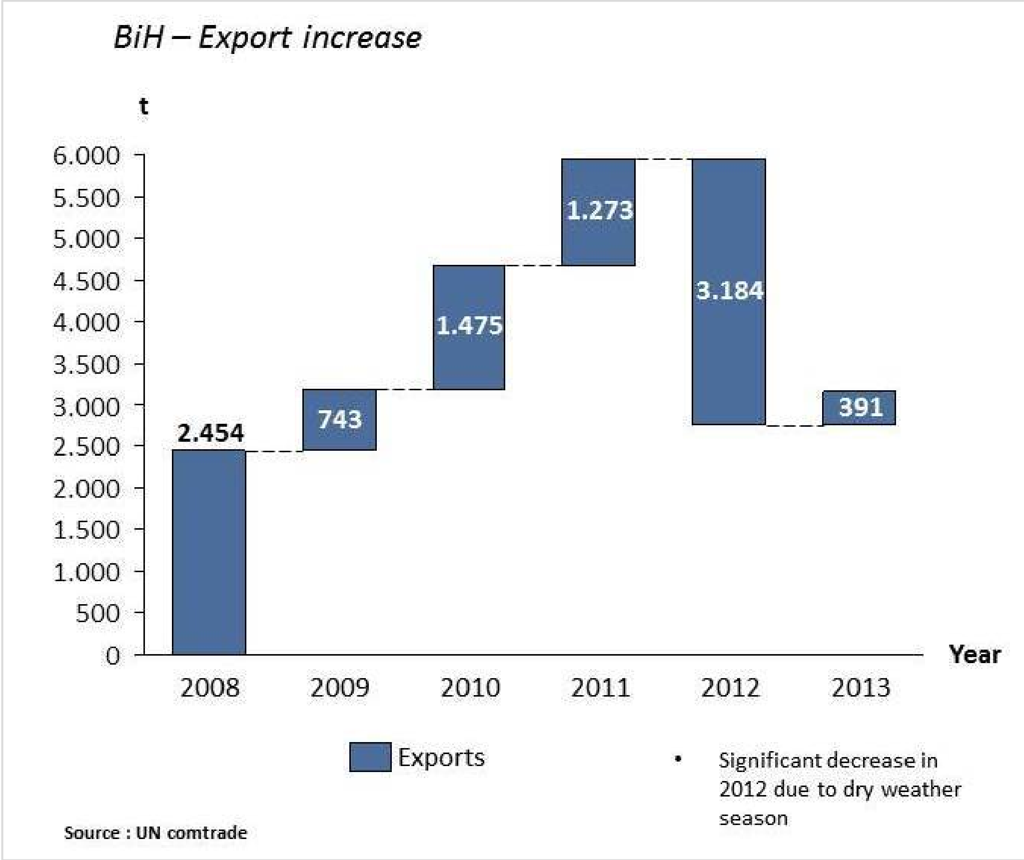


Export vs Import of cucumber

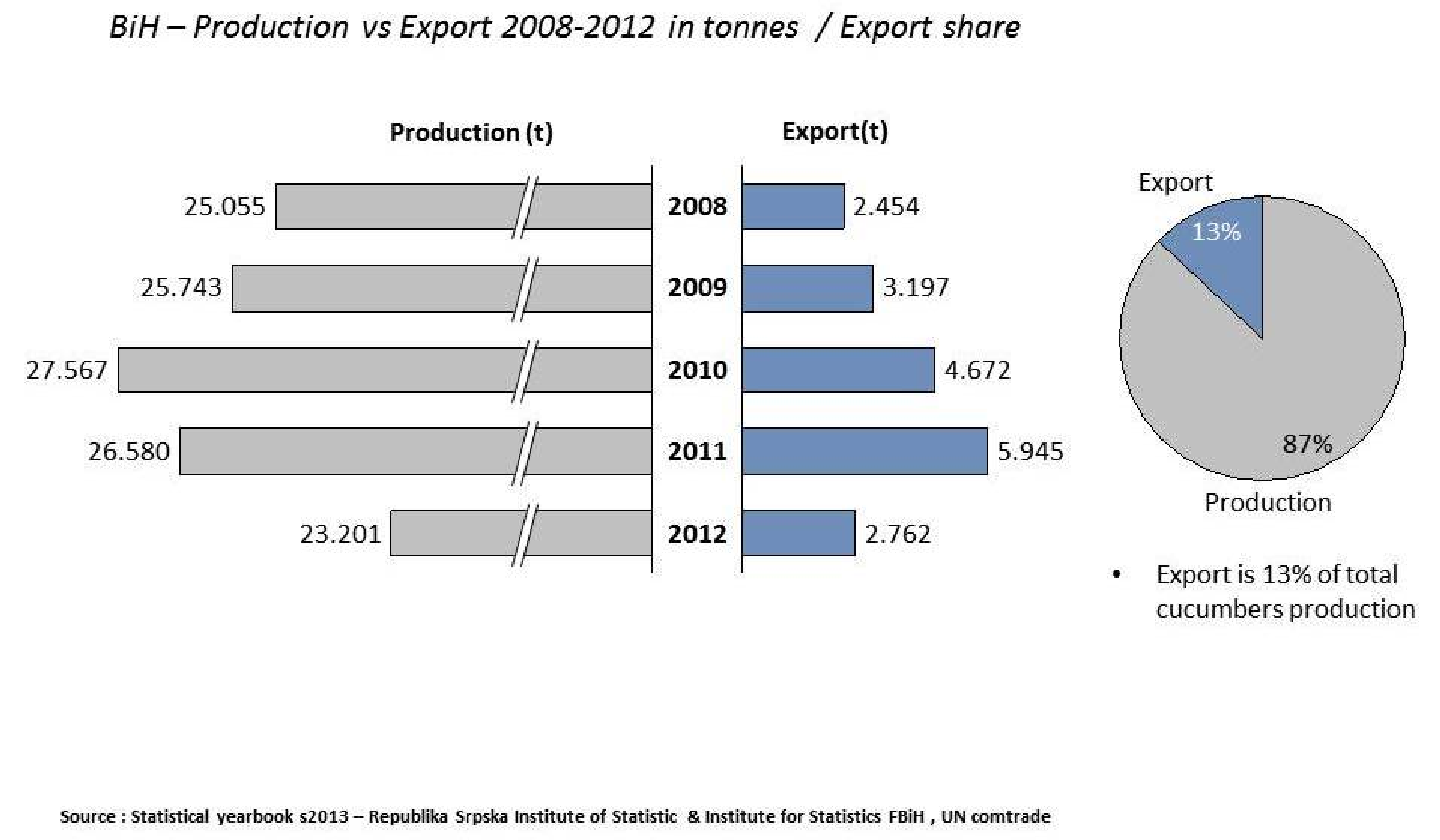


Export of cucumber growth and trend

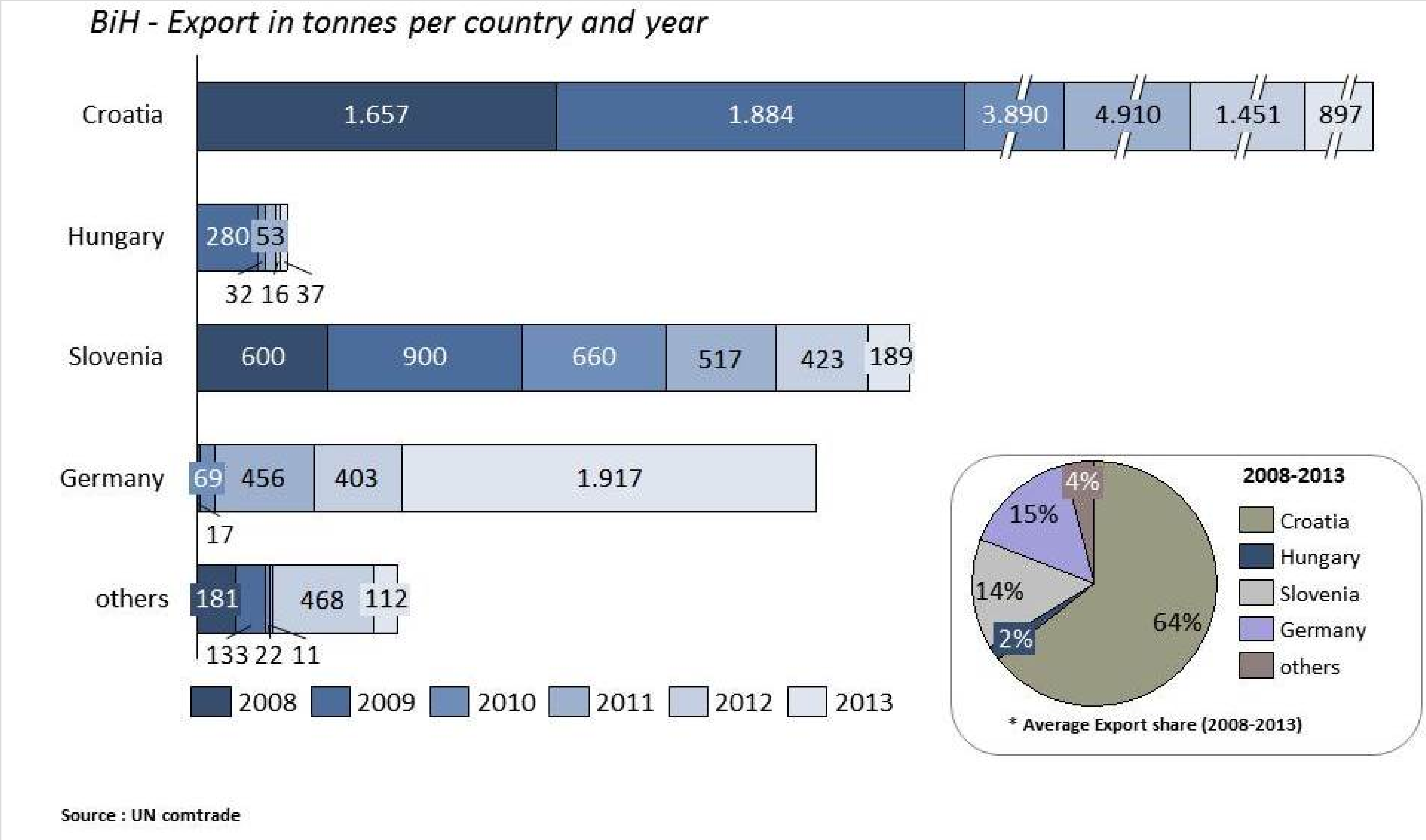




Export vs Production of cucumber



Key markets - Export of cucumber per country



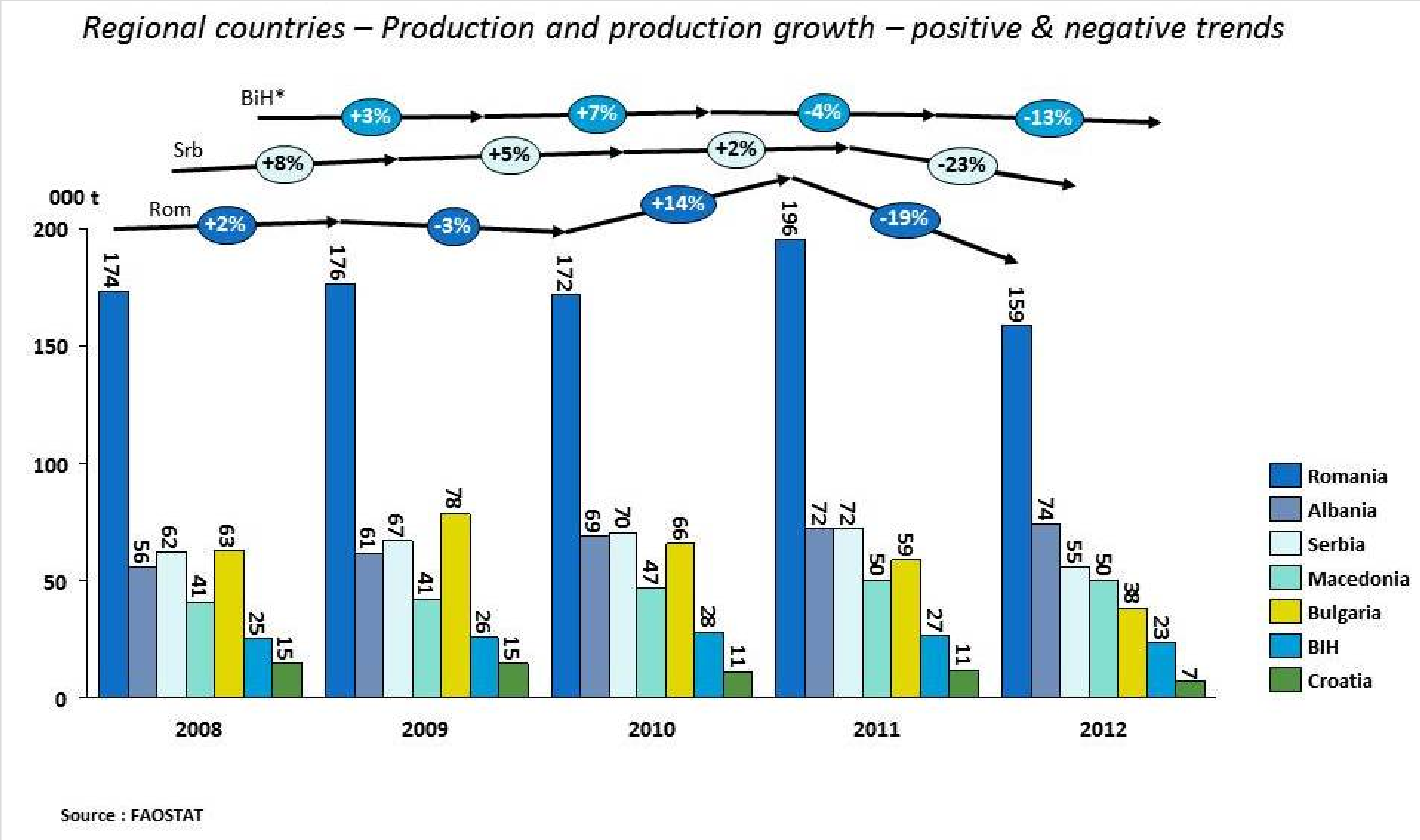
Competition for production of cucumber – Regional countries production

Regional countries – average production 2008-2012 (t)

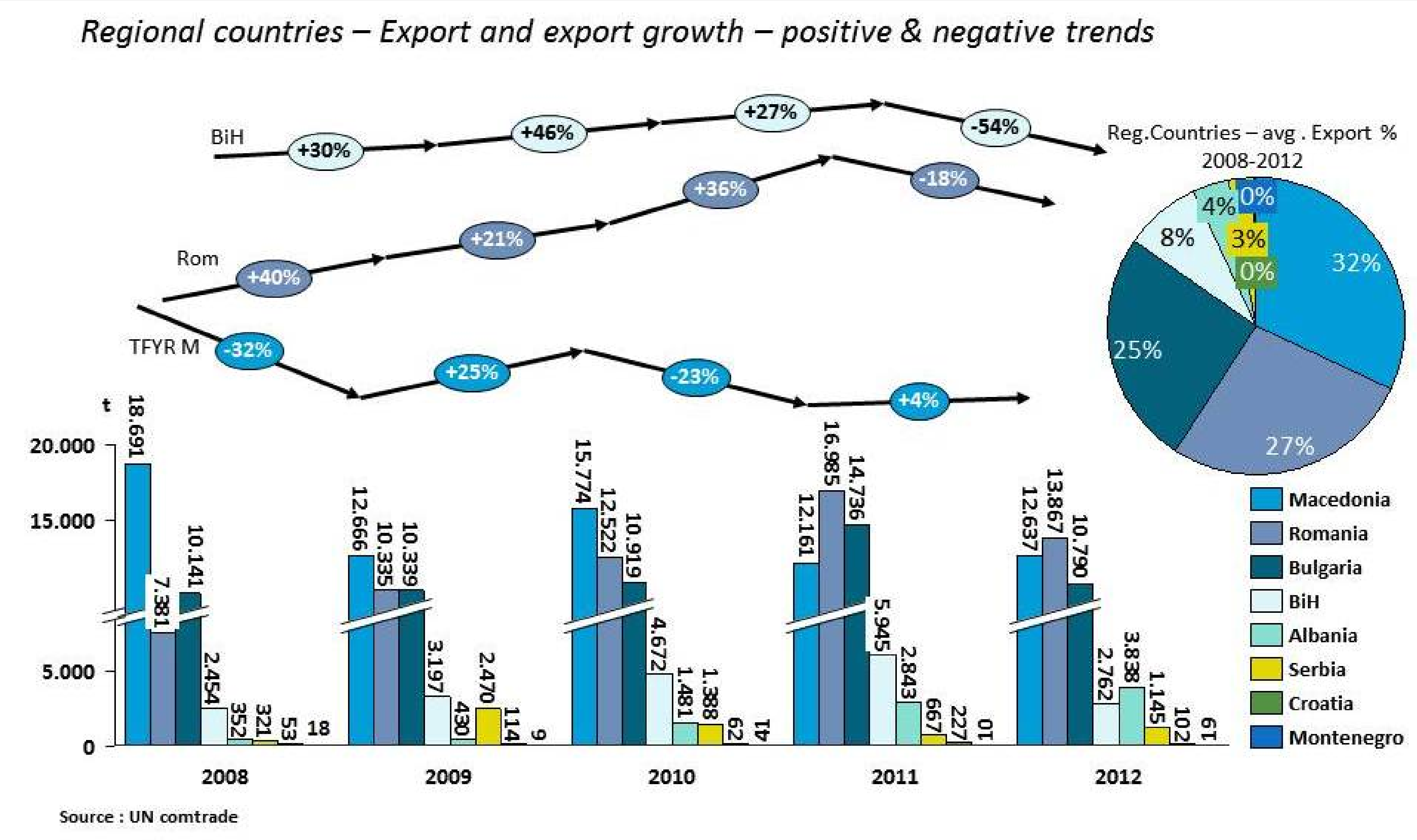
Regional Country & world's prod. place	Av. Prod. 2008-2012 (t)
Romania[28]	175.379
Albania[38]	66.328
Serbia[43]	65.183
Macedonia[47]	45.744
Bulgaria[55]	60.617
BIH[68]	25.629
Croatia[88]	11.597

Source : FAOSTAT

Competition for production of cucumber – Regional countries production charts

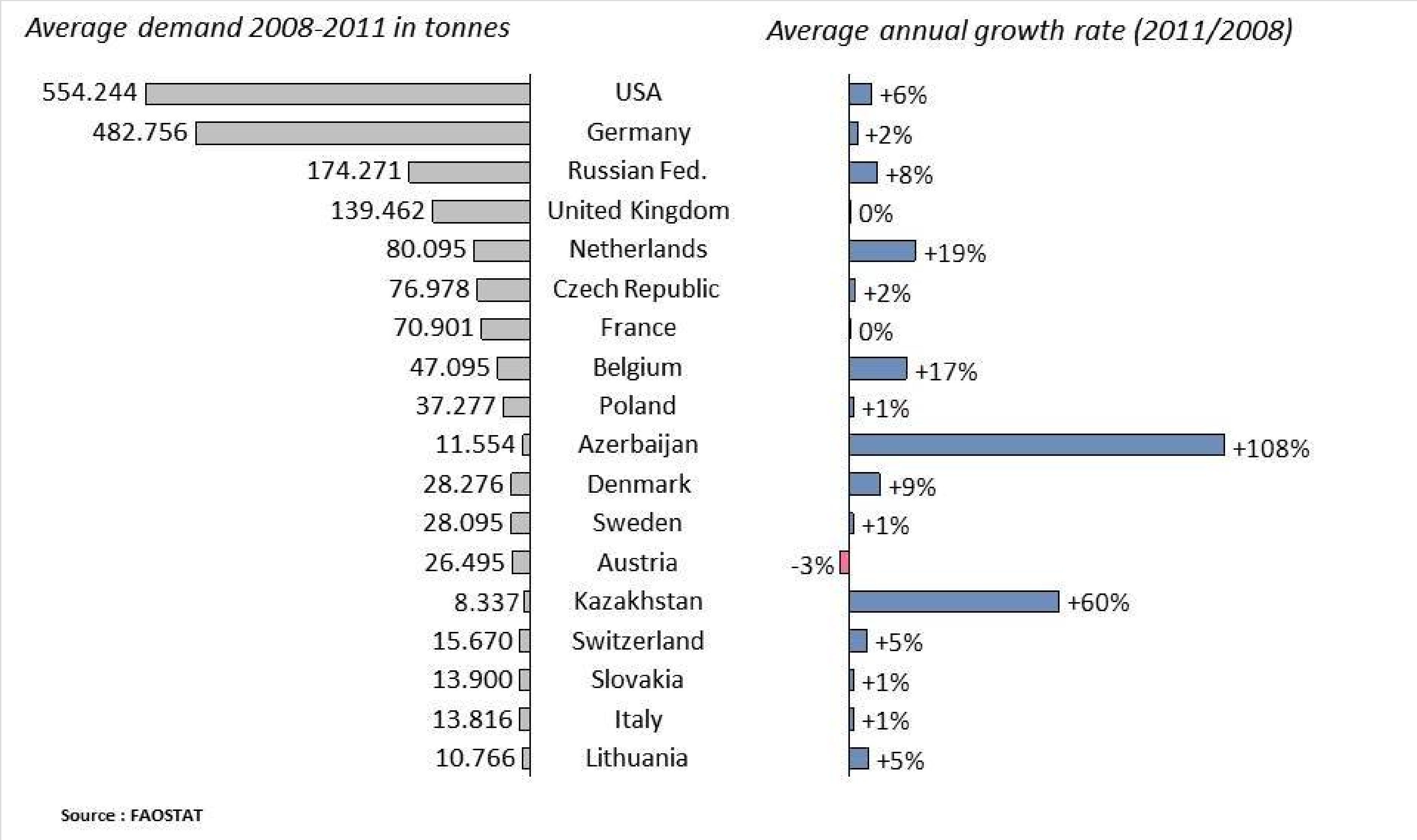


Competition for production of cucumber – Regional countries export to the World



* The very first Balkan's export country place holds Macedonia with 32% of total export Balkan countries share. (2008-2012)

International Demand for cucumber



CARROT

Statistical analysis showed that the carrot does not belong to the group of key strategic products / vegetables for the FBiH and BiH. Production of carrots has a negative growth trend 2008-2012. The highest production of carrots in the RS is in the municipality of Bijeljina (still very modest), while u FBiH in the Zenica-Doboj Canton. BiH holds the 81st place world carrots producers. The purchase price of carrots is very good in comparison with other countries / producers .

Exports has an average negative growth rate in RS -96% for the reference period 2012/2008.

The most important markets are Serbia and Croatia. Almost all Balkan countries produce more carrots than BH.

The largest regional exporter carrots Serbia with a share of 74% of the Balkan markets.

International demand for cucumbers is great, while particular interest have Germany, Netherlands , Russian Federation and Belgium.

Carrot– market opportunity

Segment/ Product	Production Size[I] -FBIH Year	Tons (000 t)	Growth	Exports[II] Year	Size (t)	Growth
Carrot	2009/2008	16,1/22,3	↓ -28%	2009/2008	0/2,7	N/A
	2010/2009	18,6/16,1	↑ 15,1%	2010/2009	no data	no data
	2011/2010	16,6/18,6	↓ -11%	2011/2010	178,1/0	N/A
	2012/2011	10,8/16,6	↓ -35%	2012/2011	6,6/178,1	↓ -96%
	AVG. 2012/2008		↓ **-17%**	**AVG. 2012/2008**		↓ **-96%**

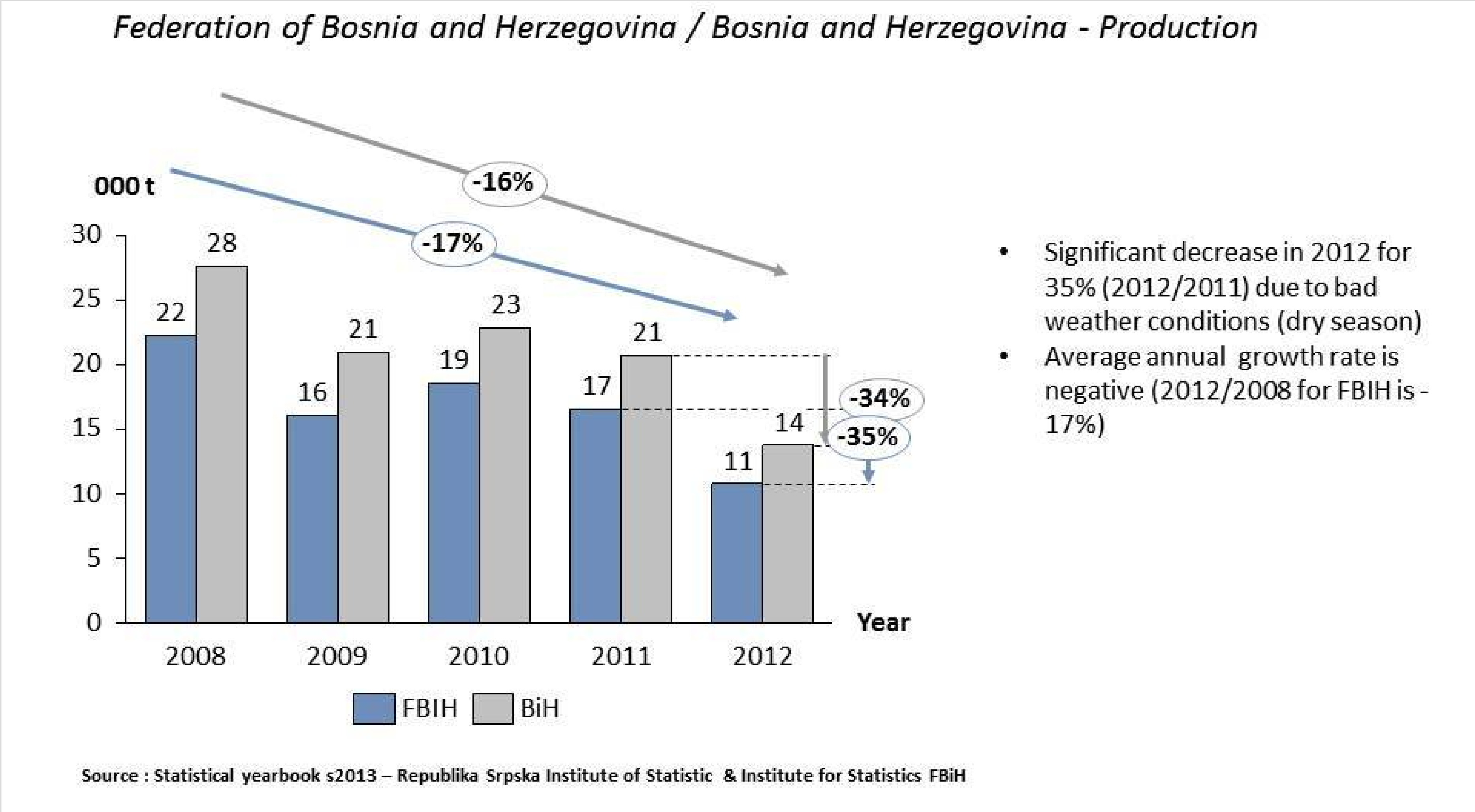
Key markets - name sofictication[III] Country	Year	Size (t)	Growth
Croatia	2009/2008	no data	no data
	2010/2009	no data	no data
	2011/2010	87,6/0	N/A
	2012/2011	6,6/87,6	↓ -92%
	AVG. 2012/2008		↓ -92%
Other countries	2009/2008	0/2,7	N/A
	2010/2009	no data	no data
	2011/2010	90,5/0	no data
	2012/2011	0/90,5	N/A
	AVG. 2012/2008		no data

Competition for production/processing[IV] Country	Year	Size (000 t)	Growth
Romania	2009/2008	215/235	↓ -8%
	2010/2009	221/215	↑ 3%
	2011/2010	246/221	↑ 11%
	2012/2011	200/246	↓ -18%
	AVG. 2012/2008		↓ -4%
Serbia	2009/2008	68/66	↑ 2%
	2010/2009	101/68	↑ 49%
	2011/2010	60/101	↓ -40%
	2012/2011	47/60	↓ -21%
	AVG. 2012/2008		↓ -8%
Macedonia	2009/2008	5/4	↑ 21%
	2010/2009	4/5	↓ -12%
	2011/2010	5/4	↑ 17%
	2012/2011	4/5	↓ -23%
	AVG. 2012/2008		↓ -1%
Croatia	2009/2008	11/8	↑ 44%
	2010/2009	13/11	↑ 19%
	2011/2010	11/13	↓ -17%
	2012/2011	15/11	↑ 42%
	AVG. 2012/2008		↑ 19%
Bulgaria	2009/2008	15/13	↑ 9%
	2010/2009	11/15	↓ -28%
	2011/2010	12/11	↑ 13%
	2012/2011	10/12	↓ -20%
	AVG. 2012/2008		↓ -8%
Albania	2009/2008	7/6	↑ 3%
	2010/2009	6/7	↓ -5%
	2011/2010	9/6	↑ 46%
	2012/2011	10/9	↑ 3%
	AVG. 2012/2008		↑ 10%
BiH	2009/2008	21/28	↓ -24%
	2010/2009	23/21	↑ 9%
	2011/2010	21/23	↓ -9%
	2012/2011	14/21	↓ -34%
	AVG. 2012/2008		↓ -16%

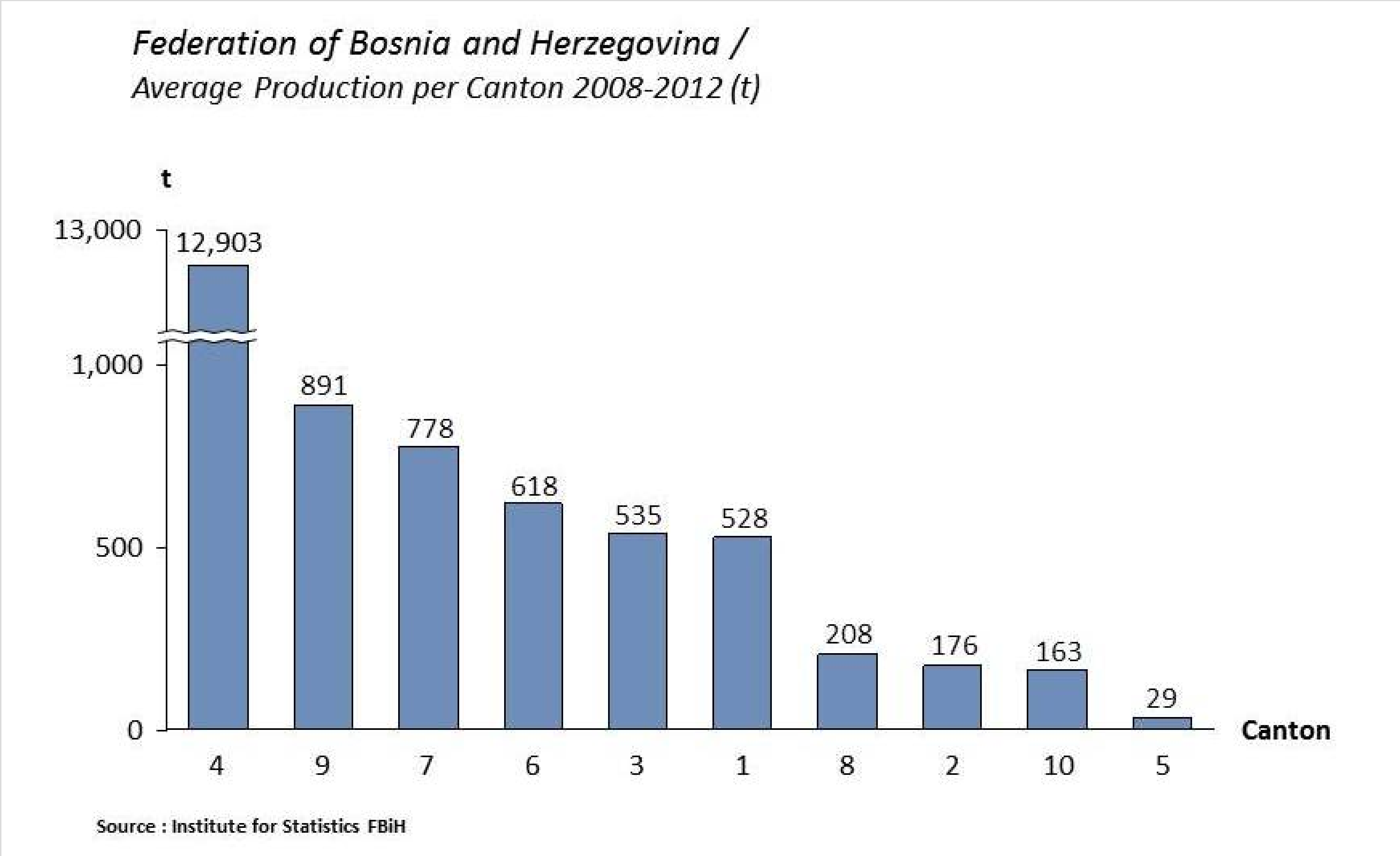
International Demand[V] (avg. 2008-2011) Country	Size (t)	Growth
Belgium	282.137	↓ -2%
Russian Fed.	208.245	↑ 1%
Germany	205.441	↑ 8%
USA	151.432	↑ 11%
France	126.469	↑ 4%
Canada	113.849	↓ -2%
Rep. of Korea	82.830	↑ 7%
Malaysia	65.254	↑ 6%
Thailand	62.911	↑ 15%
Japan	62.604	↑ 24%
Netherlands	51.516	↑ 27%
United Kingdom	48.577	↓ -5%
Czech Rep.	38.570	↑ 3%
Poland	35.652	↓ -15%
Indonesia	33.817	↑ 45%
Romania	28.558	↓ -9%
Portugal	28.395	↑ 3%
Kazakhstan	25.503	↑ 93%
Singapore	24.180	↑ 3%
El Salvador	20.738	↑ 1%
Ireland	20.404	↑ 9%
Austria	20.022	↓ -12%
Slovakia	18.644	↓ -3%
Spain	18.125	↓ -10%
Lebanon	16.739	↑ 13%
Bulgaria	13.936	↑ 20%
China Hong Kong SAR	11.942	↑ 1%
Lithuania	11.764	↓ -18%
Italy	11.287	↓ -5%
Ukraine	11.337	↓ -64%

I source: Statistics institute Republika Srpska, Statistics institute Federation BiH / Link - Chart name: *Production of carrots*
II source: Indirect Taxation Authority of BiH / Link - Chart name: *Export of carrots in 000€*
III source: Indirect Taxation Authority of BiH
IV source: FAOSTAT and Uncomtrade / Link - Chart name: *Competition for production of carrots – Regional countries production charts*
V source: FAOSTAT and Uncomtrade / Link - Chart name: *International Demand for carrots*

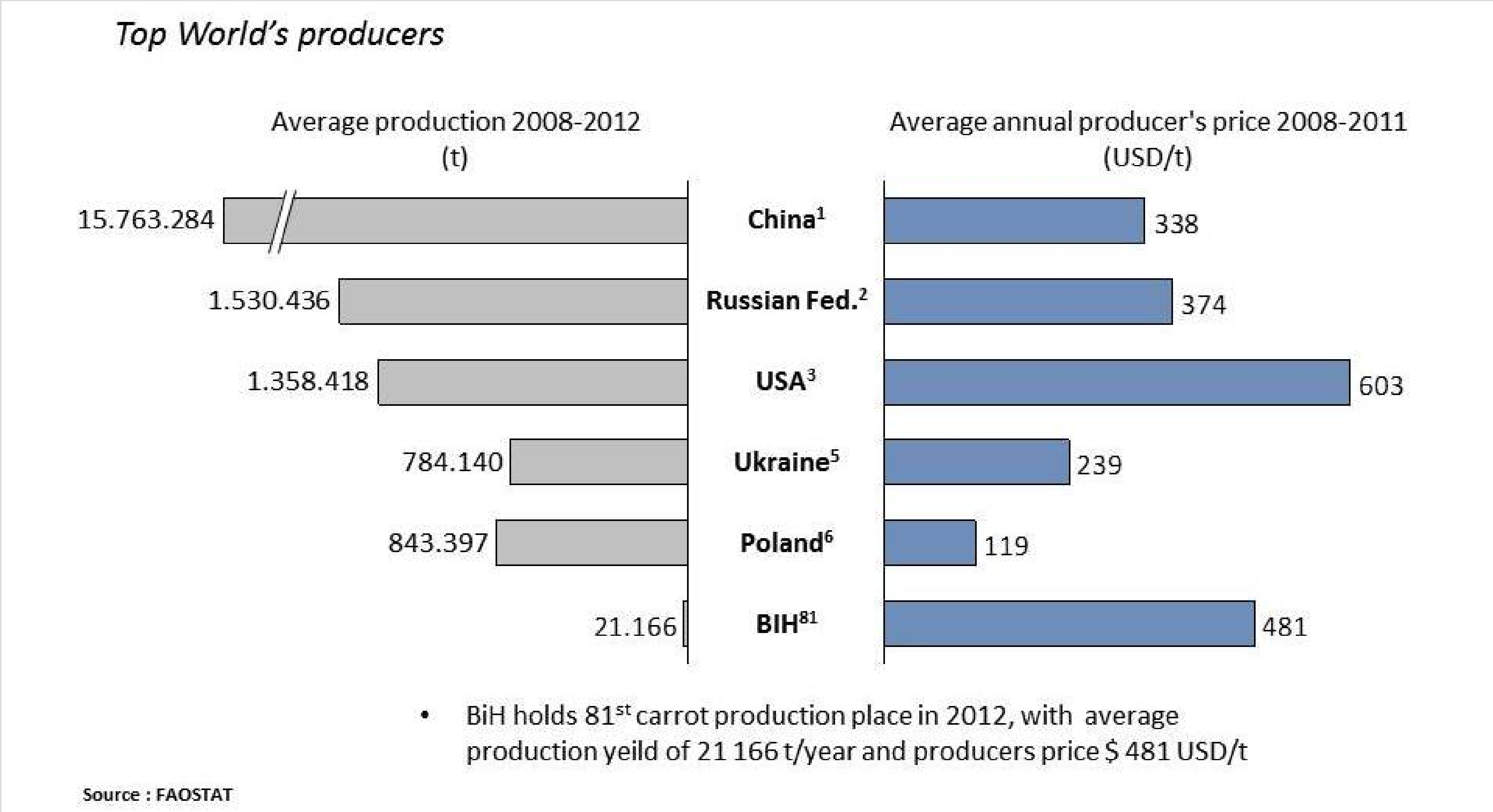
Production of carrot



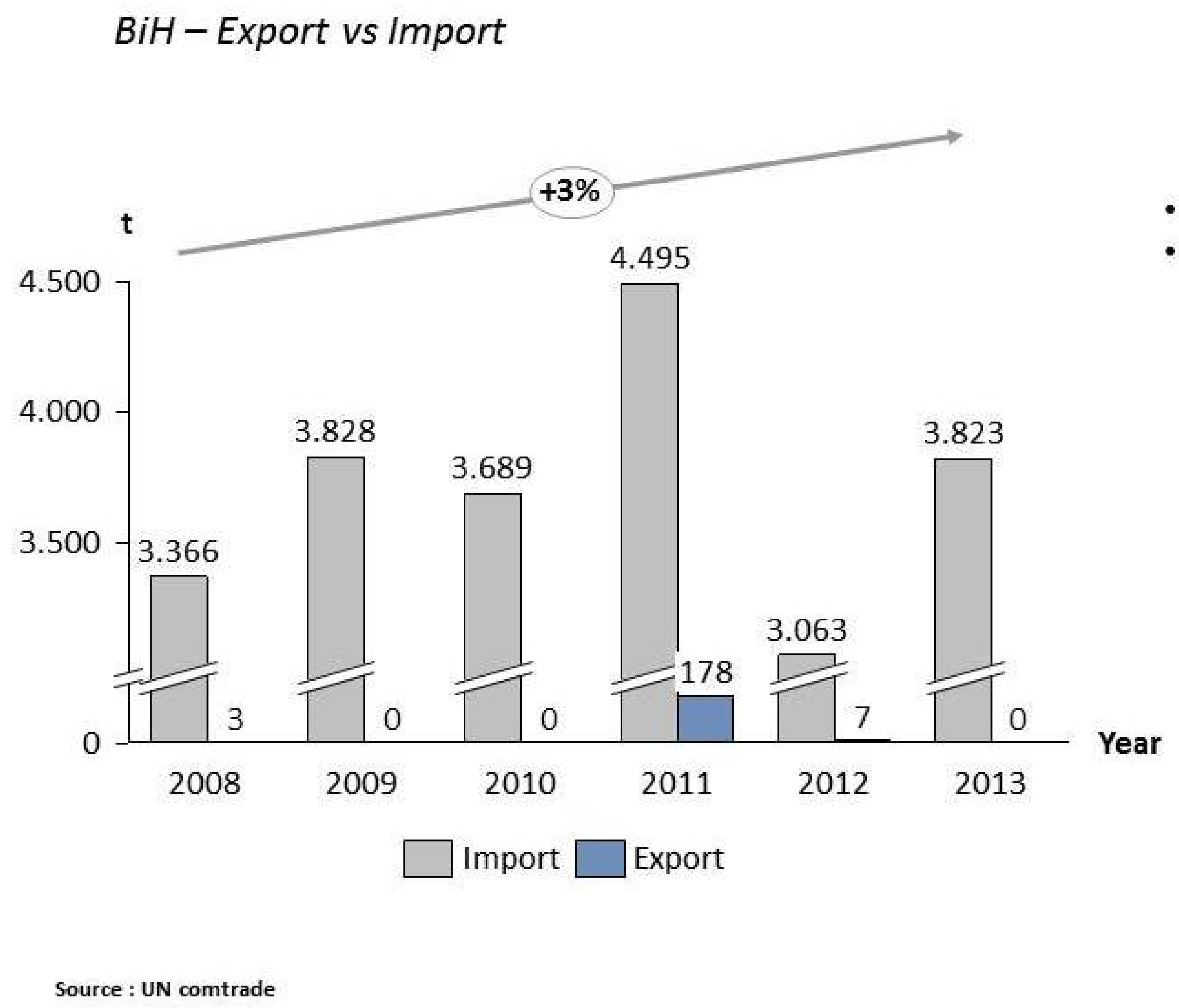
Production of carrot per Canton



Production of carrot – top world's producers

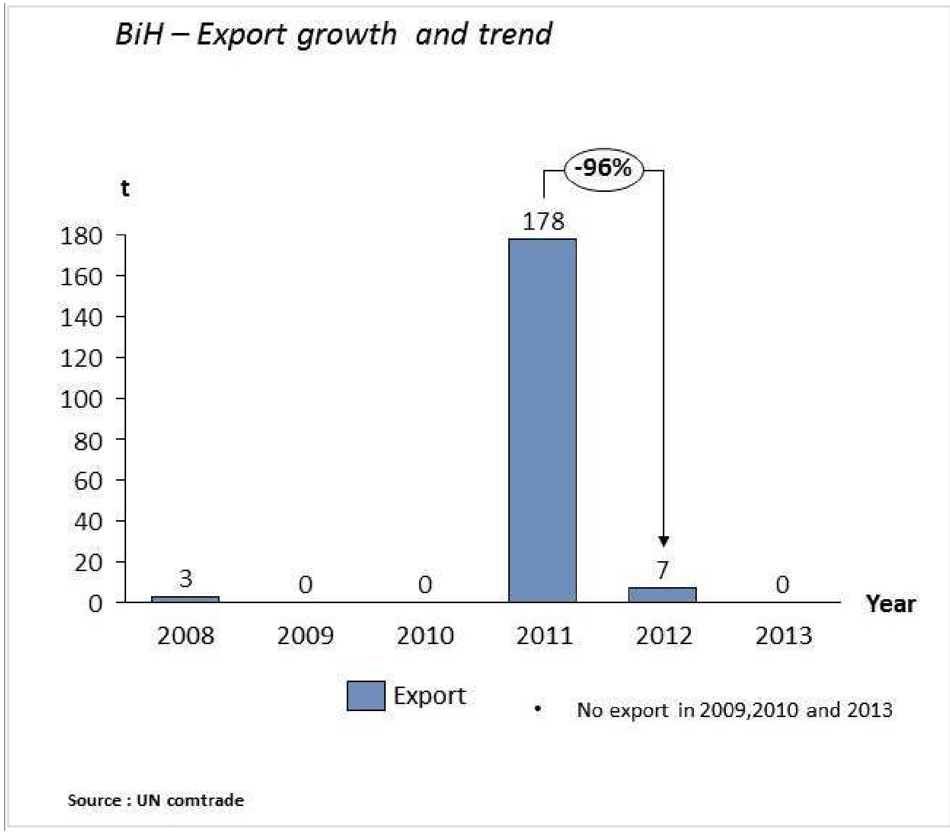


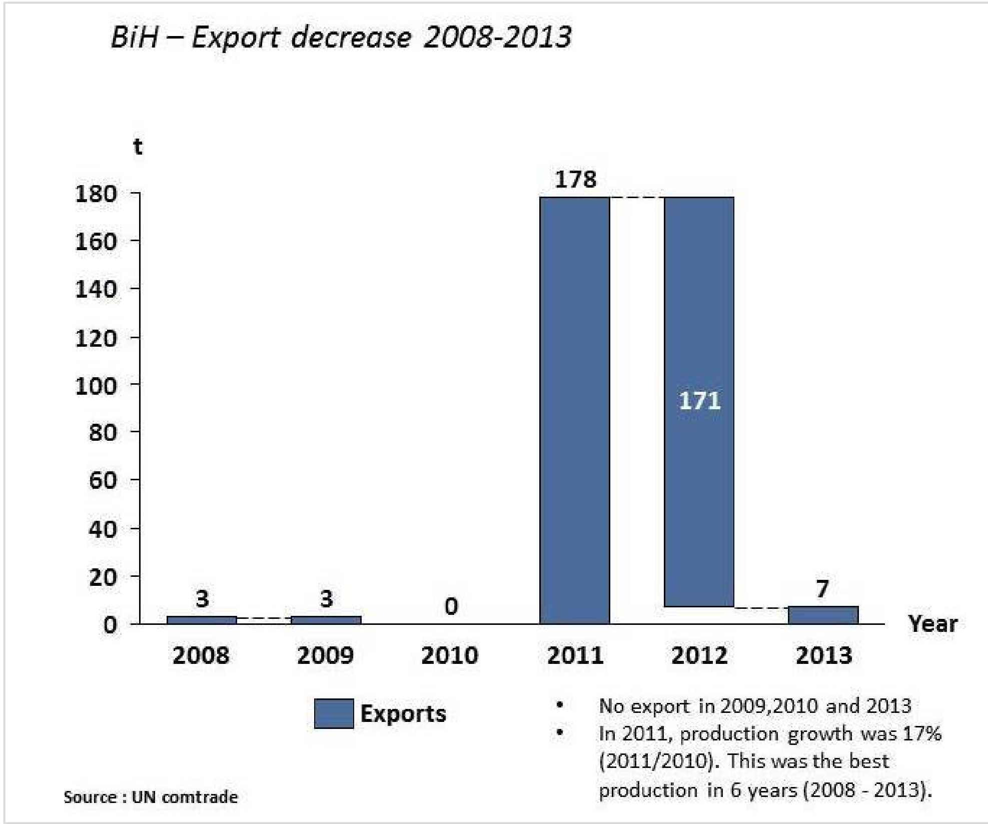
Export vs Import of carrot



- Very low export
- Import of carrots is raising (Average annual growth rate is positive +3% for 2013/2008).

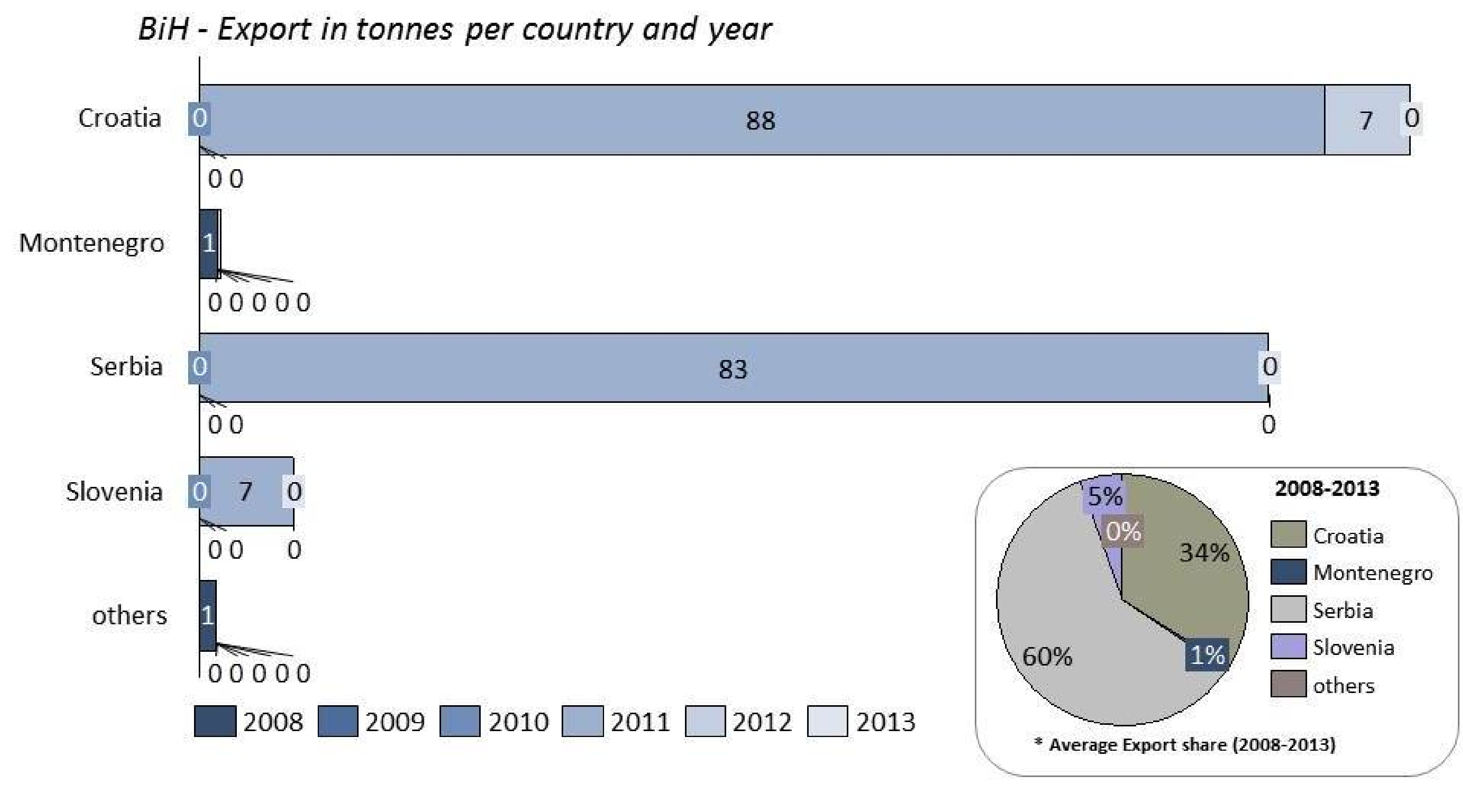
Export of carrot growth and trend





Export vs Production of carrot

Key markets - Export of carrot per country



Source : UN comtrade

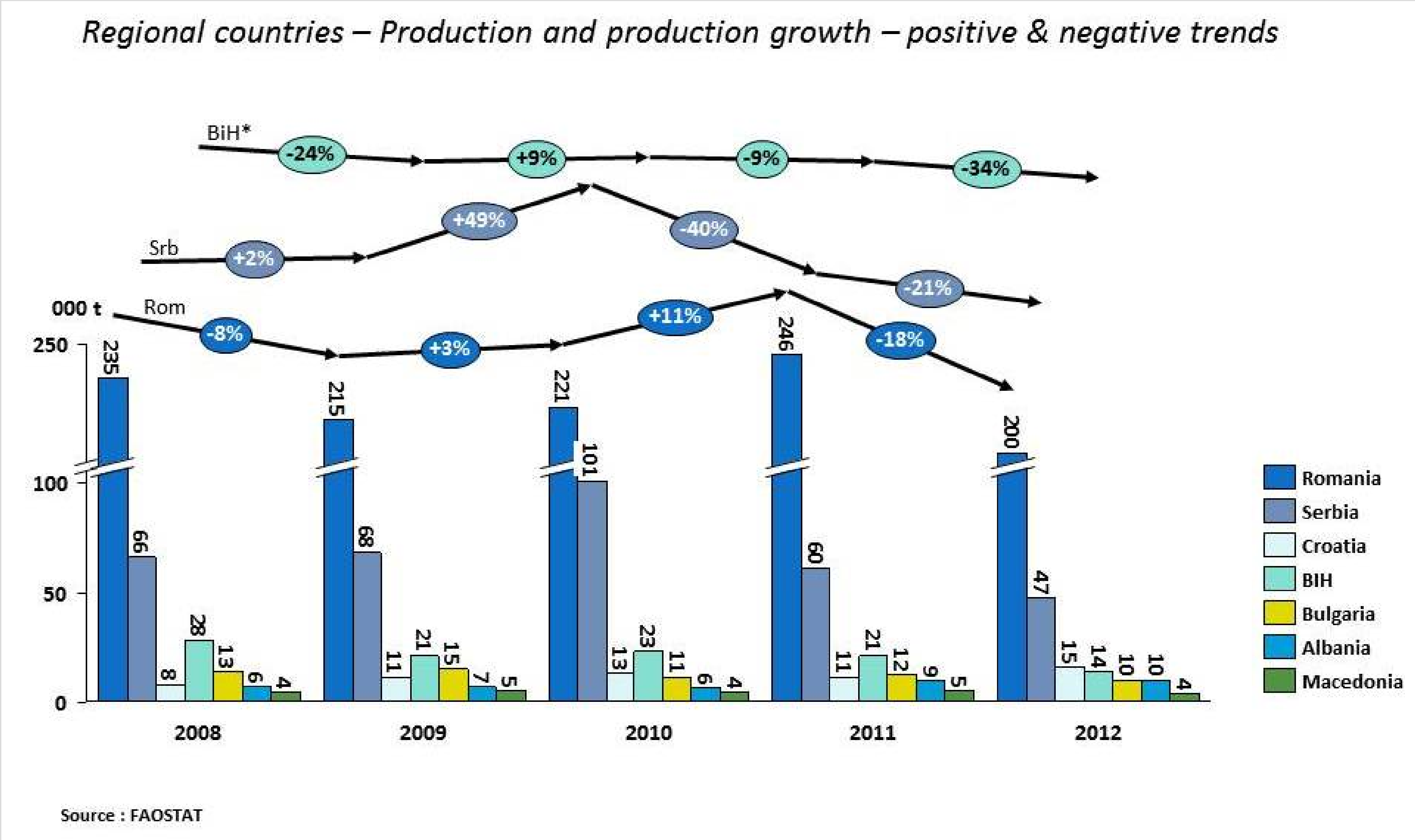
Competition for production of carrot – Regional countries production

Regional countries – average production 2008-2012 (t)

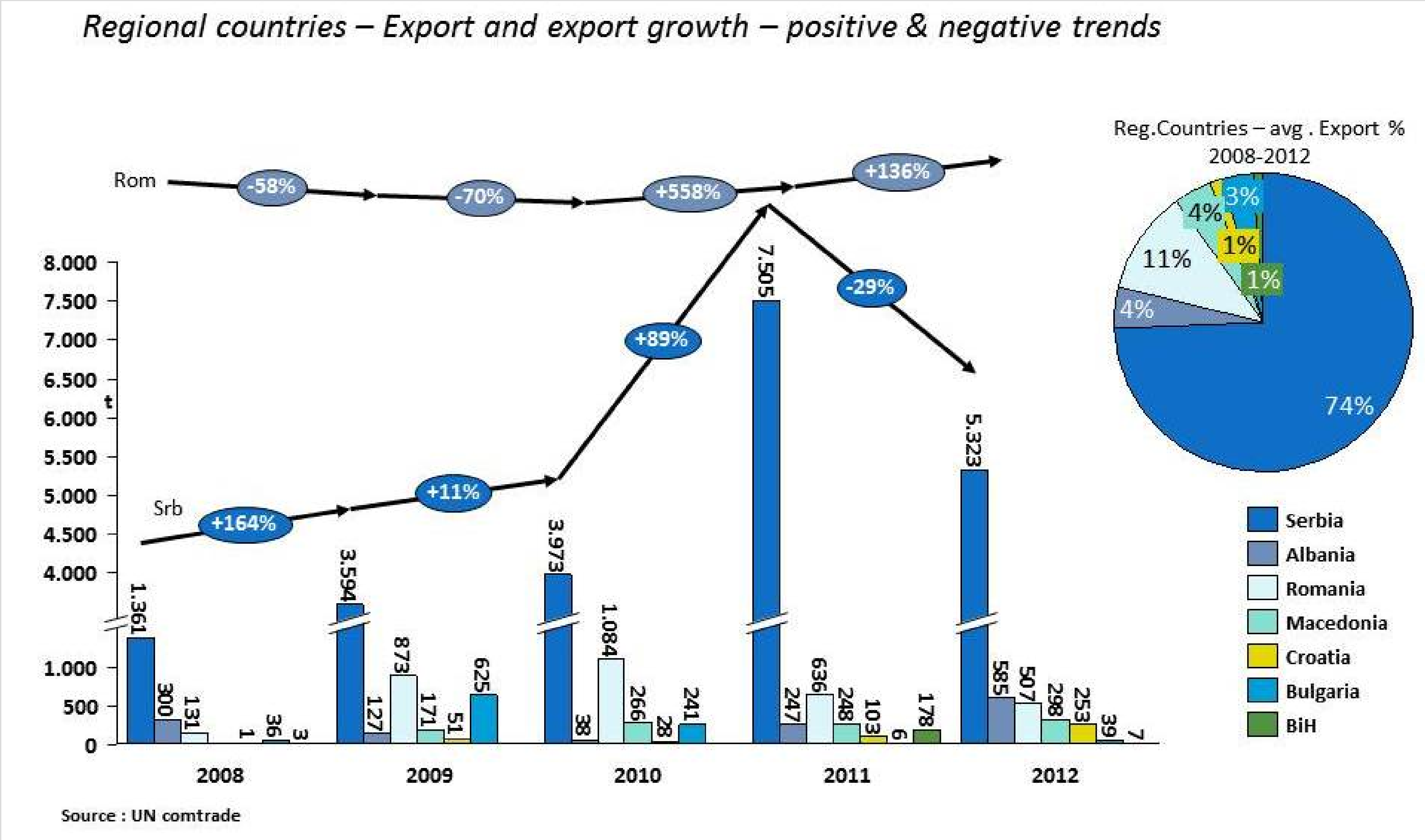
Regional Country & world's prod. place	Av. Prod. 2008-2012 (t)
Romania[33]	223.433
Serbia[58]	68.577
Croatia[79]	11.529
BIH[81]	21.166
Bulgaria[85]	12.043
Albania[86]	7.602
Macedonia[96]	4.159

Source : FAOSTAT

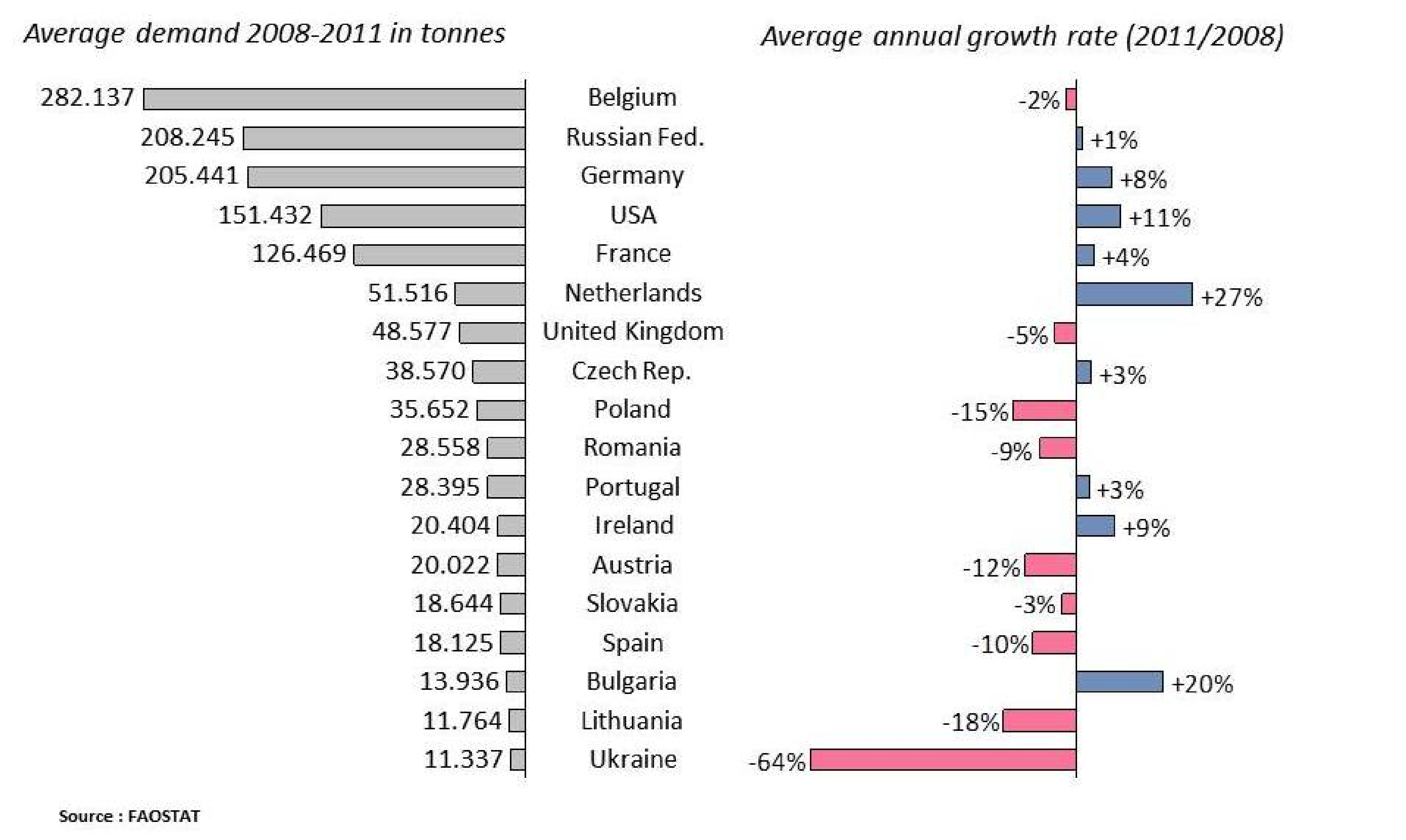
Competition for production of carrot – Regional countries production charts



Competition for production of carrot – Regional countries export to the World



International Demand for carrot



OTHER VEGETABLES

Statistical analysis in the next four tables gave an overview of market opportunities for tomatoes, onions, beans and garlic. These four vegetables does not belong within the statistical top three vegetables products because of its modest production, export and market capacity. The regional competition is very strong, where almost all Balkan countries produce more (and export) of the FBIH and BiH. The main markets for these four vegetables are Serbia and Croatia, while international demand is certainly very good. In this moment, Bosnia-Herzegovina does not have the option of market extending because of its modest capacity.

Tomato– market opportunity

Segment/ Product	Production Size[I] -FBIH Year	Size (000 t)	Growth
Tomato	2009/2008	19,6/17,8	↑ 10%
	2010/2009	19,7/19,6	↑ 1%
	2011/2010	27,2/19,7	↑ 38%
	2012/2011	20,2/27,2	↓ -26%
	AVG. 2012/2008		↑ 3%

Segment/ Product	Exports[II] -FBIH Year	Euro (000 €)	Growth
Tomato	2009/2008	201/180	↑ 12%
	2010/2009	344/201	↑ 71%
	2011/2010	384/344	↑ 11%
	2012/2011	144/384	↓ -62%
	AVG. 2012/2008		↓ -5%

Key markets - name sofictication[III]-FBIH Country	Year	Euro (000 €)	Growth
Serbia	2009/2008	3,6/19,9	↓ -82%
	2010/2009	16,4/3,6	↑ 357%
	2011/2010	0/16,4	N/A
	2012/2011	no data	no data
	AVG. 2012/2008		**N/A**
Croatia	2009/2008	186,1/139,6	↑ 33%
	2010/2009	311,9/186,1	↑ 68%
	2011/2010	359,9/311,9	↑ 15%
	2012/2011	137,5/359,9	↓ -62%
	AVG. 2012/2008		↓ **-0,4%**
Other countries	2009/2008	11,8/16,4	↓ -28%
	2010/2009	15,9/11,8	↑ 35%
	2011/2010	23,5/15,9	↑ 48%
	2012/2011	6,6/23,5	↓ -72%
	AVG. 2012/2008		↓ **-20%**

Competition for production/processing[IV] Country	Year	Size (000t)	Growth
Romania	2009/2008	755,6/814,4	↓ -7%
	2010/2009	768,5/755,6	↑ 2%
	2011/2010	911/768,5	↑ 19%
	2012/2011	683,3/911	↓ -25%
	AVG. 2012/2008		↓ **-4%**
Serbia	2009/2008	189,4/176,5	↑ 7%
	2010/2009	189,4/189,4	↑ 0%
	2011/2010	198,7/189,4	↑ 5%
	2012/2011	155,7/198,7	↓ -22%
	AVG. 2012/2008		↓ **-3%**
Bulgaria	2009/2008	104,2/134,1	↓ -22%
	2010/2009	114,6/104,2	↑ 10%
	2011/2010	103,1/114,6	↓ -10%
	2012/2011	94/103,1	↓ -9%
	AVG. 2012/2008		↓ **-9%**
Croatia	2009/2008	37,4/32,4	↑ 16%
	2010/2009	33,6/37,4	↓ -10%
	2011/2010	35,8/33,6	↑ 6%
	2012/2011	25,4/35,8	↓ -29%
	AVG. 2012/2008		↓ **-6%**
Montenegro	2009/2008	22,1/22,2	↓ 0%
	2010/2009	22,4/22,1	↑ 2%
	2011/2010	23,1/22,4	↑ 3%
	2012/2011	22,8/23,1	↓ -1%
	AVG. 2012/2008		↑ **1%**
Macedonia	2009/2008	145,4/121,6	↑ 20%
	2010/2009	168/145,4	↑ 16%
	2011/2010	165,6/168	↓ -1%
	2012/2011	145,8/165,6	↓ -12%
	AVG. 2012/2008		↑ **5%**
Albania	2009/2008	162,4/162,5	↓ 0%
	2010/2009	199,3/162,4	↑ 23%
	2011/2010	200/199,3	↑ 0%
	2012/2011	205/200	↑ 2%
	AVG. 2012/2008		↑ **6%**

International Demand[V] (avg. 2008-2011) Country	Size (t)	Growth
USA	1.332.362	↑ 10%
Russian Federation	699.392	↑ 3%
Germany	674.969	↑ 3%
France	509.258	↑ 2%
United Kingdom	404.153	↓ 0%
Canada	193.116	↑ 0%
Iraq	185.324	↓ -1%
Netherlands	183.324	↑ 10%
Spain	172.384	↓ -9%
Saudi Arabia	152.727	↑ 104%
United Arab Emirates	119.213	↑ 9%
Italy	110.580	↑ 15%
Syrian Arab Republic	105.656	↑ 9%
Poland	103.985	↑ 7%
Pakistan	97.163	↑ 68%
Czech Republic	94.730	↑ 1%
El Salvador	90.109	↑ 1%
Sweden	86.365	↑ 2%
Belgium	80.024	↓ -2%
Bulgaria	53.833	↓ -19%
Romania	53.793	↓ -10%
Austria	52.602	↑ 2%
Ukraine	51.089	↑ 11%
Lithuania	48.244	↑ 5%
Denmark	41.388	↑ 13%
Kuwait	40.509	↓ -4%
Switzerland	39.627	↓ 0%
Mexico	34.078	↓ -7%
Qatar	33.484	↑ 1%
Slovakia	33.027	↓ -9%

I source: Statistics institute Republika Srpska, Statistics institute Federation BiH
II source: Indirect Taxation Authority of BiH
III source: Indirect Taxation Authority of BiH
IV source: FAOSTAT and Uncomtrade - calculation based on country exports
V source: FAOSTAT and Uncomtrade

Onion– market opportunity

Segment/ Product	Production Size[I] -FBIH			Exports[II] -FBIH			Key markets - name sofictication[III]-FBIH			
	Year	Size (000 t)	Growth	Year	Euro (000 €)	Growth	Country	Year	Euro (000 €)	Growth
Onion	2009/2008	27,4/25,1	9%	2009/2008	no data	no data	no data	2009/2008	no data	no data
	2010/2009	25,9/27,4	-5%	2010/2009	no data	no data		2010/2009	no data	no data
	2011/2010	28,1/25,9	8%	2011/2010	no data	no data		2011/2010	no data	no data
	2012/2011	22,5/28,1	-20%	2012/2011	no data	no data		2012/2011	no data	no data
	AVG. 2012/2008		-3%	AVG. 2012/2008		no data		AVG. 2012/2008		no data

Competition for production/processing[IV]			
Country	Year	Size (000t)	Growth
Albania	2009/2008	26,3/25,8	2%
	2010/2009	33,4/26,3	27%
	2011/2010	38/33,4	14%
	2012/2011	35/38	-8%
	AVG. 2012/2008		8%
Macedonia	2009/2008	2,3/2,1	10%
	2010/2009	2,3/2,3	0%
	2011/2010	2,2/2,3	-4%
	2012/2011	2,2/2,2	0%
	AVG. 2012/2008		1%
Bulgaria	2009/2008	6,3/6,4	-2%
	2010/2009	6,3/6,3	1%
	2011/2010	5,7/6,3	-10%
	2012/2011	6/5,7	6%
	AVG. 2012/2008		-2%

International Demand[V] (avg. 2008-2011)		
Country	Size (t)	Growth
Brazil	203.138	-1%
Indonesia	107.271	8%
Paraguay	15.477	13%
Gambia	11.370	22%
Germany	7.728	7%
Saudi Arabia	6.643	-4%
Trinidad and Tobago	6.197	-2%
Liberia	5.975	12%
Belgium	5.057	9%
United Kingdom	4.867	-7%
Italy	4.354	-3%
Netherlands	3.422	4%
France	2.553	-51%
Libya	1.993	6%
Lesotho	1.650	0%
Uruguay	1.534	-36%
Burkina Faso	1.388	59%
Algeria	1.355	-42%
Austria	1.216	18%
Spain	1.200	-17%
Bahamas	1.101	-14%
New Caledonia	997	19%
Poland	971	-15%
Samoa	911	-6%
Switzerland	871	-7%
Tunisia	812	-40%
New Zealand	648	-25%
Sweden	620	-2%
Thailand	564	-100%
Greece	560	-43%

I source: Statistics institute Republika Srpska, Statistics institute Federation BiH
II source: Indirect Taxation Authority of BiH
III source: Indirect Taxation Authority of BiH
IV source: FAOSTAT and Uncomtrade - calculation based on coutry exports
V source: FAOSTAT and Uncomtrade

Bean– market opportunity

Segment/ Product	Production Size[I] -FBIH			Exports[II] -FBIH			Key markets - name sofictication[III]-FBIH			
	Year	Size (000 t)	Growth	Year	Euro (000 €)	Growth	Country	Year	Euro (000 €)	Growth
Bean	2009/2008	8/7,2	↑ 11%	2009/2008	no data	no data	Croatia	2009/2008	no data	no data
	2010/2009	6,6/8	↓ -17%	2010/2009	no data	no data		2010/2009	no data	no data
	2011/2010	6,8/6,6	↑ 3%	2011/2010	6/2	↑ 307%		2011/2010	6,1/1,5	↑ 300%
	2012/2011	4,3/6,8	↓ -37%	2012/2011	no data	no data		2012/2011	0/6,1	N/A
	AVG. 2012/2008		↓ -12%	AVG. 2012/2008		no data		AVG. 2012/2008		no data

Competition for production/processing[IV]			
Country	Year	Size (000t)	Growth
Romania	2009/2008	55,9/61,6	↓ -9%
	2010/2009	55,7/55,9	↓ 0%
	2011/2010	60,3/55,7	↑ 8%
	2012/2011	49,9/60,3	↓ -17%
	AVG. 2012/2008		↓ -5%
Serbia	2009/2008	46,3/42,2	↑ 10%
	2010/2009	43,2/46,3	↓ -7%
	2011/2010	39,5/43,2	↓ -9%
	2012/2011	40/39,5	↑ 1%
	AVG. 2012/2008		↓ -1%
Bulgaria	2009/2008	5,7/6,9	↓ -17%
	2010/2009	4,3/5,7	↓ -24%
	2011/2010	1,6/4,3	↓ -64%
	2012/2011	2/1,6	↑ 28%
	AVG. 2012/2008		↓ -26%
Croatia	2009/2008	9,3/7,7	↑ 22%
	2010/2009	5,3/9,3	↓ -43%
	2011/2010	4,8/5,3	↓ -10%
	2012/2011	2,9/4,8	↓ -40%
	AVG. 2012/2008		↓ -22%
Montenegro	2009/2008	1,5/1,7	↓ -11%
	2010/2009	1,3/1,5	↓ -10%
	2011/2010	1,3/1,3	↓ -1%
	2012/2011	1/1,3	↓ -27%
	AVG. 2012/2008		↓ -13%
Macedonia	2009/2008	12,8/12,8	↓ 0%
	2010/2009	12,1/12,8	↓ -5%
	2011/2010	13/12,1	↑ 8%
	2012/2011	11/13	↓ -15%
	AVG. 2012/2008		↓ -4%
Albania	2009/2008	6,9/7,1	↓ -3%
	2010/2009	9,3/6,9	↑ 35%
	2011/2010	8,2/9,3	↓ -12%
	2012/2011	8,4/8,2	↑ 2%
	AVG. 2012/2008		↑ 4%

International Demand[V] (avg. 2008-2011)		
Country	Size (t)	Growth
Spain	97.832	↓ -2%
Belgium	71.196	↓ -12%
United States of Americ	50.905	↑ 12%
France	50.074	↓ -7%
Netherlands	45.985	↑ 7%
United Kingdom	34.667	↑ 0%
Canada	26.995	↓ -4%
Germany	20.331	↓ -3%
Italy	15.729	↑ 0%
Singapore	12.214	↑ 3%
Kenya	10.254	↓ -43%
Portugal	5.368	↓ -9%
Democratic Republic o	4.960	↓ -55%
United Arab Emirates	4.521	↓ -43%
Chile	3.893	↑ 71%
Madagascar	3.506	↑ 14%
Rwanda	3.373	↑ 364%
Switzerland	2.622	↑ 1%
Lebanon	2.112	↑ 2%
Saudi Arabia	2.087	↑ 5%
Malaysia	2.071	↓ -9%
Austria	2.035	↓ -13%
China, Macao SAR	1.704	↑ 7%
Swaziland	1.508	→ 0%
Indonesia	1.467	↓ -69%
Syrian Arab Republic	1.421	↓ 0%
Japan	1.207	↑ 18%
Qatar	1.207	↓ -9%
New Zealand	1.194	↓ -7%
Guatemala	1.020	↑ 67%

I source: Statistics institute Republika Srpska, Statistics institute Federation BiH
II source: Indirect Taxation Authority of BiH
III source: Indirect Taxation Authority of BiH
IV source: FAOSTAT and Uncomtrade
V source: FAOSTAT and Uncomtrade

Garlic– market opportunity

Segment/ Product	Production Size[I] -FBIH Year	Size (000 t)	Growth	Exports[II] -FBIH Year	Euro (000 €)	Growth	Key markets - name sofictication[III]-FBIH Country	Year	Euro (000 €)	Growth
Garlic	2009/2008	3,9/3,6	↑ 7%	2009/2008	no data	no data	no data	2009/2008	no data	no data
	2010/2009	3,4/3,9	↓ -11%	2010/2009	14/13	↑ 4%		2010/2009	no data	no data
	2011/2010	3,2/3,4	↓ -8%	2011/2010	1/14	↓ -93%		2011/2010	no data	no data
	2012/2011	2,5/3,2	↓ -20%	2012/2011	50/1	↑ 4910%		2012/2011	no data	no data
	AVG. 2012/2008		↓ **-8%**	**AVG. 2012/2008**		↑ **56%**		**AVG. 2012/2008**		**no data**

Competition for production/processing[IV] Country	Year	Size (000t)	Growth
Albania	2009/2008	7/6,7	↑ 6%
	2010/2009	8,1/7	↑ 15%
	2011/2010	15,3/8,1	↑ 89%
	2012/2011	15,7/15,3	↑ 2%
	AVG. 2012/2008		↑ **24%**
Macedonia	2009/2008	5,8/4,6	↑ 26%
	2010/2009	5/5,8	↓ -14%
	2011/2010	4,2/5	↓ -17%
	2012/2011	4,1/4,2	↓ -2%
	AVG. 2012/2008		↓ **-3%**
Bulgaria	2009/2008	1,6/1,2	↑ 35%
	2010/2009	2,3/1,6	↑ 46%
	2011/2010	1,7/2,3	↓ -26%
	2012/2011	1,7/1,7	↓ -1%
	AVG. 2012/2008		↑ **9%**
Croatia	2009/2008	5,1/5,1	↑ 1%
	2010/2009	4,3/5,1	↓ -17%
	2011/2010	4,1/4,3	↓ -3%
	2012/2011	4,6/4,1	↑ 11%
	AVG. 2012/2008		↓ **-3%**
Montenegro	2009/2008	0,8/0,7	↑ 8%
	2010/2009	0,9/0,8	↑ 8%
	2011/2010	0,9/0,9	↑ 8%
	2012/2011	0,8/0,9	↓ -16%
	AVG. 2012/2008		↑ **2%**
Romania	2009/2008	63,2/72,3	↓ -13%
	2010/2009	67,2/63,2	↑ 6%
	2011/2010	66,6/67,2	↓ -1%
	2012/2011	59,4/66,6	↓ -11%
	AVG. 2012/2008		↓ **-5%**
Serbia	2009/2008	23,4/24	↓ -3%
	2010/2009	22,3/23,4	↓ -4%
	2011/2010	21,1/22,3	↓ -5%
	2012/2011	16,7/21,1	↓ -21%
	AVG. 2012/2008		↓ **-9%**

International Demand[V] (avg. 2008-2011) Country	Size (t)	Growth
Indonesia	402.698	↓ 0%
Brazil	153.600	↑ 4%
Viet Nam	138.005	↑ 1%
Malaysia	85.565	↑ 4%
USA	77.741	↓ -7%
Pakistan	77.596	↓ -25%
Bangladesh	61.313	↓ -2%
Thailand	51.384	↑ 32%
Russian Federation	48.295	↑ 10%
United Arab Emirates	38.801	↑ 4%
Syrian Arab Republic	31.450	↓ -56%
Netherlands	30.472	↑ 6%
Philippines	28.435	↓ -48%
Italy	27.267	↑ 6%
Colombia	26.999	↓ -10%
Saudi Arabia	26.180	↑ 6%
France	23.141	↓ -1%
Sri Lanka	22.586	↓ -2%
United Kingdom	21.485	↑ 15%
Japan	19.402	↓ -1%
Republic of Korea	18.524	↑ 79%
Germany	18.109	↑ 8%
Canada	15.151	↑ 3%
Spain	14.808	↓ -3%
Ecuador	14.080	↓ -14%
Mexico	13.284	↑ 8%
Haiti	13.283	↓ -7%
Algeria	12.483	↑ 41%
Singapore	12.026	↓ -1%
Nepal	11.906	↑ 9%

I source: Statistics institute Republika Srpska, Statistics institute Federation BiH
II source: Indirect Taxation Authority of BiH
III source: Indirect Taxation Authority of BiH
IV source: FAOSTAT and Uncomtrade - calculation based on country exports
V source: FAOSTAT and Uncomtrade

VEGETABLE PROCESSING/ CREATING VALUE ADDED IN VEGETABLE VALUE CHAIN

Processing industry in the FBIH is concentrated in small private companies, where the emphasis is placed mainly on the production of production of fresh and frozen vegetables where an average growth rate is up to 12% (2012 / 2008).

Key markets are: Serbia, Croatia, Austria, Germany and Albania. Competition in the region is high, while Serbia and Romania have a positive average growth rate (2012/2008).

International demand is raising, especially for the processing of fresh and frozen vegetables.

More detailed statistical calculations of vegetables industry are given in the following seven tables.

Tomato prepared or preserved– market opportunity

Segment/ Product	Production Size[I] -FBIH			Exports[II] -FBIH			Key markets - name sofictication[III]-FBIH			
	Year	Size (t)	Growth	Year	Euro (000 €)	Growth	Country	Year	Euro (000 €)	Growth
Tomato prepared or preserved	2009/2008	126/164	↓ -23%	2009/2008	65/75	↓ -13%	Croatia	2009/2008	34,3/28,1	↑ 22%
	2010/2009	17/126	↓ -86%	2010/2009	19/65	↓ -71%		2010/2009	0/34,3	N/A
	2011/2010	46/17	↑ 163%	2011/2010	25/19	↑ 33%		2011/2010	no data	no data
	2012/2011	35/46	↓ -23%	2012/2011	13/25	↓ -47%		2012/2011	no data	no data
	AVG. 2012/2008		↓ **-32%**	**AVG. 2012/2008**		↓ **-35%**		**AVG. 2012/2008**		↓ **-81%**

Competition for production/processing[IV]			
Country	Year	Size (000t)	Growth
Macedonia	2009/2008	1/0	→ 0%
	2010/2009	0,8/1	↓ -20%
	2011/2010	1,1/0,8	↑ 36%
	2012/2011	0,5/1,1	↓ -51%
	AVG. 2012/2008		↓ **-19%**
Bulgaria	2009/2008	8,4/5,9	↑ 41%
	2010/2009	11/8,4	↑ 31%
	2011/2010	7,5/11	↓ -32%
	2012/2011	7,5/7,5	↑ 1%
	AVG. 2012/2008		↑ **6%**
Croatia	2009/2008	0,4/0,4	↓ -6%
	2010/2009	0,3/0,4	↓ -15%
	2011/2010	0,3/0,3	↑ 5%
	2012/2011	0,6/0,3	↑ 95%
	AVG. 2012/2008		↑ **13%**
Romania	2009/2008	2,5/0,6	↑ 308%
	2010/2009	0,7/2,5	↓ -73%
	2011/2010	0,7/0,7	↑ 12%
	2012/2011	0,8/0,7	↑ 6%
	AVG. 2012/2008		↑ **6%**
Serbia	2009/2008	3,6/3,8	↓ -6%
	2010/2009	4,2/3,6	↑ 16%
	2011/2010	4,6/4,2	↑ 10%
	2012/2011	4,9/4,6	↑ 7%
	AVG. 2012/2008		↑ **7%**

International Demand[V] (avg. 2008-2011)		
Country	Size (t)	Growth
United Kingdom	646.122	↓ -4%
Germany	532.614	↑ 3%
France	350.689	↓ -1%
Algeria	293.775	↓ -50%
Canada	229.791	↑ 3%
Japan	222.708	↑ 5%
Russian Fed.	204.550	↓ -1%
Italy	200.061	↓ -2%
Netherlands	138.346	↑ 11%
Australia	129.085	↑ 12%
Belgium	127.940	↑ 3%
USA	119.896	↓ -16%
Mexico	93.164	↑ 2%
Nigeria	91.611	↑ 35%
Poland	81.156	↑ 11%
Sweden	73.040	↓ -2%
Spain	72.409	↑ 3%
Ghana	70.109	↑ 19%
Switzerland	69.031	↓ -3%
Saudi Arabia	65.533	↑ 166%
Denmark	49.698	↓ -1%
Austria	49.614	↑ 3%
Rep. of Korea	43.417	↑ 4%
Ireland	36.728	↑ 3%
Brazil	35.956	↑ 33%
Romania	31.881	↑ 7%
Czech Rep.	31.741	↓ 0%
New Zealand	31.535	↓ 0%
Philippines	30.917	↓ -1%
Kazakhstan	30.737	↑ 0%

I source: Statistics institute Republika Srpska, Statistics institute Federation BiH
II source: Indirect Taxation Authority of BiH
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IV source: FAOSTAT and Uncomtrade - calculation based on country exports
V source: FAOSTAT and Uncomtrade

Potato preserved or canned – market opportunity

Segment/ Product	Production Size[I] -FBIH Year	Size (t)	Growth	Exports[II] Year	Size (t)	Growth
Potato preserved or canned	2009/2008	305/444	-31%	2009/2008	351/476	-26%
	2010/2009	103/305	-66%	2010/2009	201/351	-43%
	2011/2010	114/103	11%	2011/2010	176/201	-12%
	2012/2011	96/114	-16%	2012/2011	199/176	13%
	AVG. 2012/2008		**-32%**	**AVG. 2012/2008**		**-20%**

Key markets - name sofictication[III] Country	Year	Size (t)	Growth
Croatia	2009/2008	108/242	-56%
	2010/2009	120/108	12%
	2011/2010	144/120	20%
	2012/2011	151/144	5%
	AVG. 2012/2008		**-11%**
Serbia	2009/2008	16/176	-91%
	2010/2009	7/16	-57%
	2011/2010	0/7	-100%
	2012/2011	4/0	N/A
	AVG. 2012/2008		**-61%**
Macedonia	2009/2008	206/55	279%
	2010/2009	74/206	-64%
	2011/2010	16/74	-78%
	2012/2011	8/16	-48%
	AVG. 2012/2008		**-37%**
Slovenia	2009/2008	17/0	N/A
	2010/2009	0/17	-100%
	2011/2010	16/0	N/A
	2012/2011	18/16	13%
	AVG. 2012/2008		**N/A**

Competition for export processing[IV] Country	Year	Size (000t)	Growth
Serbia	2009/2008	2,6/3,6	-27%
	2010/2009	2,3/2,6	-12%
	2011/2010	2,1/2,3	-8%
	2012/2011	3,7/2,1	76%
	AVG. 2012/2008		**1%**
Macedonia	2009/2008	0,1/0	0%
	2010/2009	0,1/0,1	-35%
	2011/2010	0,1/0,1	47%
	2012/2011	0,1/0,1	16%
	AVG. 2012/2008		**3%**
Bulgaria	2009/2008	0,2/0,3	-28%
	2010/2009	0,3/0,2	12%
	2011/2010	0,9/0,3	247%
	2012/2011	0,4/0,9	-58%
	AVG. 2012/2008		**5%**
Croatia	2009/2008	0,5/0,3	36%
	2010/2009	0,5/0,5	0%
	2011/2010	0,6/0,5	19%
	2012/2011	1/0,6	73%
	AVG. 2012/2008		**29%**
Romania	2009/2008	1,3/1,4	-8%
	2010/2009	2,2/1,3	70%
	2011/2010	3,3/2,2	51%
	2012/2011	3,4/3,3	2%
	AVG. 2012/2008		**24%**

International Demand[V] (avg. 2008-2011) Country	Size (t)	Growth
Netherlands	191.275	-16%
Germany	155.008	3%
France	161.328	-1%
USA	120.700	11%
United Kingdom	114.039	-6%
Belgium	66.869	8%
Italy	53.626	5%
Rep. of Korea	45.779	13%
Spain	51.807	-1%
Canada	43.092	3%
Sweden	45.821	0%
China	50.229	32%
Mexico	34.833	9%
China Hong Kong SAR	30.473	13%
Indonesia	16.688	21%
Russian Fed.	35.402	-7%
Ireland	18.740	9%
Thailand	21.939	12%
Japan	17.808	40%
Peru	15.196	4%
Poland	17.075	8%
Denmark	16.904	4%
Malaysia	12.904	17%
Austria	20.538	-8%
Ukraine	17.399	-2%
Switzerland	17.137	-5%
Australia	10.138	14%
Latvia	8.751	10%
Philippines	12.481	-4%
Portugal	7.362	19%

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Prepared or preserved vegetable nes (excl. Frozen) – market opportunity

Segment/ Product	Production Size[I] -FBIH			Exports[II] -FBIH		
	Year	Size (000 t)	Growth	Year	Euro (000 €)	Growth
Prepared or preserved vegetable nes (excl. Frozen)	2009/2008	3,4/4,9	-31%	2009/2008	569/938	-39%
	2010/2009	0,6/3,4	-82%	2010/2009	411/569	-28%
	2011/2010	2,2/0,6	262%	2011/2010	445/411	8%
	2012/2011	0,3/2,2	-88%	2012/2011	401/445	-10%
	AVG. 2012/2008		**-52%**	**AVG. 2012/2008**		**-19%**

Key markets - name sofictication[III]-RS			
Country	Year	Euro (000 €)	Growth
Serbia	2009/2008	145/967	-85%
	2010/2009	148/145	2%
	2011/2010	207/148	40%
	2012/2011	131/207	-37%
	AVG. 2012/2008		**-39%**
Croatia	2009/2008	851/1117	-24%
	2010/2009	1125/851	32%
	2011/2010	1162/1125	3%
	2012/2011	1168/1162	1%
	AVG. 2012/2008		**1%**
Macedonia	2009/2008	no data	no data
	2010/2009	136/411	-67%
	2011/2010	0/136	N/A
	2012/2011	no data	no data
	AVG. 2012/2008		**N/A**
Kosovo	2009/2008	no data	no data
	2010/2009	0/4	N/A
	2011/2010	no data	no data
	2012/2011	159/338	-53%
	AVG. 2012/2008		**N/A**
Austria	2009/2008	219/137	60%
	2010/2009	299/219	37%
	2011/2010	177/299	-41%
	2012/2011	248/177	40%
	AVG. 2012/2008		**16%**
Germany	2009/2008	2/2	-25%
	2010/2009	2/2	0%
	2011/2010	0/2	N/A
	2012/2011	no data	no data
	AVG. 2012/2008		**279%**

Competition for export/processing[IV]			
Country	Year	Size (000t)	Growth
Romania	2009/2008	2,9/2,7	8%
	2010/2009	6,3/2,9	118%
	2011/2010	8/6,3	27%
	2012/2011	0/8	no data
	AVG. 2012/2008		**44%**
Serbia	2009/2008	20,4/22,7	-10%
	2010/2009	22,4/20,4	10%
	2011/2010	19,7/22,4	-12%
	2012/2011	0/19,7	no data
	AVG. 2012/2008		**-5%**
Bulgaria	2009/2008	23,5/25,9	-9%
	2010/2009	20,5/23,5	-13%
	2011/2010	18,8/20,5	-8%
	2012/2011	0/18,8	no data
	AVG. 2012/2008		**-10%**
Croatia	2009/2008	6,1/6,7	-9%
	2010/2009	5,4/6,1	-12%
	2011/2010	5,8/5,4	8%
	2012/2011	0/5,8	no data
	AVG. 2012/2008		**-5%**
Albania	2009/2008	0,7/0,3	97%
	2010/2009	0,5/0,7	-30%
	2011/2010	0,5/0,5	5%
	2012/2011	0/0,5	no data
	AVG. 2012/2008		**13%**
Macedonia	2009/2008	18/16,8	7%
	2010/2009	20,1/18	12%
	2011/2010	21,8/20,1	8%
	2012/2011	0/21,8	no data
	AVG. 2012/2008		**9%**
Montenegro	2009/2008	0,1/0,1	57%
	2010/2009	0,2/0,1	110%
	2011/2010	0,1/0,2	-52%
	2012/2011	0/0,1	no data
	AVG. 2012/2008		**17%**

International Demand[V] (avg. 2008-2011)		
Country	Size (t)	Growth
Germany	760.582	-1%
France	593.051	1%
Japan	510.763	2%
Russian Federation	410.740	-4%
Netherlands	386.916	-16%
Republic of Korea	334.879	2%
China	327.920	-5%
Canada	303.229	6%
Belgium	263.547	1%
China, Hong Kong SAR	238.251	-10%
Spain	210.101	-1%
Italy	178.317	2%
Singapore	121.670	2%
Saudi Arabia	100.919	27%
Sweden	94.791	3%
Austria	92.104	2%
Thailand	89.197	10%
Czech Republic	85.605	3%
Argentina	85.373	-52%
Australia	83.322	5%
China, Taiwan Province	66.923	12%
Denmark	63.578	7%
China ex.int	55.769	32%
Poland	55.707	17%
Malaysia	53.067	0%
Switzerland	48.265	1%
Ireland	42.262	3%
Qatar	41.073	-25%
Romania	41.043	-2%
Iraq	40.289	-22%

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Prepared or preserved vegetable nes (incl. Frozen) – market opportunity

Segment/ Product	Production Size[I] -FBIH Year	Size (000 t)	Growth		Exports[II] -FBIH Year	Euro (000 €)	Growth	
Prepared or preserved vegetable nes (incl. Frozen)	2009/2008	3,4/4,9	↓	-31%	2009/2008	938/1202	↓	-22%
	2010/2009	0,6/3,4	↓	-82%	2010/2009	1203/938	↑	28%
	2011/2010	2,2/0,6	↑	262%	2011/2010	639/1203	↓	-47%
	2012/2011	0,3/2,2	↓	-88%	2012/2011	1026/639	↑	61%
	AVG. 2012/2008		↓	**-52%**	**AVG. 2012/2008**		↓	**-4%**

Key markets - name sofictication[III]-RS Country	Year	Euro (000 €)	Growth	
Serbia	2009/2008	123,7/216,3	↓	-43%
	2010/2009	53,2/123,7	↓	-57%
	2011/2010	1,5/53,2	↓	-97%
	2012/2011	14,8/1,5	↑	867%
	AVG. 2012/2008		↓	**-49%**
Croatia	2009/2008	85,9/177,9	↓	-52%
	2010/2009	16,4/85,9	↓	-81%
	2011/2010	39,4/16,4	↑	141%
	2012/2011	25,6/39,4	↓	-35%
	AVG. 2012/2008		↓	**-38%**
Macedonia	2009/2008	146,7/180,5	↓	-19%
	2010/2009	72,6/146,7	↓	-51%
	2011/2010	61,9/72,6	↓	-15%
	2012/2011	28,1/61,9	↓	-55%
	AVG. 2012/2008		↓	**-37%**
Kosovo	2009/2008	4,6/0,5	↑	800%
	2010/2009	13,3/4,6	↑	189%
	2011/2010	40,4/13,3	↑	204%
	2012/2011	1/40,4	↓	-97%
	AVG. 2012/2008		↑	**19%**
Austria	2009/2008	4,1/24	↓	-83%
	2010/2009	84,9/4,1	↑	1975%
	2011/2010	102,8/84,9	↑	21%
	2012/2011	134/102,8	↑	30%
	AVG. 2012/2008		↑	**54%**
Germany	2009/2008	1,5/2	↓	-25%
	2010/2009	15,9/1,5	↑	933%
	2011/2010	54,2/15,9	↑	242%
	2012/2011	56,8/54,2	↑	5%
	AVG. 2012/2008		↑	**130%**

Competition for export/processing[IV] Country	Year	Size (000t)	Growth	
Romania	2009/2008	6,6/5,6	↑	17%
	2010/2009	10,9/6,6	↑	65%
	2011/2010	11,2/10,9	↑	3%
	2012/2011	0/11,2		no data
	AVG. 2012/2008		↑	**26%**
Serbia	2009/2008	37,5/36,5	↑	3%
	2010/2009	52,9/37,5	↑	41%
	2011/2010	49,4/52,9	↓	-7%
	2012/2011	0/49,4		no data
	AVG. 2012/2008		↑	**11%**
Bulgaria	2009/2008	39,3/37,9	↑	4%
	2010/2009	33,1/39,3	↓	-16%
	2011/2010	31,6/33,1	↓	-5%
	2012/2011	0/31,6		no data
	AVG. 2012/2008		↓	**-6%**
Croatia	2009/2008	7,6/9,5	↓	-20%
	2010/2009	6,9/7,6	↓	-9%
	2011/2010	7,5/6,9	↑	9%
	2012/2011	0/7,5		no data
	AVG. 2012/2008		↓	**-7%**
Albania	2009/2008	0,8/0,3	↑	129%
	2010/2009	1,2/0,8	↑	61%
	2011/2010	0,6/1,2	↓	-53%
	2012/2011	0/0,6		no data
	AVG. 2012/2008		↑	**20%**
Macedonia	2009/2008	24,6/24,1	↑	2%
	2010/2009	29,1/24,6	↑	18%
	2011/2010	30,8/29,1	↑	6%
	2012/2011	0/30,8		no data
	AVG. 2012/2008		↑	**8%**
Montenegro	2009/2008	0,2/0,2	↓	-3%
	2010/2009	0,3/0,2	↑	49%
	2011/2010	0,1/0,3	↓	-47%
	2012/2011	0/0,1		no data
	AVG. 2012/2008		↓	**-9%**

International Demand[V] (avg. 2008-2011) Country	Size (t)	Growth	
Germany	1.297.001	↑	2%
France	1.108.608	↑	2%
Japan	904.445	↑	4%
Belgium	621.815	↑	3%
Republic of Korea	563.155	↑	6%
Russian Federation	533.940	↓	-2%
Netherlands	529.027	↓	-11%
Canada	385.297	↑	6%
China	358.286	↓	-5%
Italy	351.895	↑	1%
Spain	330.150	↑	3%
China, Hong Kong SAR	252.745	↓	-10%
Sweden	160.447	↑	1%
Australia	159.500	↑	4%
Austria	138.891	↑	3%
Czech Republic	131.381	↑	2%
Singapore	128.617	↑	2%
Saudi Arabia	124.503	↑	32%
Denmark	108.835	↑	7%
Thailand	93.402	↑	10%
Poland	92.668	↑	10%
Argentina	86.614	↓	-51%
China, Taiwan Province	79.264	↑	7%
Portugal	78.552	↑	5%
China ex.int	70.539	↑	21%
Ireland	68.794	↑	0%
Malaysia	64.775	↓	-4%
Switzerland	63.330	↑	0%
Romania	59.741	↓	-1%
Greece	56.499	↓	-1%

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Frozen vegetables – market opportunity

Segment/ Product	Production Size[I] -FBIH: Year	Size (t)	Growth	Exports[II] -FBIH: Year	Euro (000 €)	Growth
Frozen vegetables	2009/2008	no data	no data	2009/2008	370/264	↑ 40%
	2010/2009	no data	no data	2010/2009	792/370	↑ 114%
	2011/2010	no data	no data	2011/2010	193/792	↓ -76%
	2012/2011	no data	no data	2012/2011	625/193	↑ 223%
	AVG. 2012/2008		**no data**	**AVG. 2012/2008**		↑ **24%**

Key markets - name sofictication[III]-RS: Country	Year	Euro (000 €)	Growth
Serbia	2009/2008	38,9/49,6	↓ -22%
	2010/2009	0/38,9	N/A
	2011/2010	no data	no data
	2012/2011	no data	no data
	Avg. Year		↓ **-100%**
Croatia	2009/2008	0/0,5	N/A
	2010/2009	no data	no data
	2011/2010	2/2,6	↓ -20%
	2012/2011	0/2	N/A
	Avg. Year		N/A
Austria	2009/2008	2,6/4,1	↓ -38%
	2010/2009	81,3/2,6	↑ 3080%
	2011/2010	9,7/81,3	↓ -88%
	2012/2011	38,9/9,7	↑ 300%
	Avg. Year		↑ **76%**
Germany	2009/2008	0/1,5	N/A
	2010/2009	no data	no data
	2011/2010	no data	no data
	2012/2011	0/52,7	N/A
	Avg. Year		N/A

Competition for export/processing[IV]: Country	Year	Size (000t)	Growth
Romania	2009/2008	3,7/2,9	↑ 26%
	2010/2009	4,6/3,7	↑ 24%
	2011/2010	3,2/4,6	↓ -30%
	2012/2011	0/3,2	no data
	AVG. 2012/2008		↑ 3%
Serbia	2009/2008	17,1/13,8	↑ 24%
	2010/2009	30,5/17,1	↑ 78%
	2011/2010	29,8/30,5	↓ -2%
	2012/2011	0/29,8	no data
	AVG. 2012/2008		↑ 29%
Bulgaria	2009/2008	15,8/12	↑ 32%
	2010/2009	12,7/15,8	↓ -20%
	2011/2010	12,8/12,7	↑ 1%
	2012/2011	0/12,8	no data
	AVG. 2012/2008		↑ 2%
Croatia	2009/2008	1,5/2,8	↓ -46%
	2010/2009	1,6/1,5	↑ 3%
	2011/2010	1,7/1,6	↑ 12%
	2012/2011	0/1,7	no data
	AVG. 2012/2008		↓ -14%
Albania	2009/2008	0,1/0	↑ 2825%
	2010/2009	0,8/0,1	↑ 566%
	2011/2010	0,1/0,8	↓ -87%
	2012/2011	0/0,1	no data
	AVG. 2012/2008		↑ 194%
Macedonia	2009/2008	6,6/7,3	↓ -9%
	2010/2009	8,9/6,6	↑ 35%
	2011/2010	9/8,9	↑ 1%
	2012/2011	0/9	no data
	AVG. 2012/2008		↑ 7%
Montenegro	2009/2008	0,1/0,1	↓ -35%
	2010/2009	0,1/0,1	↓ -30%
	2011/2010	0/0,1	↓ -30%
	2012/2011	0/0	no data
	AVG. 2012/2008		↓ -32%

International Demand[V] (avg. 2008-2011): Country	Size (t)	Growth
USA	677.737	↑ 2%
Germany	536.419	↑ 5%
France	515.557	↑ 4%
Japan	393.682	↑ 7%
Belgium	358.268	↑ 4%
United Kingdom	303.479	↓ -3%
Republic of Korea	228.276	↑ 13%
Italy	173.578	↓ 0%
Netherlands	142.111	↑ 3%
Russian Federation	123.200	↑ 2%
Spain	120.050	↑ 11%
Canada	82.068	↑ 4%
Australia	76.178	↑ 3%
Sweden	65.655	↓ -1%
Austria	46.787	↑ 7%
Czech Republic	45.777	↓ 0%
Denmark	45.258	↑ 6%
Portugal	39.517	↑ 10%
Poland	36.961	↑ 1%
Finland	31.325	↑ 4%
China	30.366	↓ -11%
Greece	29.182	↓ -6%
Ireland	26.532	↓ -3%
Hungary	24.648	↑ 6%
Saudi Arabia	23.584	↑ 52%
United Arab Emirates	23.022	↑ 7%
Romania	18.698	↓ 0%
Slovakia	15.480	↑ 4%
Mexico	15.130	↑ 0%
Switzerland	15.065	↓ -1%

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Vegetable nes, fresh or chilled – market opportunity

Segment/ Product	Production Size[I] -FBIH			Exports[II] -FBIH		
	Year	Size (t)	Growth	Year	Euro (000 €)	Growth
Vegetable nes, fresh or chilled	2009/2008	no data	no data	2009/2008	47/115	-59%
	2010/2009	no data	no data	2010/2009	196/47	317%
	2011/2010	no data	no data	2011/2010	157/196	-20%
	2012/2011	no data	no data	2012/2011	175/157	12%
	AVG. 2012/2008		no data	AVG. 2012/2008		11%

Key markets - name sofictication[III]-RS			
Country	Year	Euro (000 €)	Growth
Croatia	2009/2008	0/1	N/A
	2010/2009	no data	no data
	2011/2010	no data	no data
	2012/2011	0,5/5,1	-90%
	AVG. 2012/2008		-29%
Austria	2009/2008	no data	no data
	2010/2009	3,6/1	250%
	2011/2010	1/3,6	-71%
	2012/2011	53,2/1	5100%
	AVG. 2012/2008		273%

Competition for export/processing[IV]				International Demand[V] (avg. 2008-2011)		
Country	Year	Size (000t)	Growth	Country	Size (t)	Growth
Romania	2009/2008	0,2/0,3	-20%	China	248.576	-9%
	2010/2009	0,3/0,2	35%	China, Hong Kong SAR	205.995	-11%
	2011/2010	0,7/0,3	146%	Germany	182.981	4%
	2012/2011	no data	no data	France	174.345	3%
	AVG. 2012/2008		38%	Canada	144.466	4%
Serbia	2009/2008	6,3/8,5	-25%	Russian Federation	112.063	13%
	2010/2009	3,7/6,3	-42%	Singapore	102.410	3%
	2011/2010	3,1/3,7	-15%	Netherlands	94.516	12%
	2012/2011	no data	no data	Belgium	84.449	3%
	AVG. 2012/2008		-28%	Thailand	80.492	11%
Bulgaria	2009/2008	0,5/0,4	7%	Argentina	80.474	-60%
	2010/2009	0,2/0,5	-53%	Japan	59.756	3%
	2011/2010	0,4/0,2	67%	Italy	43.237	3%
	2012/2011	no data	no data	Republic of Korea	36.679	7%
	AVG. 2012/2008		-6%	Qatar	32.607	-25%
Croatia	2009/2008	0,8/0,7	9%	China, Taiwan Province	32.425	11%
	2010/2009	0,1/0,8	-82%	Czech Republic	31.899	5%
	2011/2010	0,2/0,1	13%	Saudi Arabia	31.897	41%
	2012/2011	no data	no data	Austria	30.678	9%
	AVG. 2012/2008		-40%	Malaysia	30.653	-1%
Albania	2009/2008	0,2/0,1	61%	Mauritania	25.037	8%
	2010/2009	0,2/0,2	-14%	Syrian Arab Republic	23.464	-50%
	2011/2010	0,3/0,2	41%	Switzerland	21.722	1%
	2012/2011	no data	no data	Sweden	21.530	1%
	AVG. 2012/2008		25%	Denmark	20.627	9%
Macedonia	2009/2008	0/0,2	-76%	Iraq	20.571	-59%
	2010/2009	0,2/0	282%	Spain	19.287	-11%
	2011/2010	0,3/0,2	102%	Poland	19.013	27%
	2012/2011	no data	no data	China ex.int	17.786	15%
	AVG. 2012/2008		22%	Oman	17.410	13%

I source: Statistics institute Republika Srpska, Statistics institute Federation BiH
II source: Indirect Taxation Authority of BiH
III source: Indirect Taxation Authority of BiH
IV source: FAOSTAT and Uncomtrade - calculation based on country exports
V source: FAOSTAT and Uncomtrade

Dried vegetables – market opportunity

Segment/ Product	Production Size[I] -FBIH			Exports[II] -FBIH		
	Year	Size (t)	Growth	Year	Euro (000 €)	Growth
Dried vegetables	2009/2008	no data	no data	2009/2008	349/611	-43%
	2010/2009	no data	no data	2010/2009	703/349	101%
	2011/2010	no data	no data	2011/2010	581/703	-17%
	2012/2011	no data	no data	2012/2011	549/581	-5%
	AVG. 2012/2008		**no data**	AVG. 2012/2008		-3%

Key markets - name sofictication[III]-RS			
Country	Year	Euro (000 €)	Growth
Serbia	2009/2008	49,6/60,3	-18%
	2010/2009	23/49,6	-54%
	2011/2010	15,3/23	-33%
	2012/2011	11,2/15,3	-27%
	AVG. 2012/2008		**-34%**
Croatia	2009/2008	26,1/64,9	-60%
	2010/2009	46/26,1	76%
	2011/2010	47/46	2%
	2012/2011	73,6/47	57%
	AVG. 2012/2008		**3%**
Austria	2009/2008		
	2010/2009	32,2/7,7	320%
	2011/2010	26,1/32,2	-19%
	2012/2011	10,2/26,1	-61%
	AVG. 2012/2008		**10%**
Germany	2009/2008	0/8,2	N/A
	2010/2009	no data	no data
	2011/2010	no data	no data
	2012/2011	38,9/87,4	-56%
	AVG. 2012/2008		**118%**

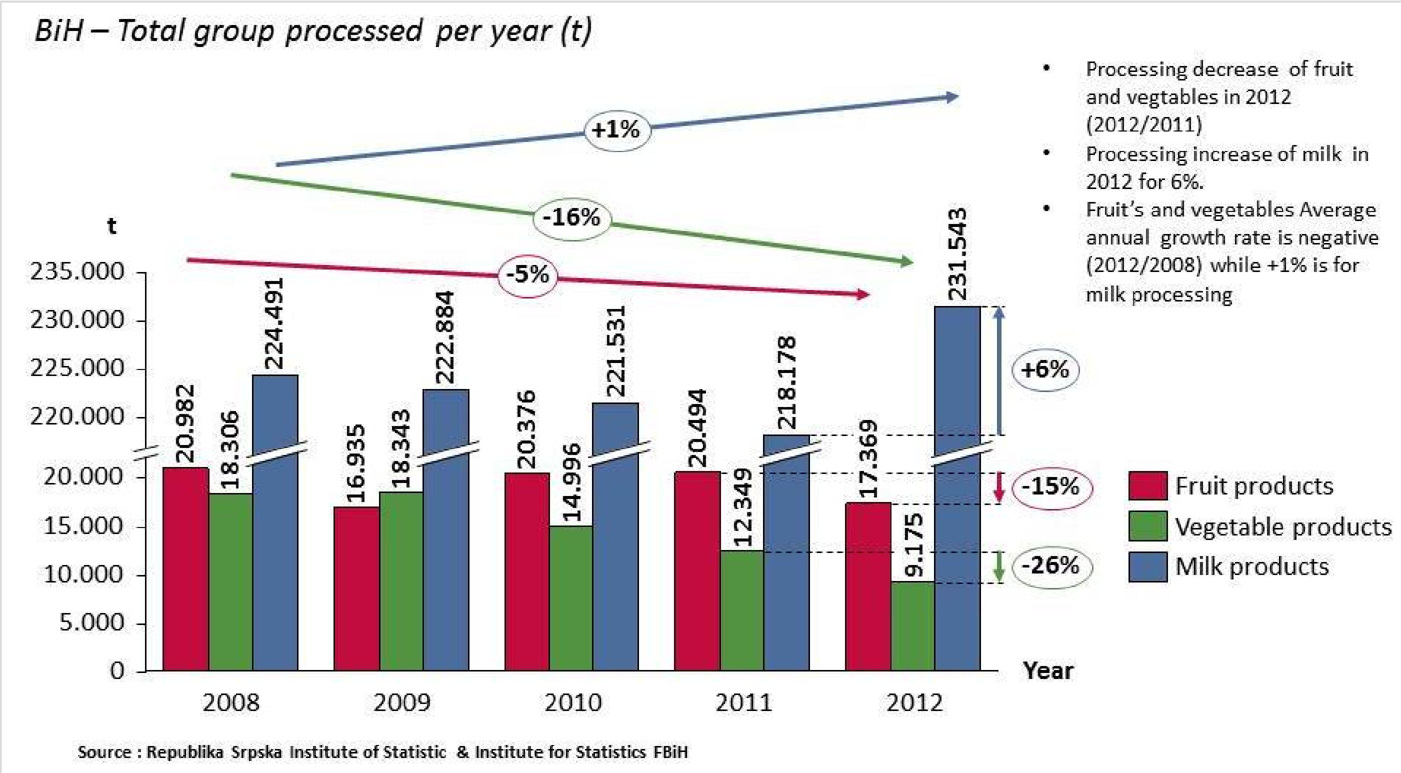
Competition for export/processing[IV]			
Country	Year	Size (t)	Growth
Romania	2009/2008	301,1/336,5	-11%
	2010/2009	2589,9/301,1	760%
	2011/2010	757,8/2589,9	-71%
	2012/2011	684,2/757,8	-10%
	AVG. 2012/2008		**19%**
Serbia	2009/2008	2099,3/2482,1	-15%
	2010/2009	2522,3/2099,3	20%
	2011/2010	2557,4/2522,3	1%
	2012/2011	2068,3/2557,4	-19%
	AVG. 2012/2008		**-4%**
Bulgaria	2009/2008	15890,4/2119,3	650%
	2010/2009	951/15890,4	-94%
	2011/2010	3709,8/951	290%
	2012/2011	8812,7/3709,8	138%
	AVG. 2012/2008		**43%**
Croatia	2009/2008	141,7/71	100%
	2010/2009	249,2/141,7	76%
	2011/2010	130,7/249,2	-48%
	2012/2011	134,6/130,7	3%
	AVG. 2012/2008		**17%**
Albania	2009/2008	0,2/0,2	0%
	2010/2009	18,3/0,2	9050%
	2011/2010	19,2/18,3	5%
	2012/2011	69,8/19,2	264%
	AVG. 2012/2008		**332%**
Macedonia	2009/2008	354,9/0	**N/A**
	2010/2009	357,7/354,9	1%
	2011/2010	194,9/357,7	-46%
	2012/2011	220/194,9	13%
	AVG. 2012/2008		**-11%**
Montenegro	2009/2008	44,8/17,8	152%
	2010/2009	31,9/44,8	-29%
	2011/2010	32,4/31,9	2%
	2012/2011	18,5/32,4	-43%
	AVG. 2012/2008		**1%**

International Demand[V] (avg. 2008-2011)		
Country	Size (t)	Growth
USA	104.060	-18%
Netherlands	65.542	-1%
Germany	62.411	1%
Japan	46.628	-1%
United Kingdom	29.646	-1%
Canada	28.643	15%
Russian Federation	26.429	1%
France	24.472	-1%
Italy	19.936	3%
Rep. of Korea	19.291	4%
Poland	17.634	-100%
Brazil	16.702	8%
China Hong Kong SAR	15.530	-2%
Belgium	14.425	-3%
Malaysia	14.162	-3%
Philippines	13.906	60%
Thailand	13.100	2%
Spain	13.040	-12%
Australia	12.227	6%
Indonesia	9.222	5%
Austria	6.725	#DIV/0!
South Africa	6.219	9%
Norway	5.990	65%
Portugal	5.863	6%
Ireland	5.843	7%
Mexico	5.618	2%
Sweden	5.394	1%
Denmark	5.344	3%
Greece	4.404	8%
Egypt	4.367	-1%

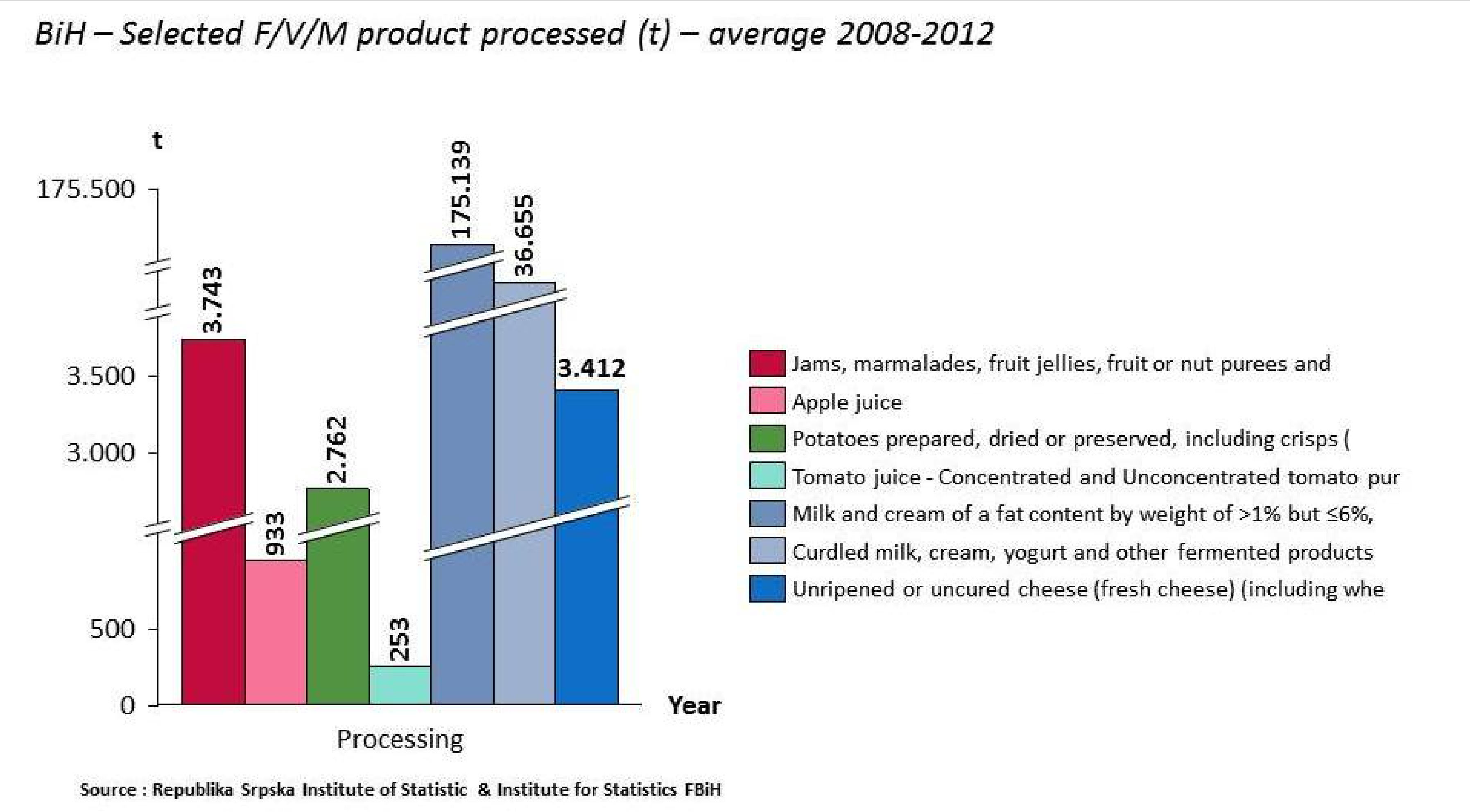
I source: Statistics institute Republika Srpska, Statistics institute Federation BiH
II source: Indirect Taxation Authority of BiH
III source: Indirect Taxation Authority of BiH
IV source: FAOSTAT and Uncomtrade - calculation based on country exports
V source: FAOSTAT and Uncomtrade

Value Chain – processed groups of fruit, vegetable and milk products

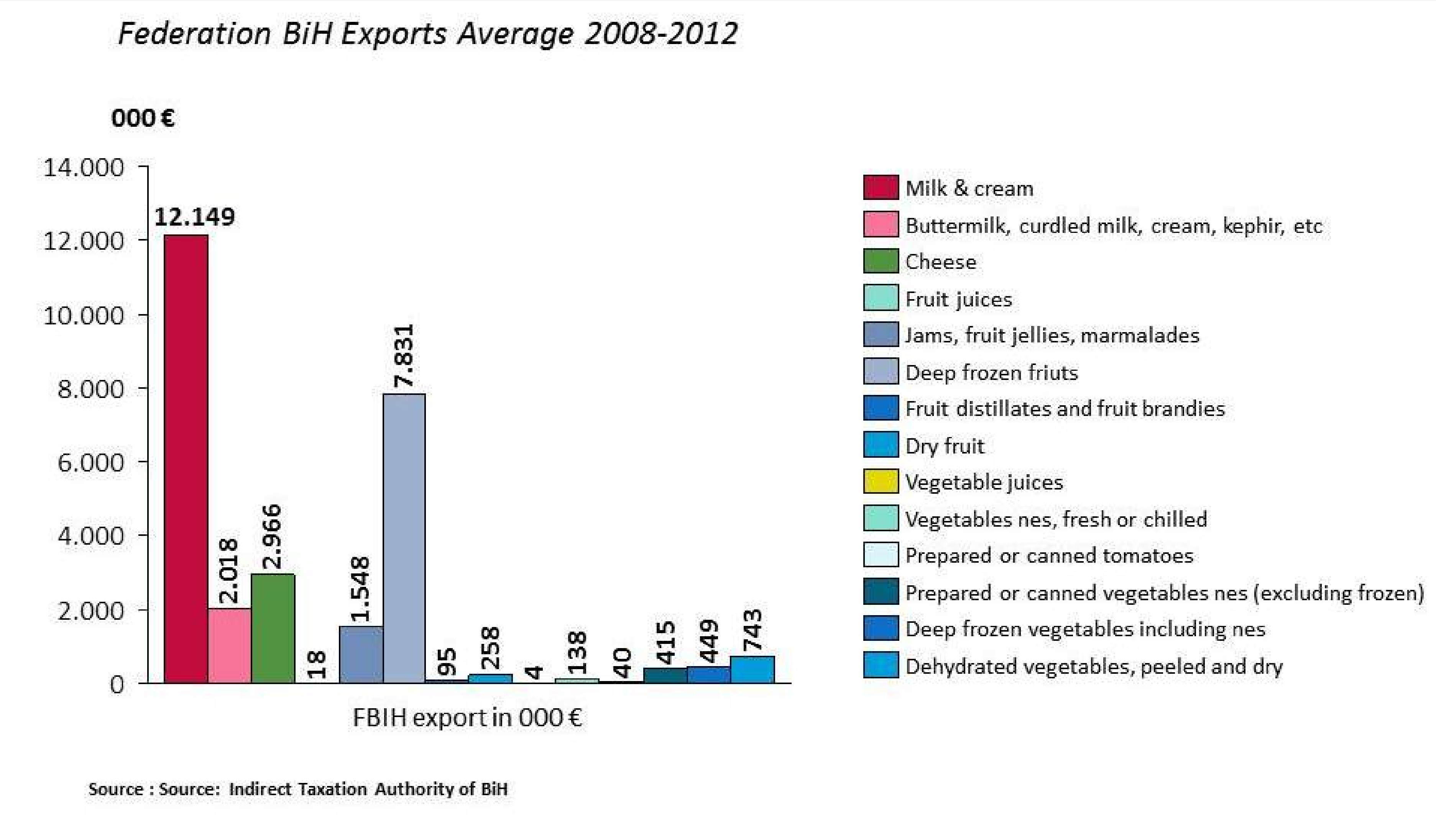
Statistical analysis of the value chain for three sectors (fruit, vegetables and milk):



Value Chain – processed selected fruit, vegetable and milk products

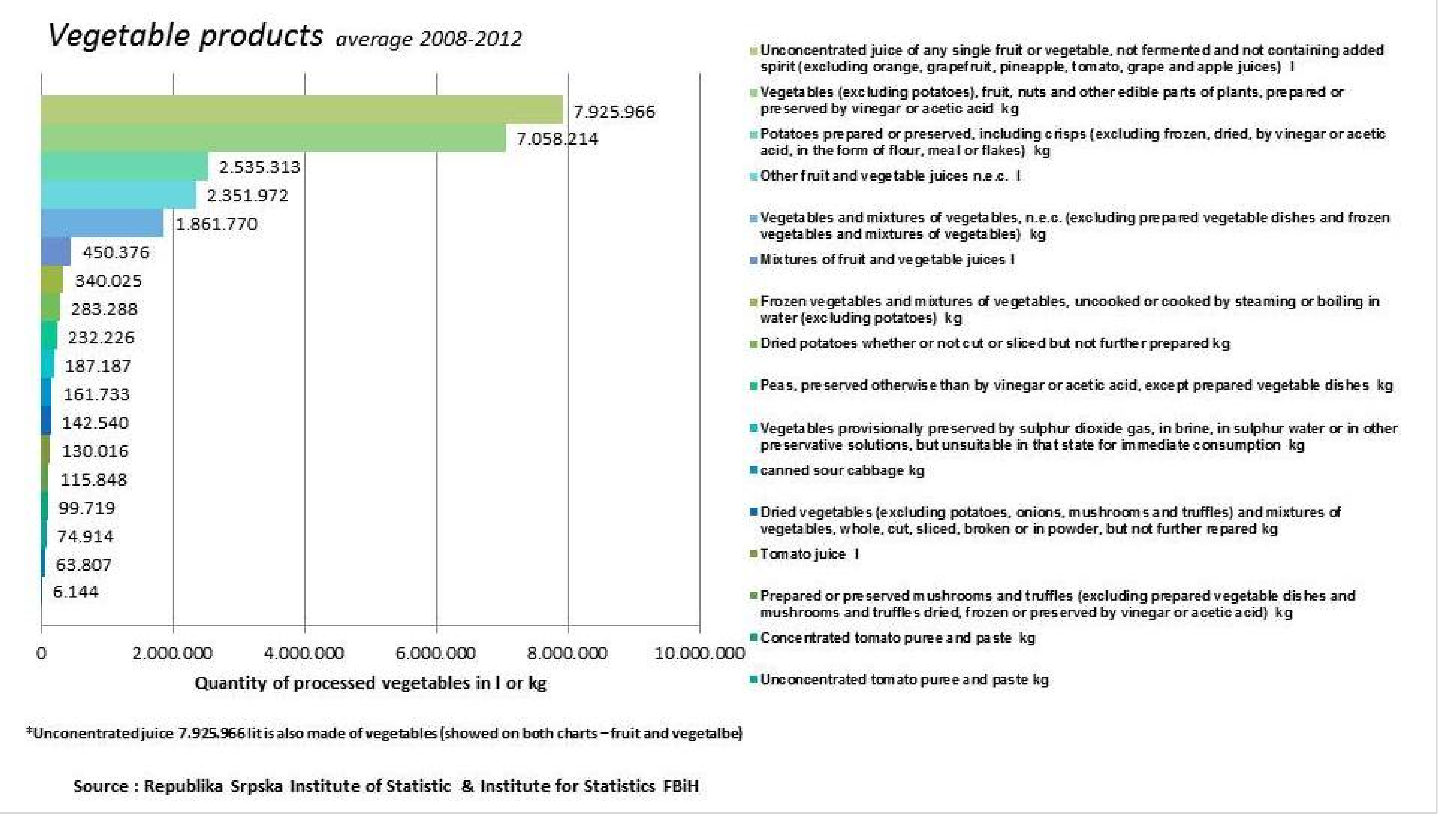


Value Chain – Export of processed fruit, vegetable and milk products in 000€



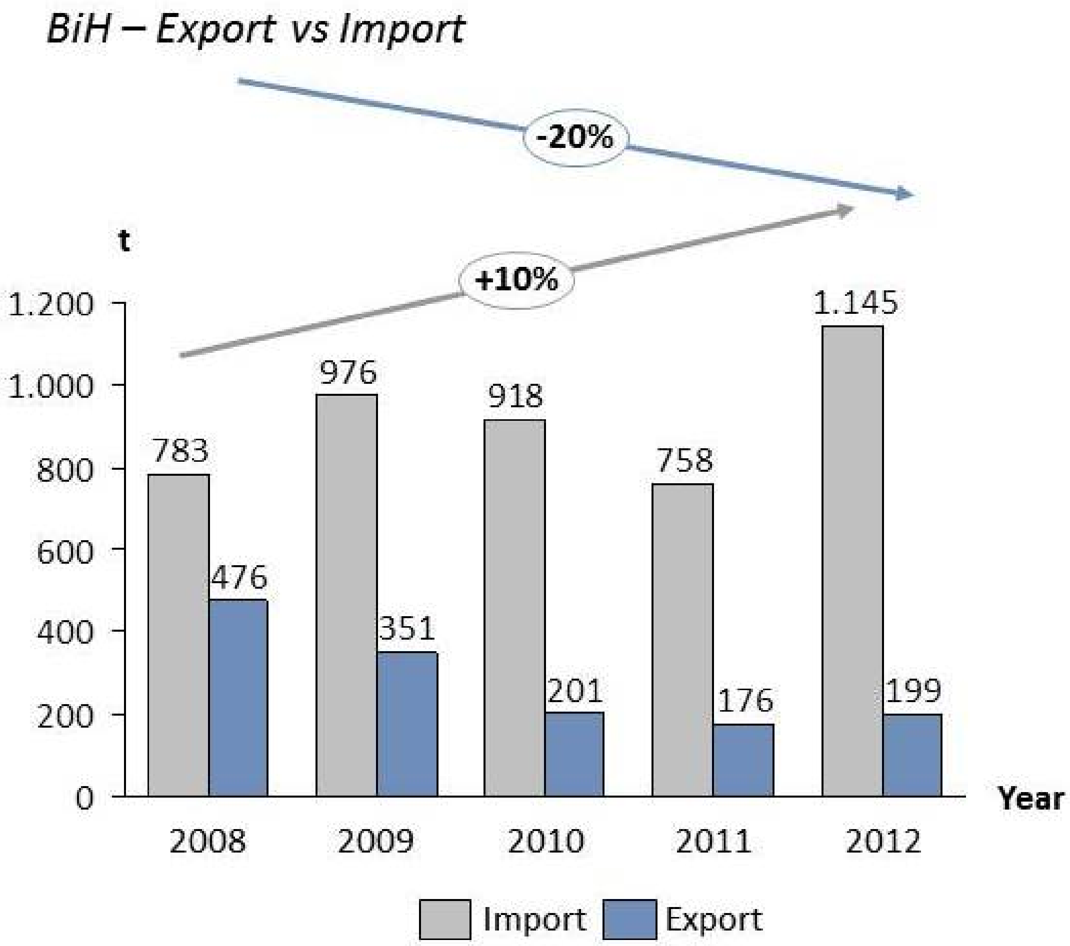
VEGETABLE PRODUCTS

Data analysis (from statistical yearbooks) calculated the average processing results which are shown in the chart (in liters or kilograms - depending on the types of processed vegetable). The analysis includes the import of raw materials for processing/products



Further analysis is devoted to the processing of potato and tomato (tomato puree, ketchup, tomato juice ...), as the top two products that are processed from domestic raw materials.
The decrease in production of fruits (2012) in the region had a negative effect on the processing industry. Export of processed potato has a negative growth in 2012, but the increasing imports of processed potato products, with the exception of tomatoes, which have a uniform import. The main market for these types of products is Croatian. The main market for these types of processed vegetable Croatia and Serbia, while the largest processing rivals are Romania and Serbia.The demand for these products in the world market is large (Russian Federation, Germany, France, Great Britain and others).

Vegetable products – Export of Potatoes prepared or oreserved or dried...

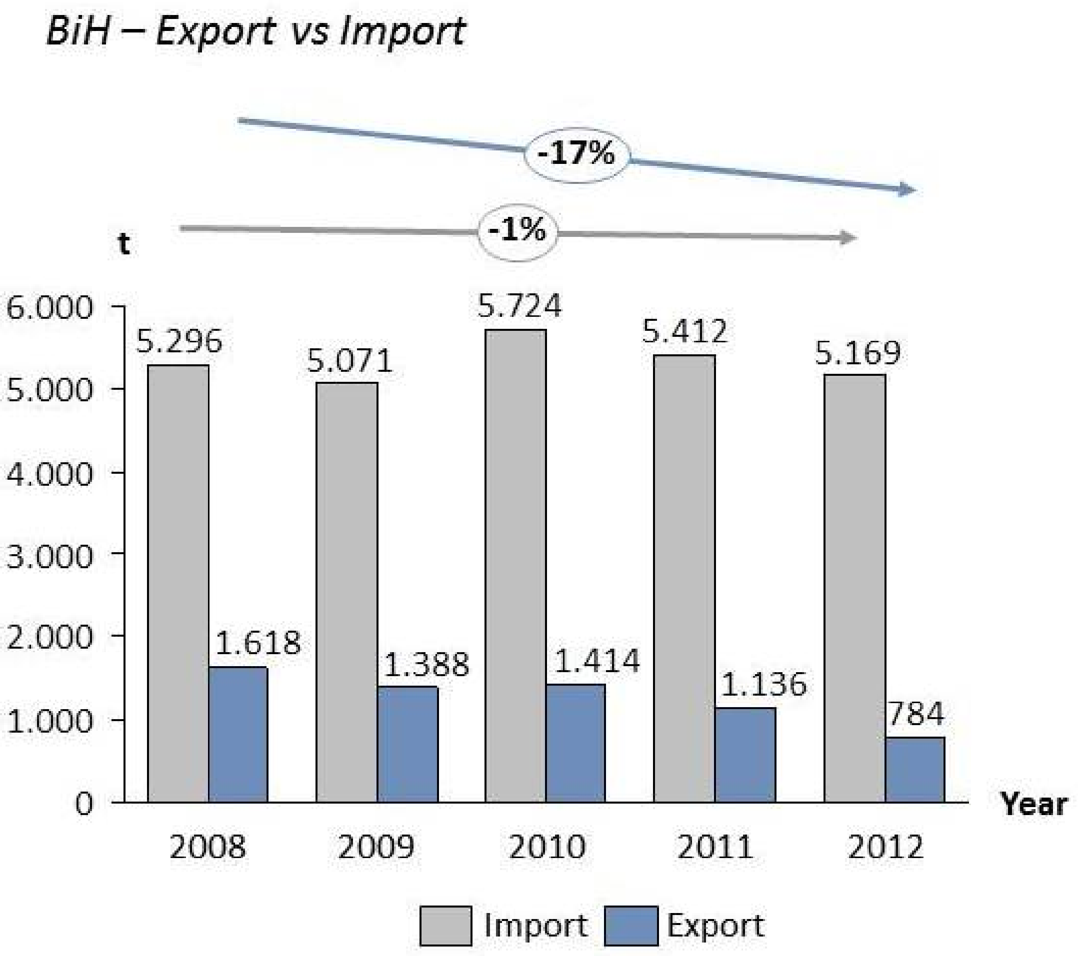


Source : UN comtrade

Potatoes prepared or preserved or dried , including crisps (excluding frozen, dried, by vinegar or acetic acid, in the form of flour, meal or flakes)

- Import is increasing (Average annual growth rate is +10% for 2012/2008), while export is decreasing (Average annual growth rate is negative -20% for 2012/2008).

Vegetable products – Export of Tomato juice, concetrated and unconcentrated puree and paste (ketchup)...

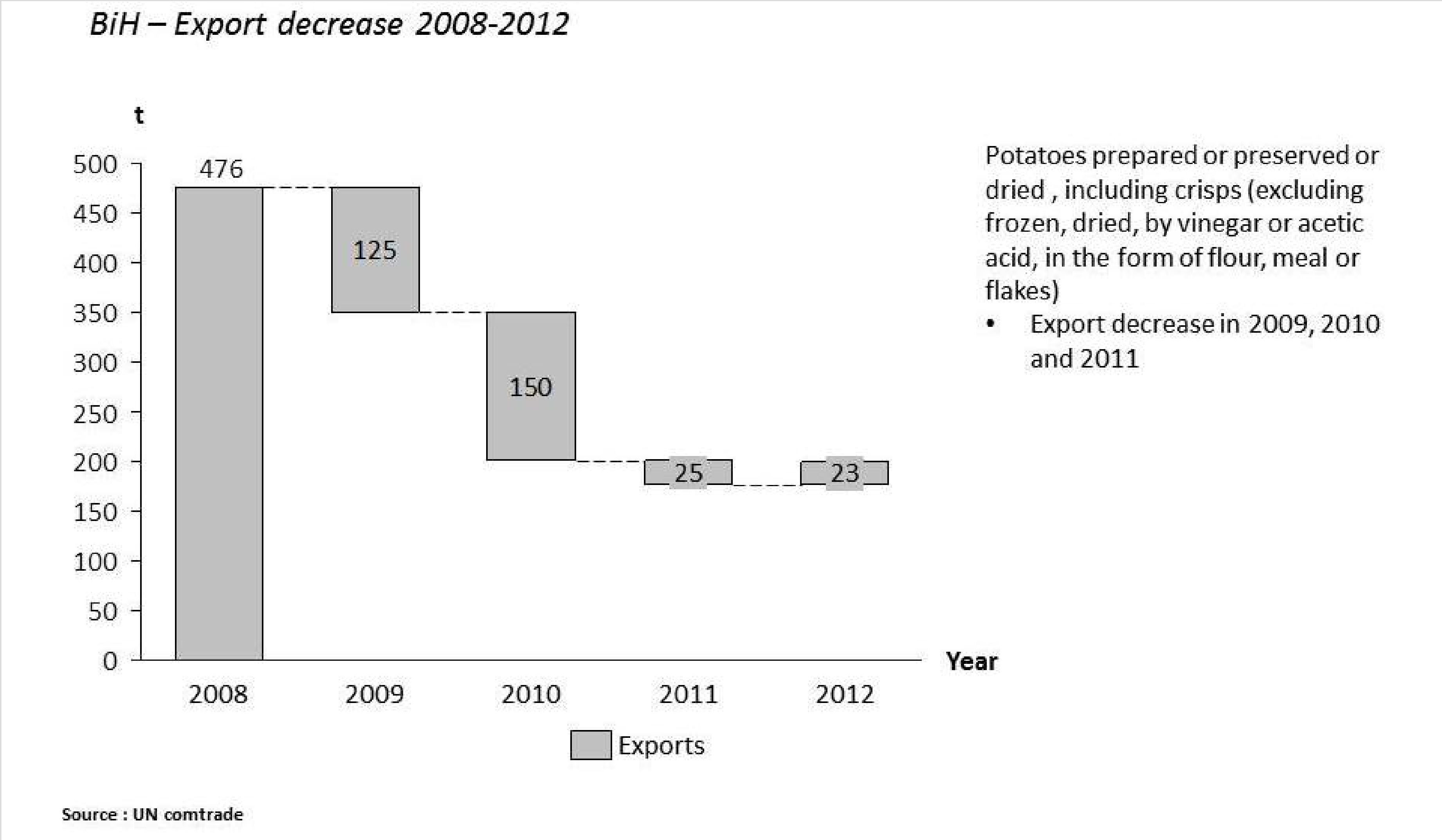


Tomato juice - Concentrated and Unconcentrated tomato puree and paste (ketchup)

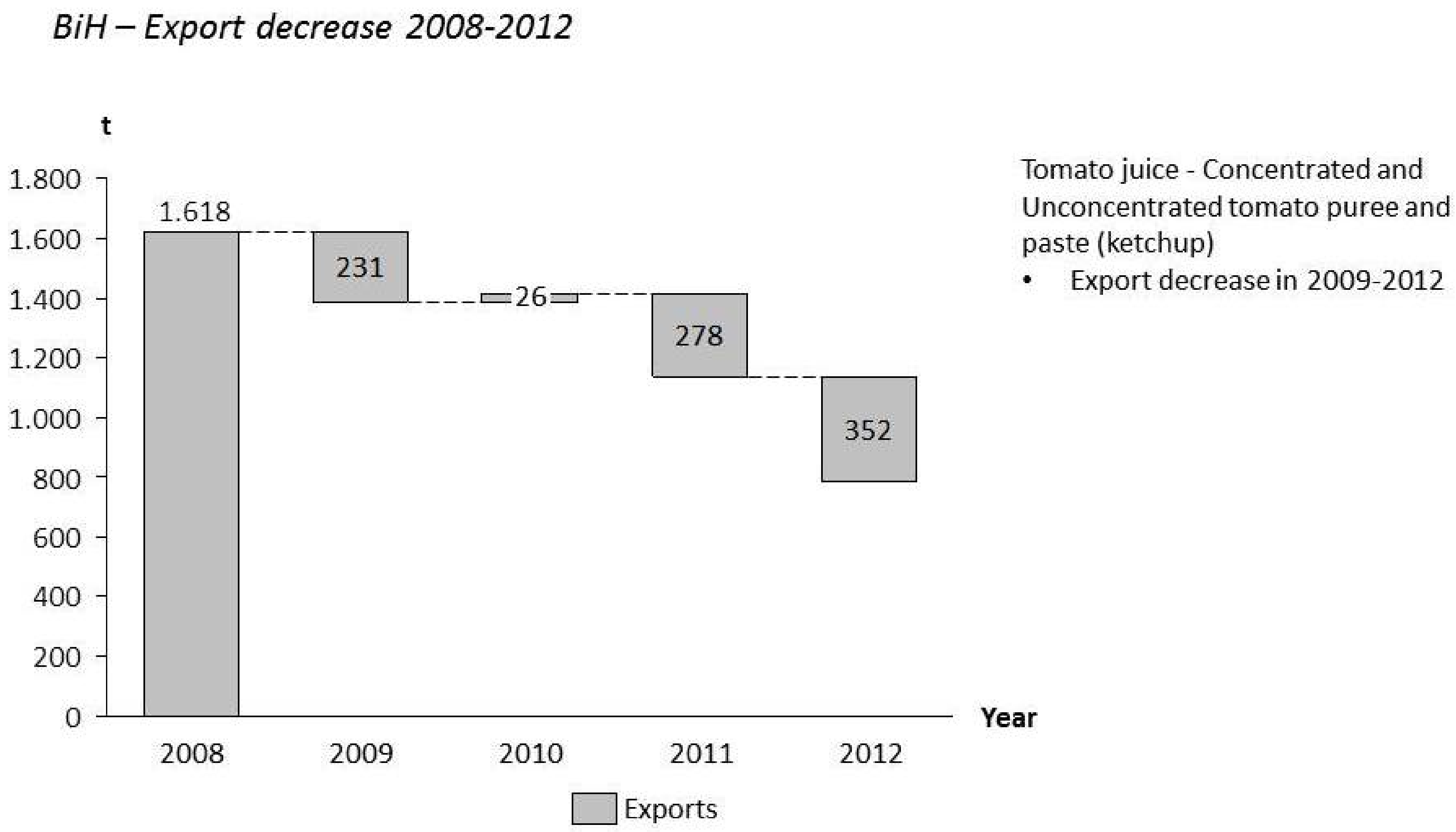
- Import is decreasing (Average annual growth rate is -1% for 2012/2008), as well as export (Average annual growth rate is - 17% for 2012/2008).

Source : UN comtrade

Vegetable products –Export of Potatoes prepared or oreserved or dried

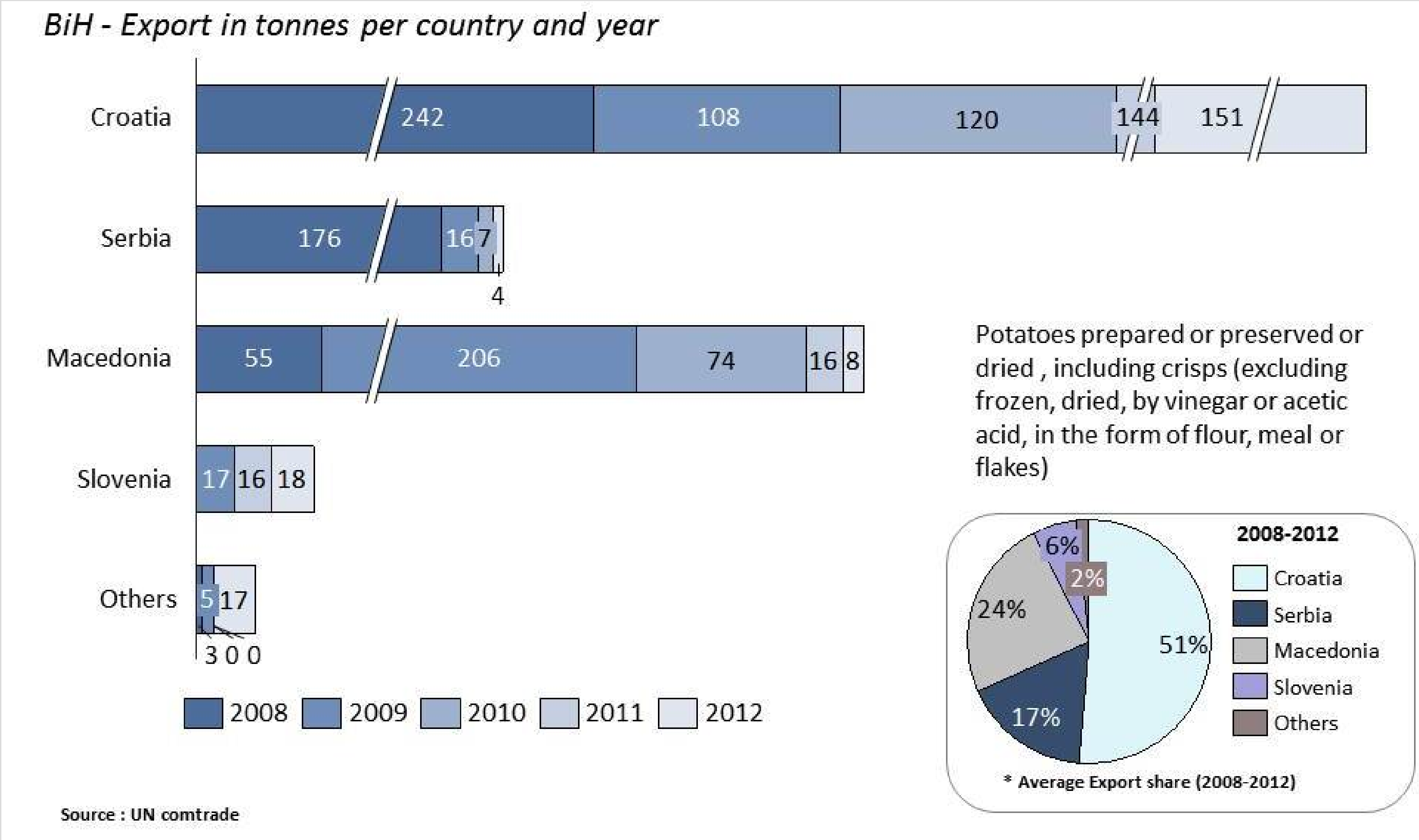


Vegetable products –Export of Tomato juice, concetrated and unconcentrated puree and paste (ketchup)...

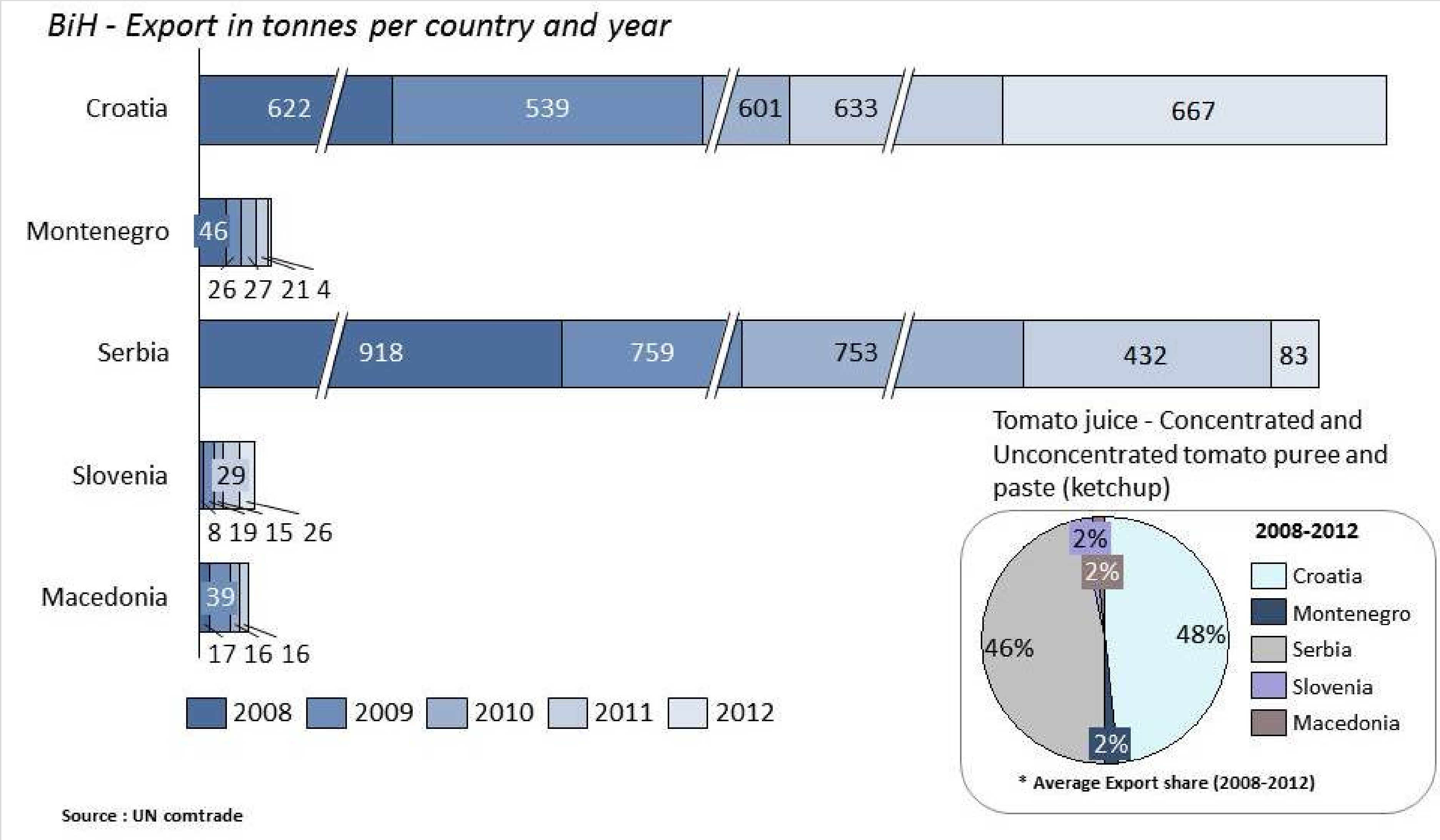


Source : UN comtrade

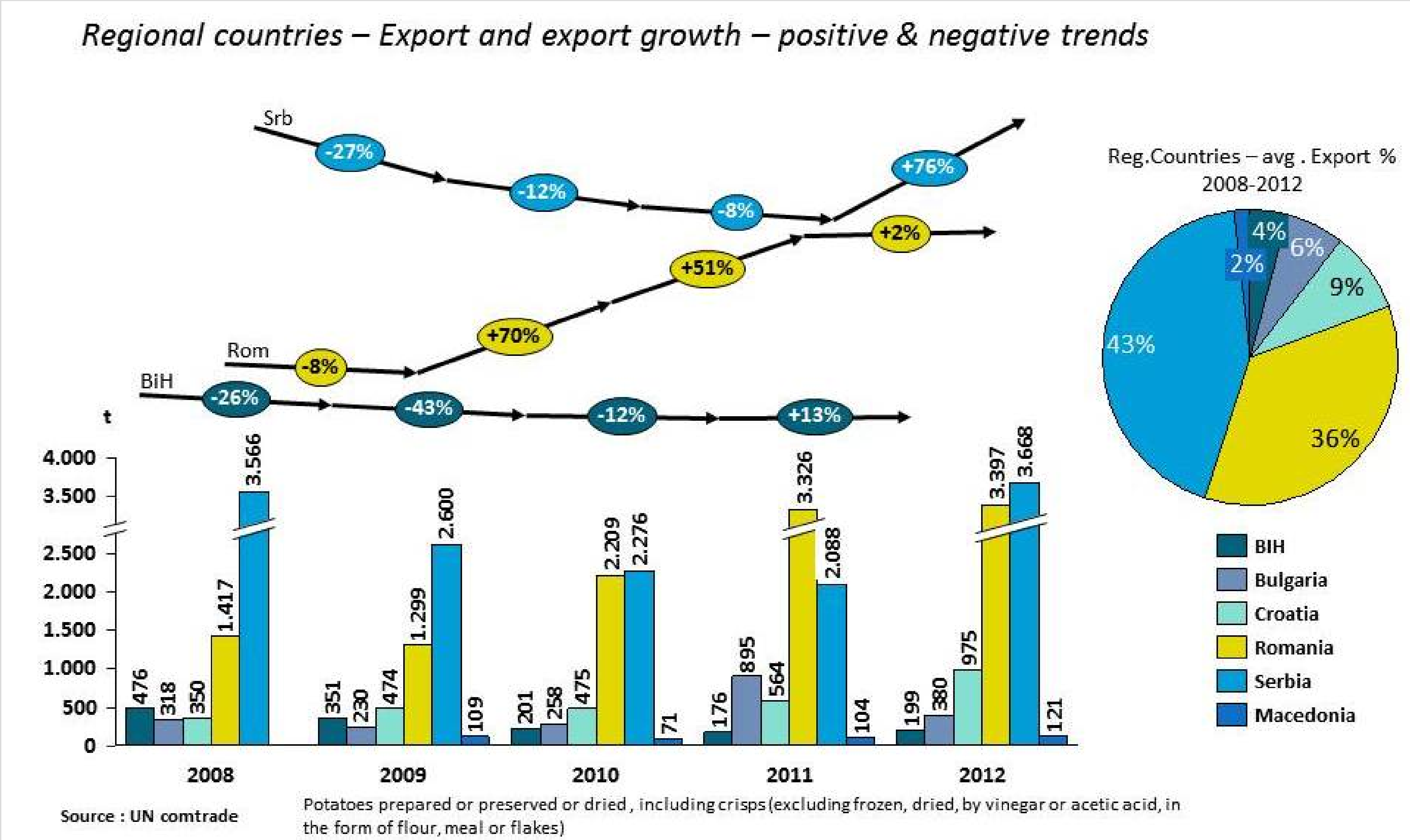
Vegetable products – Key markets - Potatoes prepared or oreserved or dried - export per country



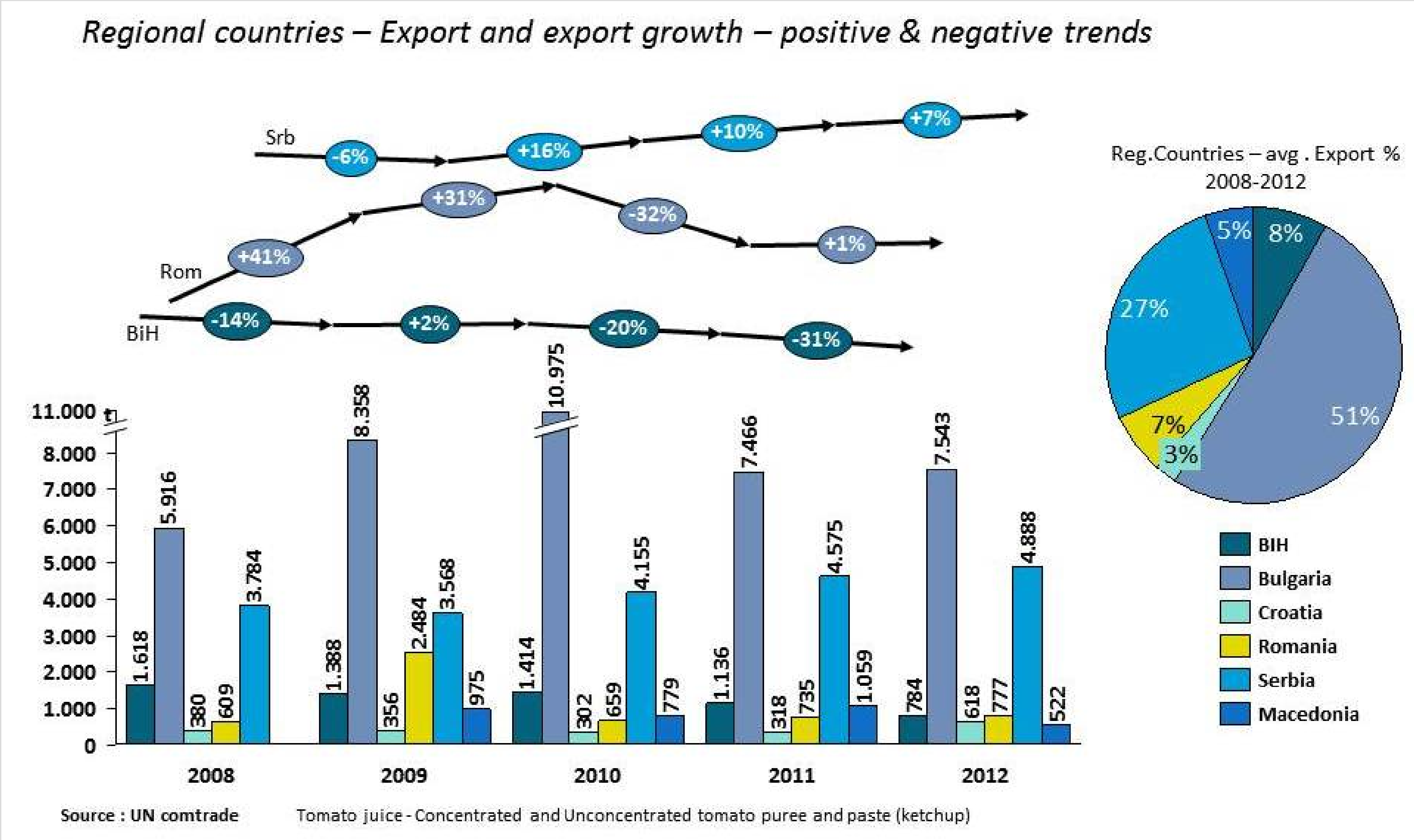
Vegetable products – Key markets - Tomato juice, concetrated and unconcentrated puree and paste (ketchup) - export per country



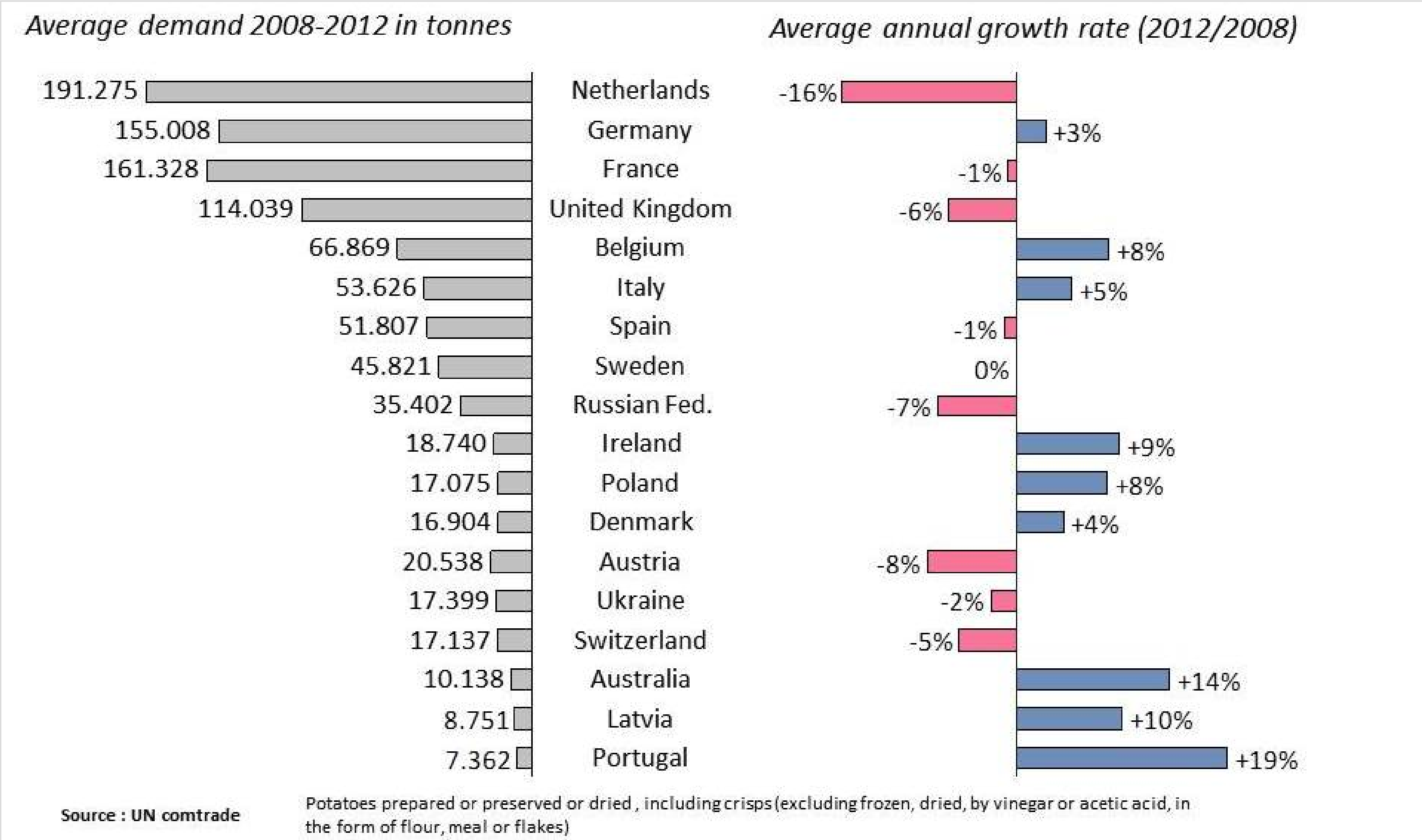
Competition for production of Potatoes prepared or oreserved or dried – Regional countries export



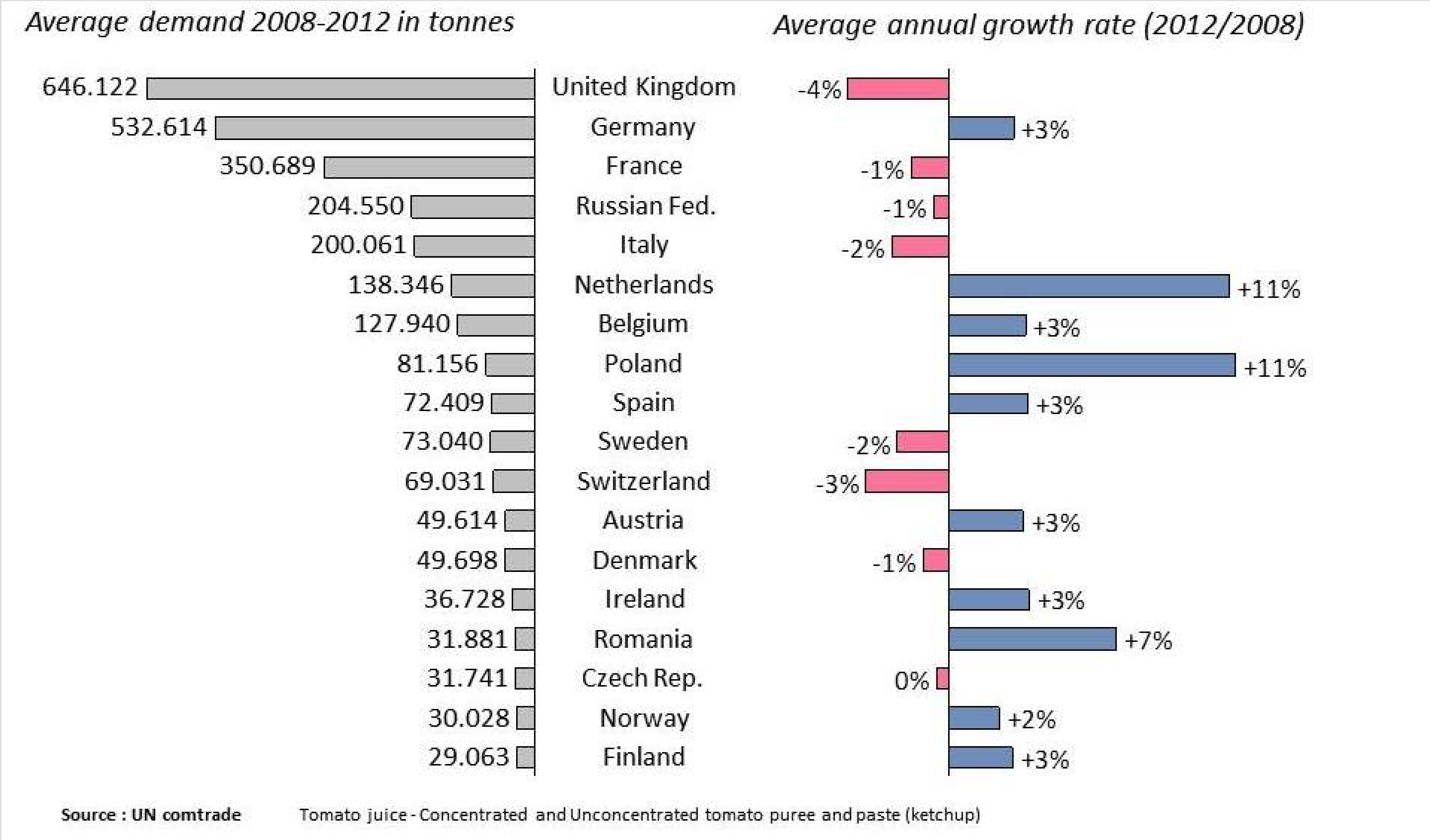
Competition for production of Tomato juice, concetrated and unconcentrated puree and paste (ketchup)– Regional countries export



International Demand for Potatoes prepared or oreserved or dried



International Demand for Tomato juice, concetrated and unconcentrated puree and paste (ketchup



FRESH MILK

Statistical analysis showed that the production of milk (including the cream) and cheese strategically crucial product for FBiH and BiH. Milk production has an equable production in the reporting period 2008-2012. It is important to note that about 27% of milk buy dairy farms while the remainder retained for farmers .

The highest milk production in FBiH in the Tuzla canton, while in the RS is the municipality Gradiška. The purchase price of fresh milk is in line with prices in other countries / producers .

Exports are raising so that for the reference period 2012/2008, we have an increase in the average growth rate for of 15% in the FBIH.

The most important markets are : Serbia , Croatia , Macedonia , Albania and Kosovo. Our biggest competitors in the region are Romania, Serbia, Albania and Bulgaria.

The largest regional exporters of milk (in addition to BH) are Serbia and Croatia .

International demand for milk and dairy products is a great, while particular interest have Italy, Russian Federation, United Kingdom, Germany and Canada .

Fresh Milk – market opportunity

Segment/ Product	Production Size[I] -FBIH			Exports[II] -FBIH		
	Year	Size (10^6 lit)	Growth	Year	Euro (000 €)	Growth
Milk	2009/2008	321,1/322,2	↓ -0,3%	2009/2008	11772/8418	↑ 40%
	2010/2009	317/321,1	↓ -1,3%	2010/2009	12208/11772	↑ 4%
	2011/2010	315,3/317	↓ -0,5%	2011/2010	13685/12208	↑ 12%
	2012/2011	319,3/315,3	↑ 1,3%	2012/2011	14662/13685	↑ 7%
	AVG. 2012/2008		↓ -0,2%	**AVG. 2012/2008**		↑ **14,9%**

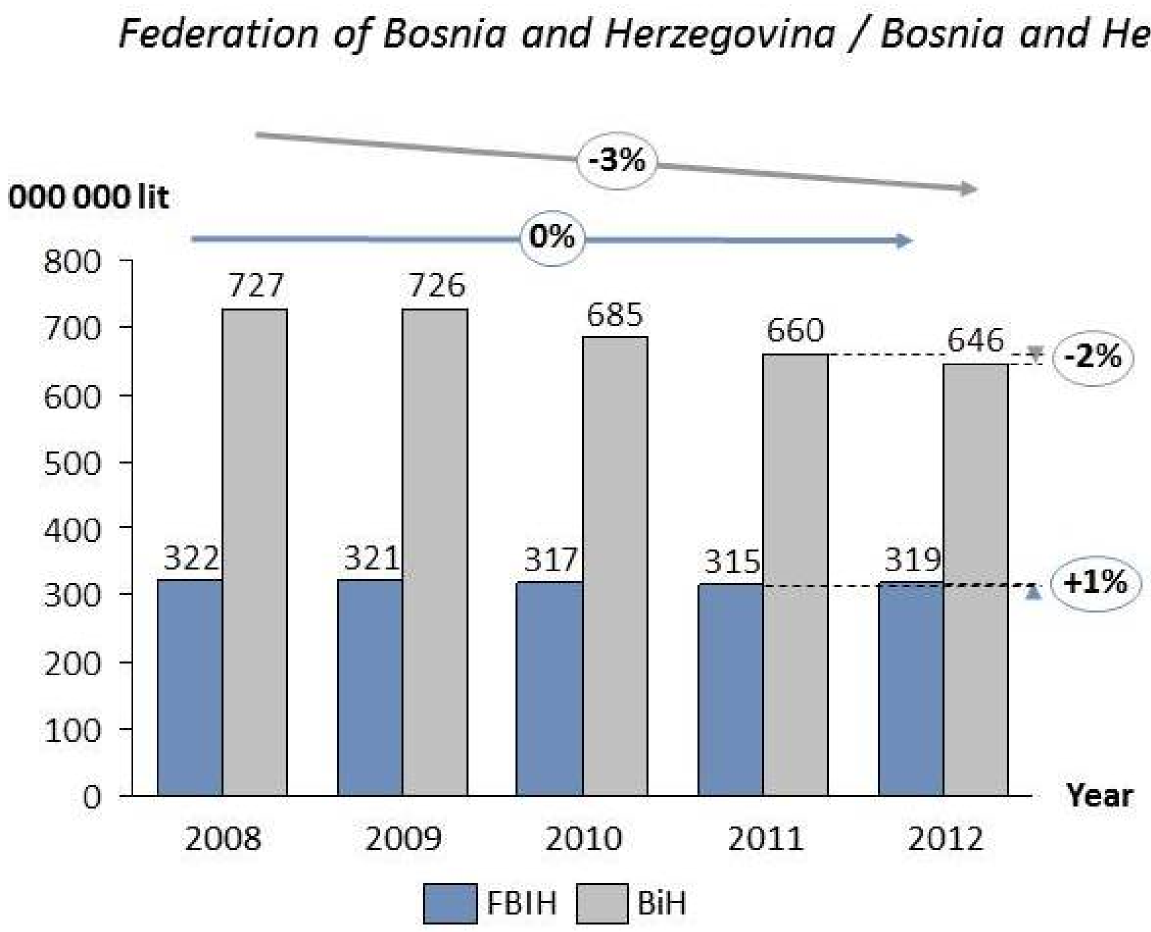
Key markets - name sofictication[III]-FBIH			
Country	Year	Euro (000 €)	Growth
Serbia	2009/2008	1904,1/1700,6	↑ 12%
	2010/2009	2346,3/1904,1	↑ 23%
	2011/2010	1654/2346,3	↓ -30%
	2012/2011	1357,5/1654	↓ -18%
	AVG. 2012/2008		↓ -5%
Croatia	2009/2008	1840,1/1712,3	↑ 7%
	2010/2009	1307,9/1840,1	↓ -29%
	2011/2010	2920/1307,9	↑ 123%
	2012/2011	4450,3/2920	↑ 52%
	AVG. 2012/2008		↑ 27%
Macedonia	2009/2008	5643,1/3154,2	↑ 79%
	2010/2009	4963,6/5643,1	↓ -12%
	2011/2010	5628,3/4963,6	↑ 13%
	2012/2011	5462,6/5628,3	↓ -3%
	AVG. 2012/2008		↑ 15%
Albania	2009/2008	168,2/74,6	↑ 125%
	2010/2009	365,6/168,2	↑ 117%
	2011/2010	319/365,6	↓ -13%
	2012/2011	306,3/319	↓ -4%
	AVG. 2012/2008		↑ 42%
Kosovo	2009/2008	1636,1/1376,4	↑ 19%
	2010/2009	1665,3/1636,1	↑ 2%
	2011/2010	1791,1/1665,3	↑ 8%
	2012/2011	1690,8/1791,1	↓ -6%
	AVG. 2012/2008		↑ 5%
Other countries	2009/2008	579,8/0,5	↑ 113300%
	2010/2009	1559,4/579,8	↑ 169%
	2011/2010	1372,3/1559,4	↓ -12%
	2012/2011	1394,3/1372,3	↑ 2%
	AVG. 2012/2008		↑ 623%

Competition for production/processing [IV]			
Country	Year	Size (000 t)	Growth
Romania	2009/2008	5209/5468	↓ -5%
	2010/2009	4411/5209	↓ -15%
	2011/2010	4527/4411	↑ 3%
	2012/2011	4330/4527	↓ -4%
	AVG. 2012/2008		↓ -6%
Serbia	2009/2008	1505/1582	↓ -5%
	2010/2009	1485/1505	↓ -1%
	2011/2010	1462/1485	↓ -2%
	2012/2011	1465/1462	↑ 0,2%
	AVG. 2012/2008		↓ -2%
Macedonia	2009/2008	353/369	↓ -4%
	2010/2009	358/353	↑ 1%
	2011/2010	376/358	↑ 5%
	2012/2011	350/376	↓ -7%
	AVG. 2012/2008		↓ -1%
Croatia	2009/2008	799/826	↓ -3%
	2010/2009	769/799	↓ -4%
	2011/2010	780/769	↑ 1%
	2012/2011	786/780	↑ 1%
	AVG. 2012/2008		↓ -1%
Bulgaria	2009/2008	1073/1143	↓ -6%
	2010/2009	1124/1073	↑ 5%
	2011/2010	1126/1124	↑ 0%
	2012/2011	1093/1126	↓ -3%
	AVG. 2012/2008		↓ -1%
Albania	2009/2008	908/895	↑ 1%
	2010/2009	930/908	↑ 2%
	2011/2010	955/930	↑ 3%
	2012/2011	957/955	↑ 0%
	AVG. 2012/2008		↑ 2%
Montenegro	2009/2008	150/157	↓ -5%
	2010/2009	140/150	↓ -6%
	2011/2010	197/140	↑ 41%
	2012/2011	146/197	↓ -26%
	AVG. 2012/2008		↓ -2%
BiH	2009/2008	798/760	↑ 5%
	2010/2009	716/798	↓ -10%
	2011/2010	689/716	↓ -4%
	2012/2011	674/689	↓ -2%
	AVG. 2012/2008		↓ -3%

International Demand [V] (avg. 2008-2011)		
Country	Size (t)	Growth
Italy	2.356.509	↑ 9%
Germany	1.864.116	↑ 1%
Canada	1.423.418	↑ 13%
Belgium	810.664	↑ 5%
Netherlands	614.270	↑ 13%
France	562.954	↑ 4%
Spain	634.304	↓ -16%
Ireland	274.357	↑ 1%
Lithuania	223.527	↑ 14%
United Kingdom	189.535	↑ 4%
Greece	179.647	↑ 7%
Portugal	195.928	↓ -8%
Hungary	146.945	↑ 23%
China	98.617	↑ 17%
Romania	103.823	↑ 25%
Denmark	80.453	↑ 39%
Slovakia	87.200	↑ 6%
Sweden	103.351	↑ 10%
Austria	77.421	↑ 14%
Slovenia	72.426	↑ 7%
Poland	57.811	↑ 39%
Czech Republic	94.594	↓ -16%
Croatia	50.597	↑ 15%
Singapore	60.266	↑ 9%
China, Hong Kong SAR	57.214	↑ 5%
Finland	37.376	↑ 160%
Philippines	47.966	↑ 8%
Kazakhstan	42.433	↑ 6%
China, mainland	19.153	↑ 76%
Mauritania	30.878	↑ 13%

I source: Statistics institute Republika Srpska, Statistics institute Federation BiH / Link - Chart name: *Production of milk*
II source: Indirect Taxation Authority of BiH / Link - Chart name: *Export of milk in 000€*
III source: Indirect Taxation Authority of BiH
IV source: FAOSTAT and Uncomtrade / Link - Chart name: *Competition for production of milk – Regional countries production charts*
V source: FAOSTAT and Uncomtrade / Link - Chart name: *International Demand for milk*

Production of Fresh Milk

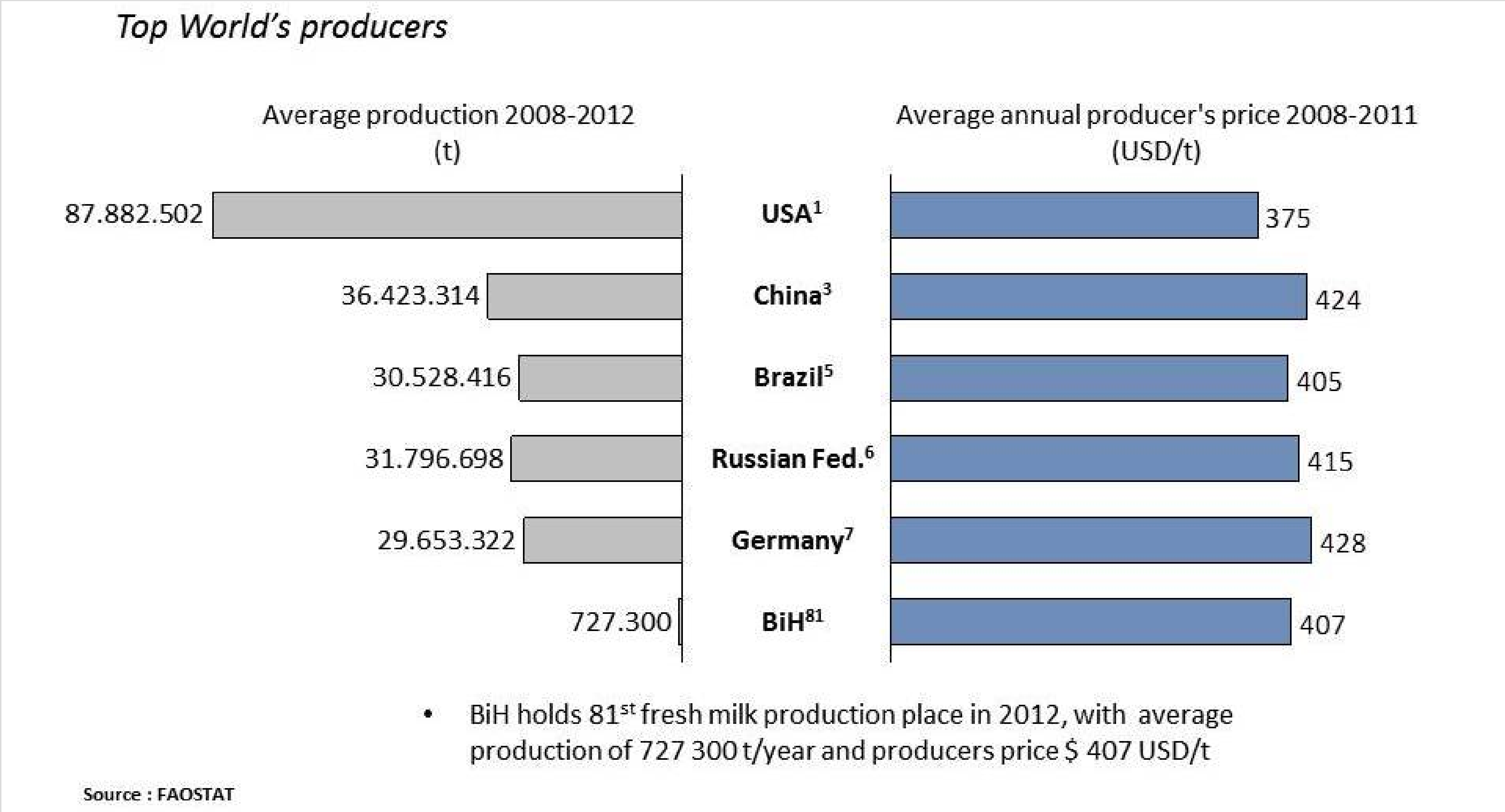


- Production decrease in 2012 for 5% (2012/2011)
- Average annual growth rate 2012/2008: for FBIH is 0% and for BiH is -3%)

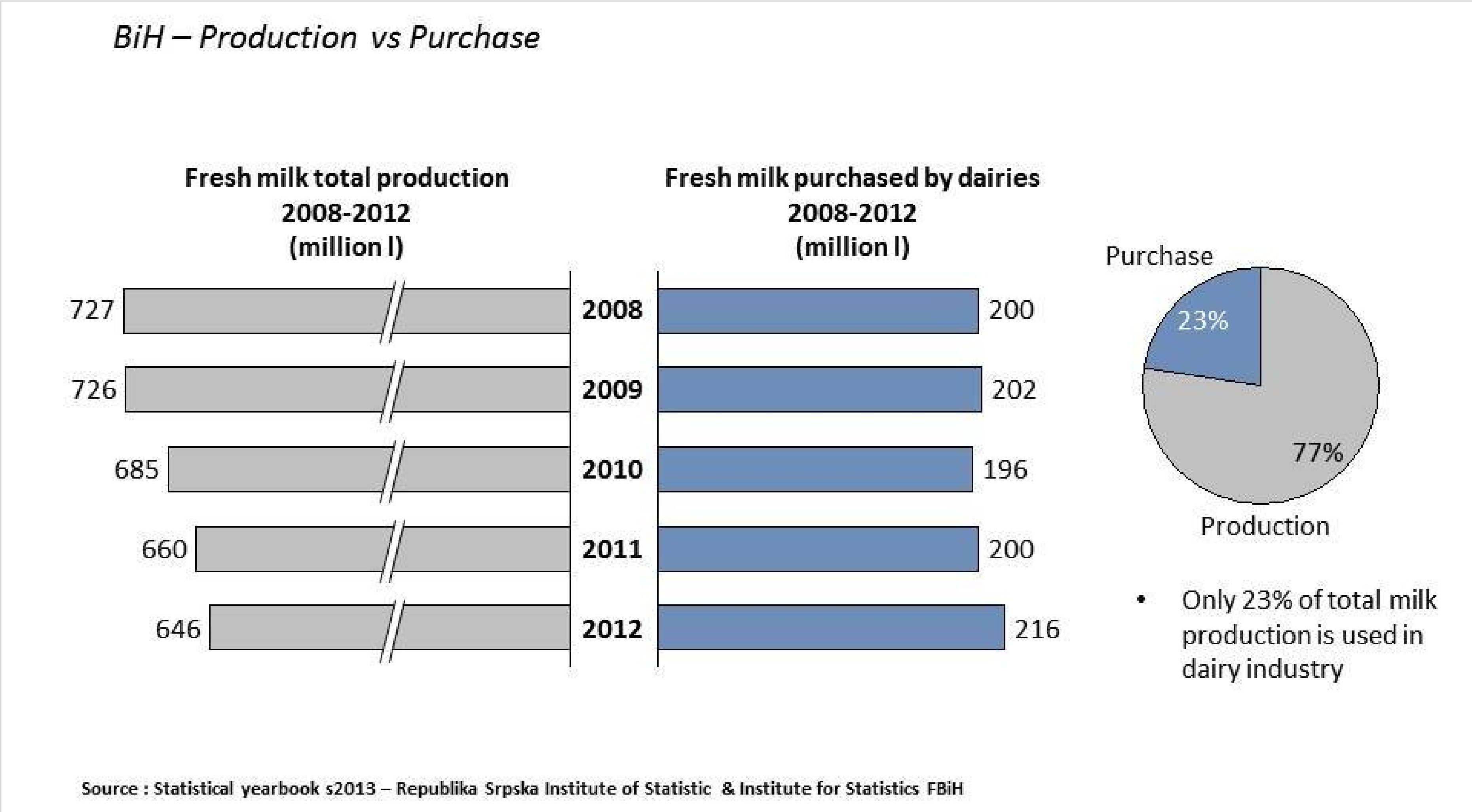
Source : Statistical yearbook s2013 – Republika Srpska Institute of Statistic & Institute for Statistics FBiH

Production of Fresh Milk – purchase price

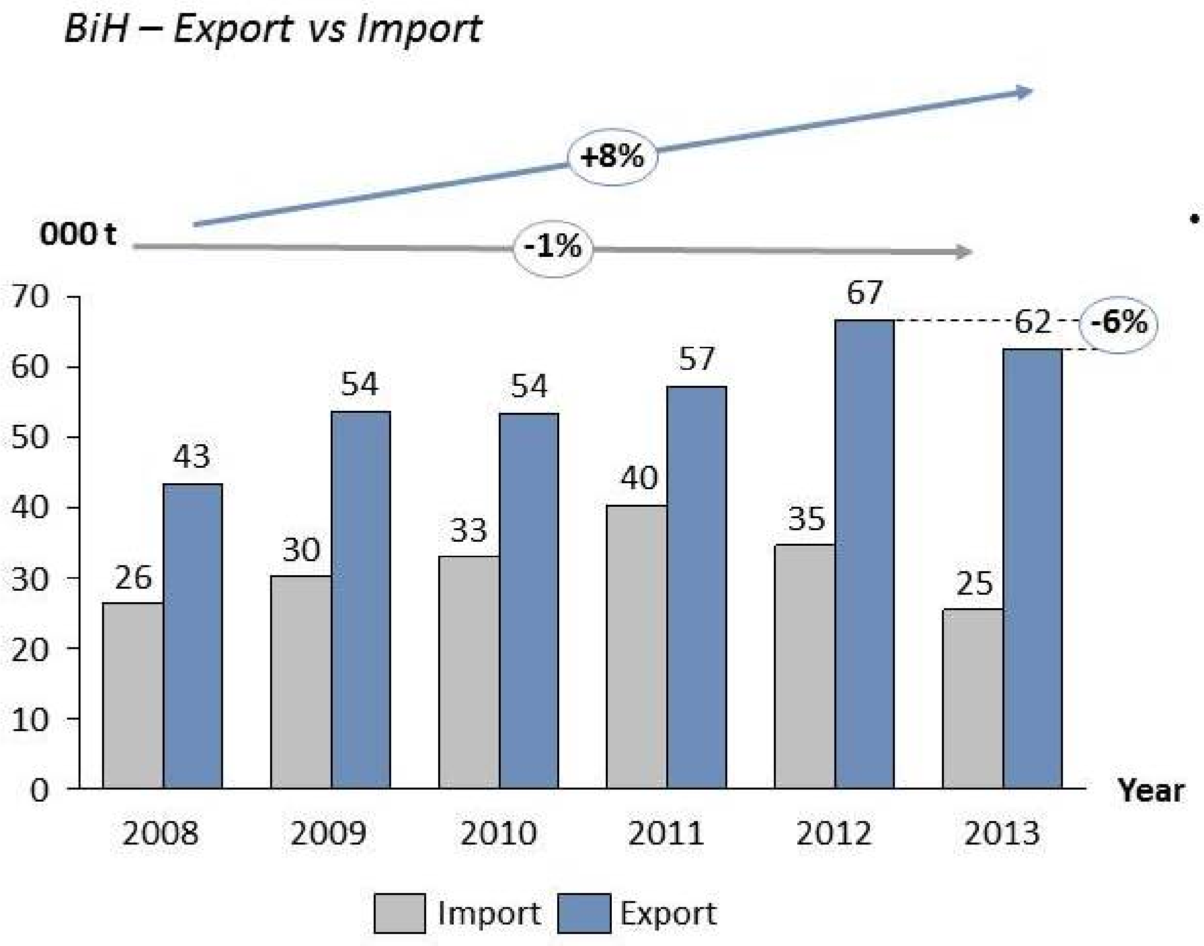
Production of Fresh Milk – top world's producers



Production vs pruchase of Fresh Milk



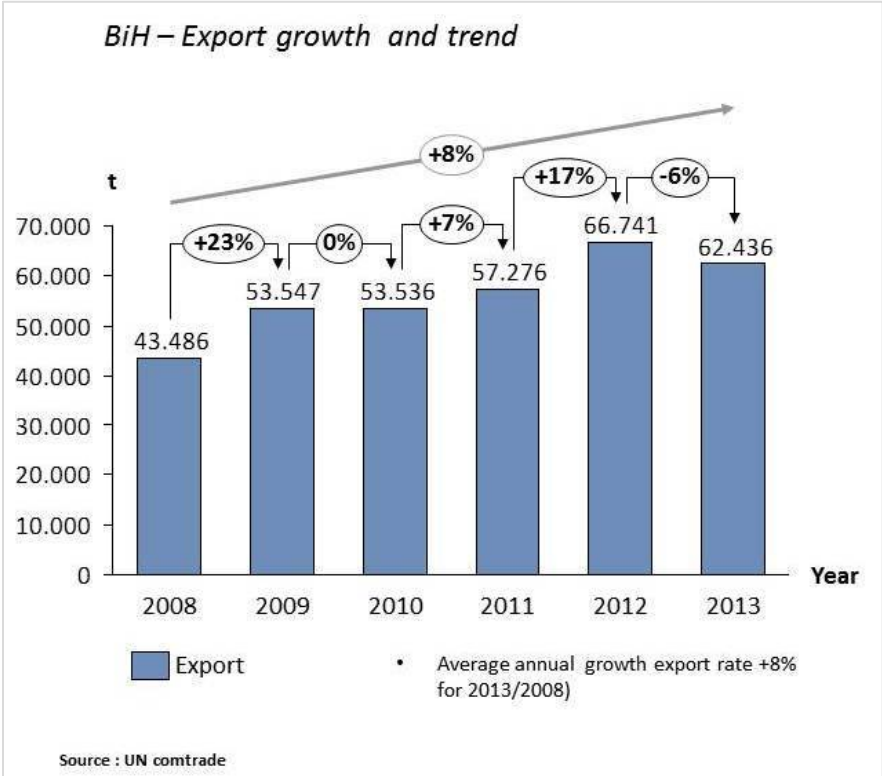
Export vs Import of Fresh Milk

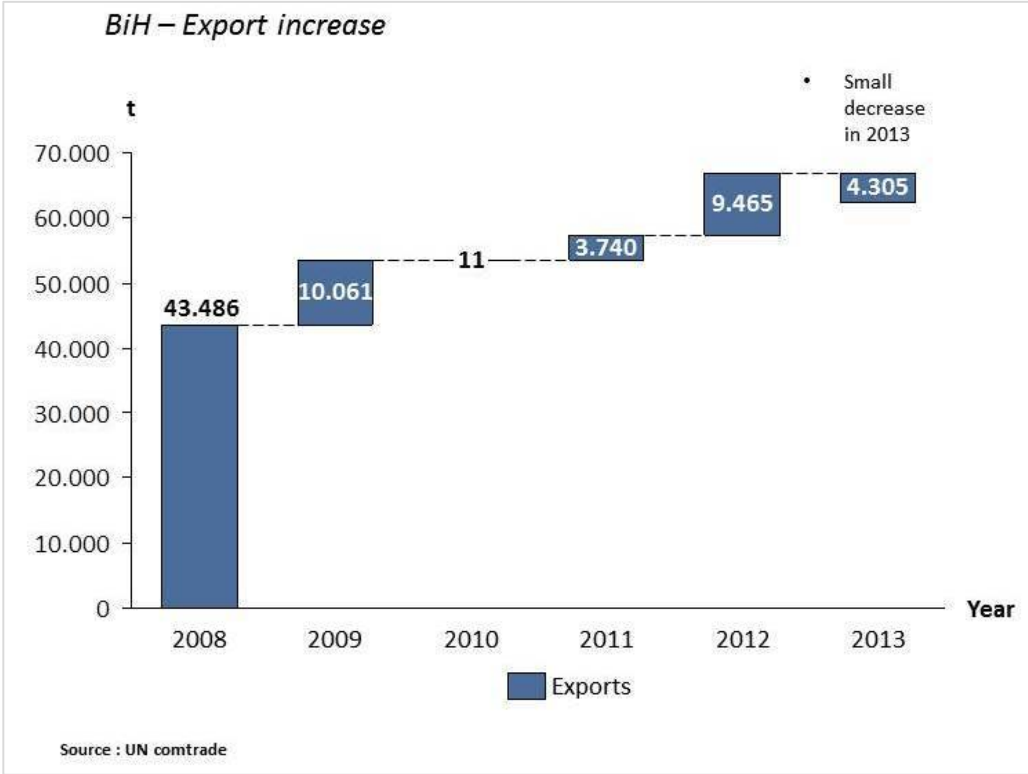


- Import of fresh milk is decreasing (Average annual growth rate is negative -1% for 2013/2008), while export is raising (Average annual growth rate is +8% for 2013/2008).

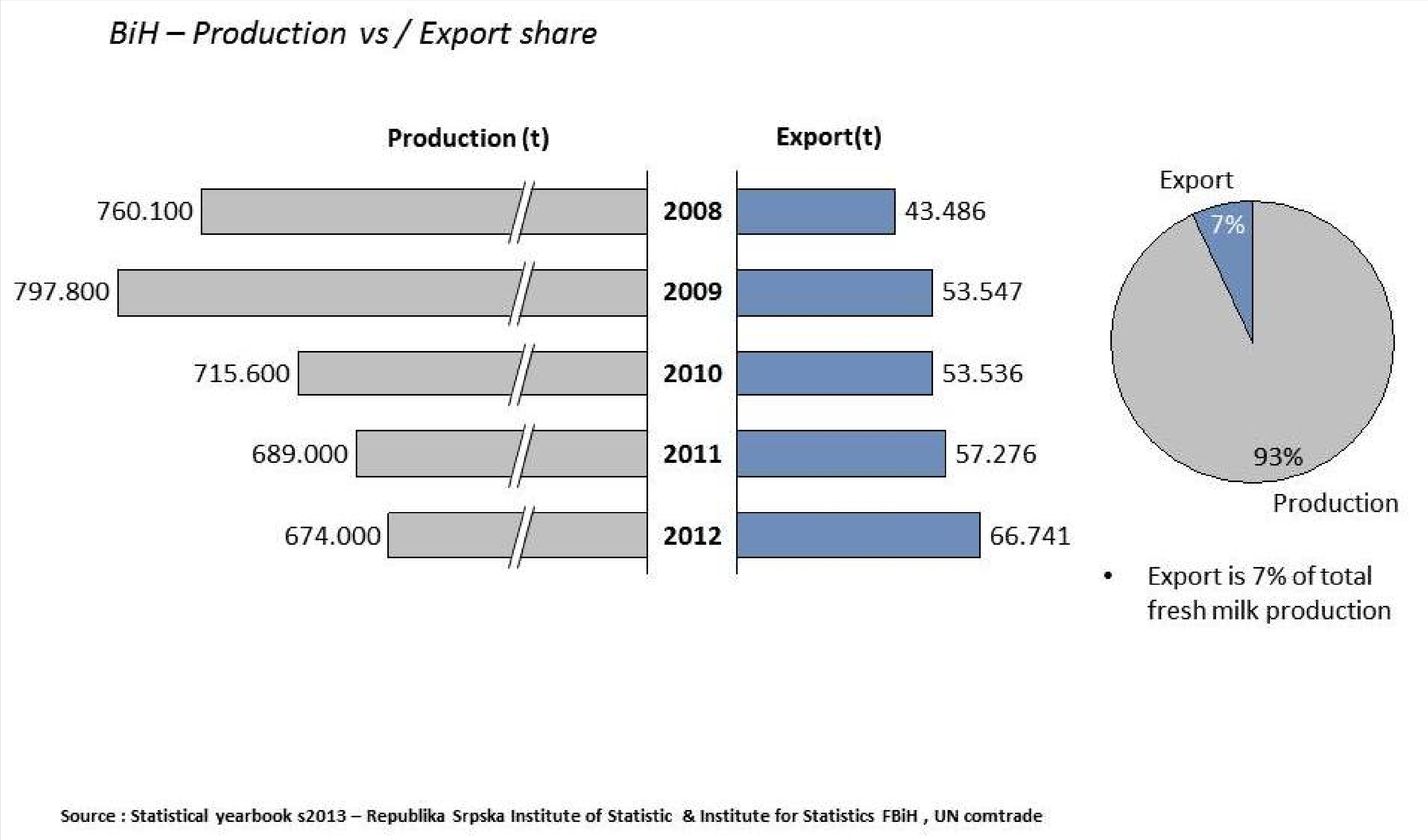
Source : UN comtrade

Export of Fresh Milk growth and trend

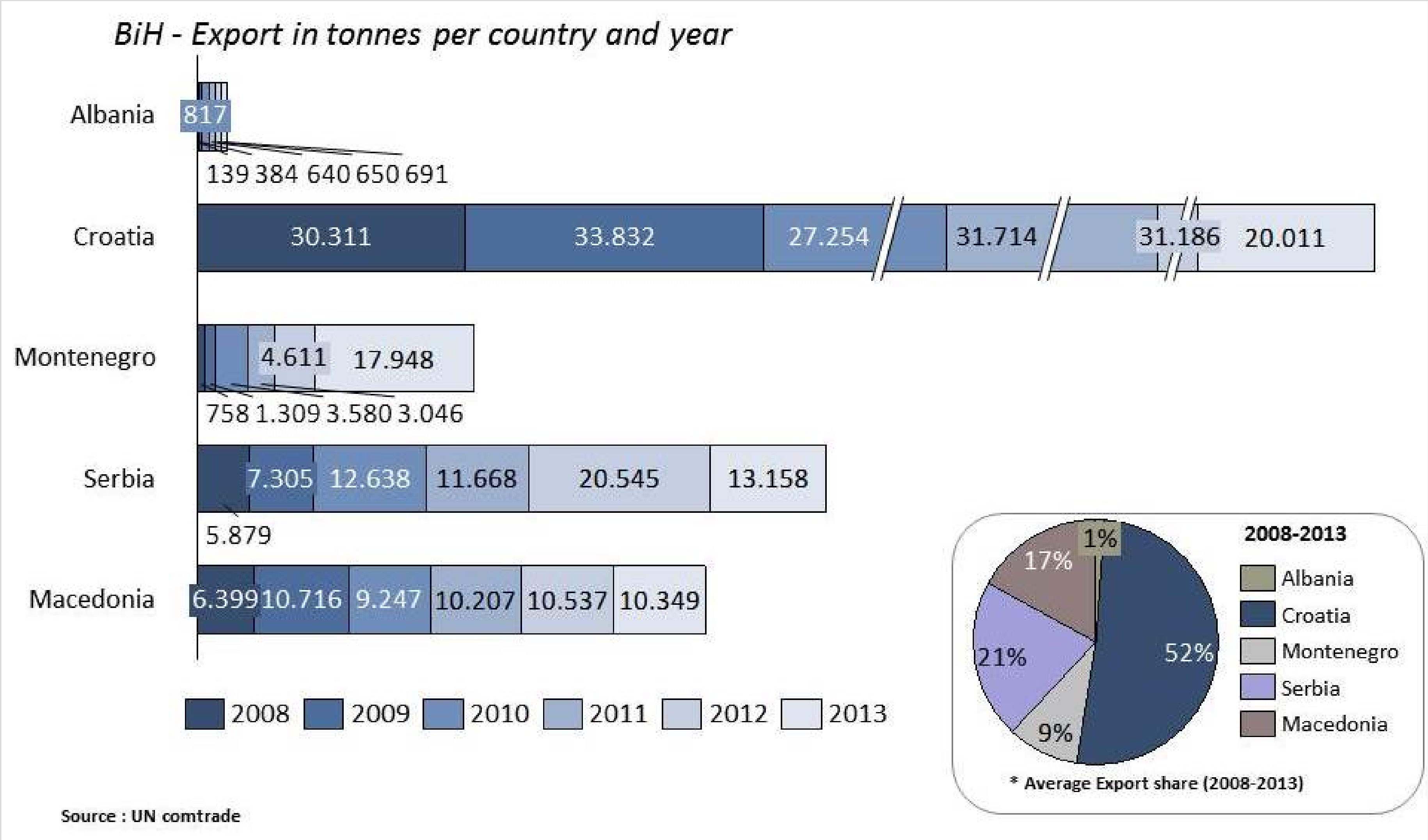




Export vs Production of Fresh Milk



Key markets - Export of Fresh Milk per country



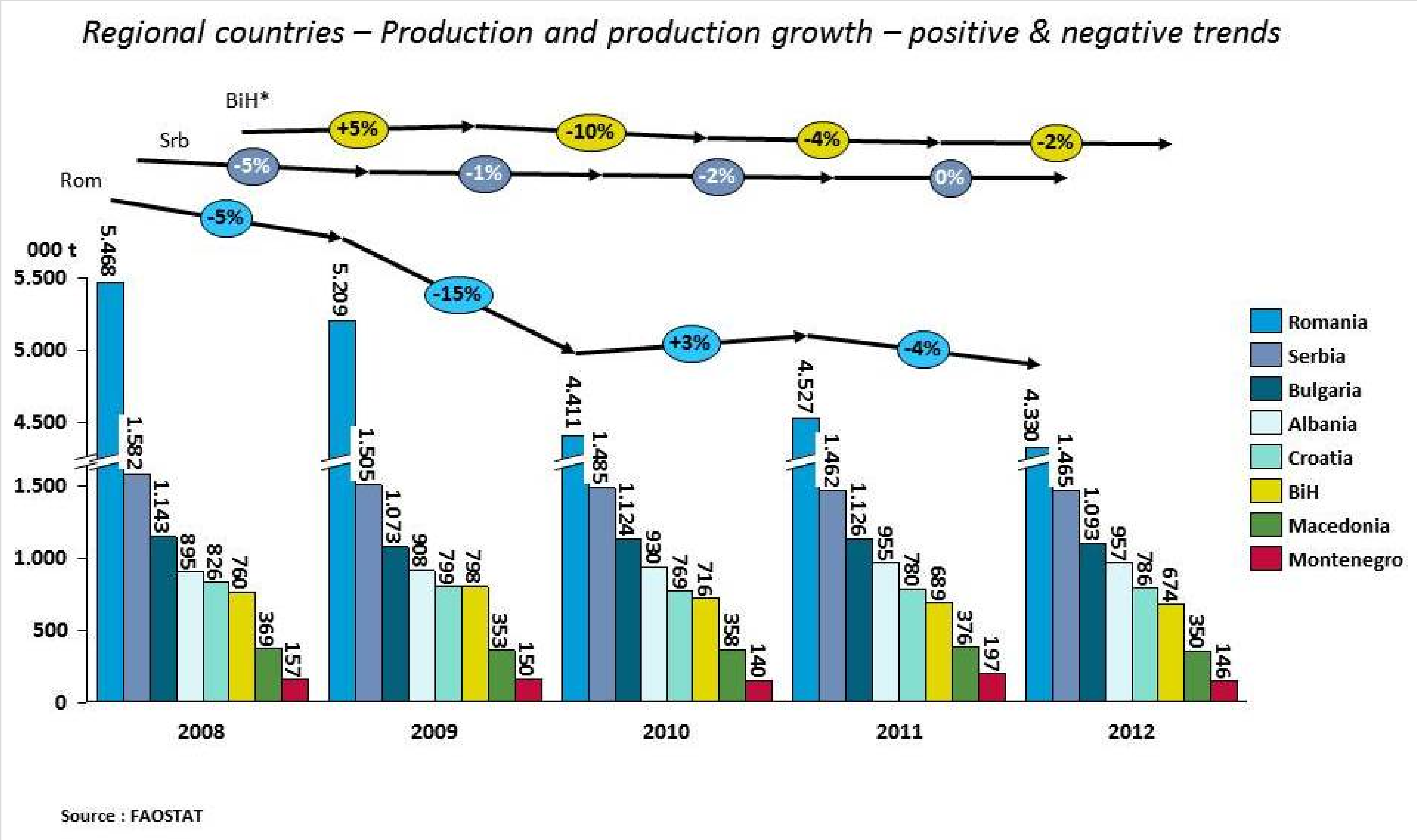
Competition for production of Fresh Milk – Regional countries production

Regional countries – average production 2008-2012 (t)

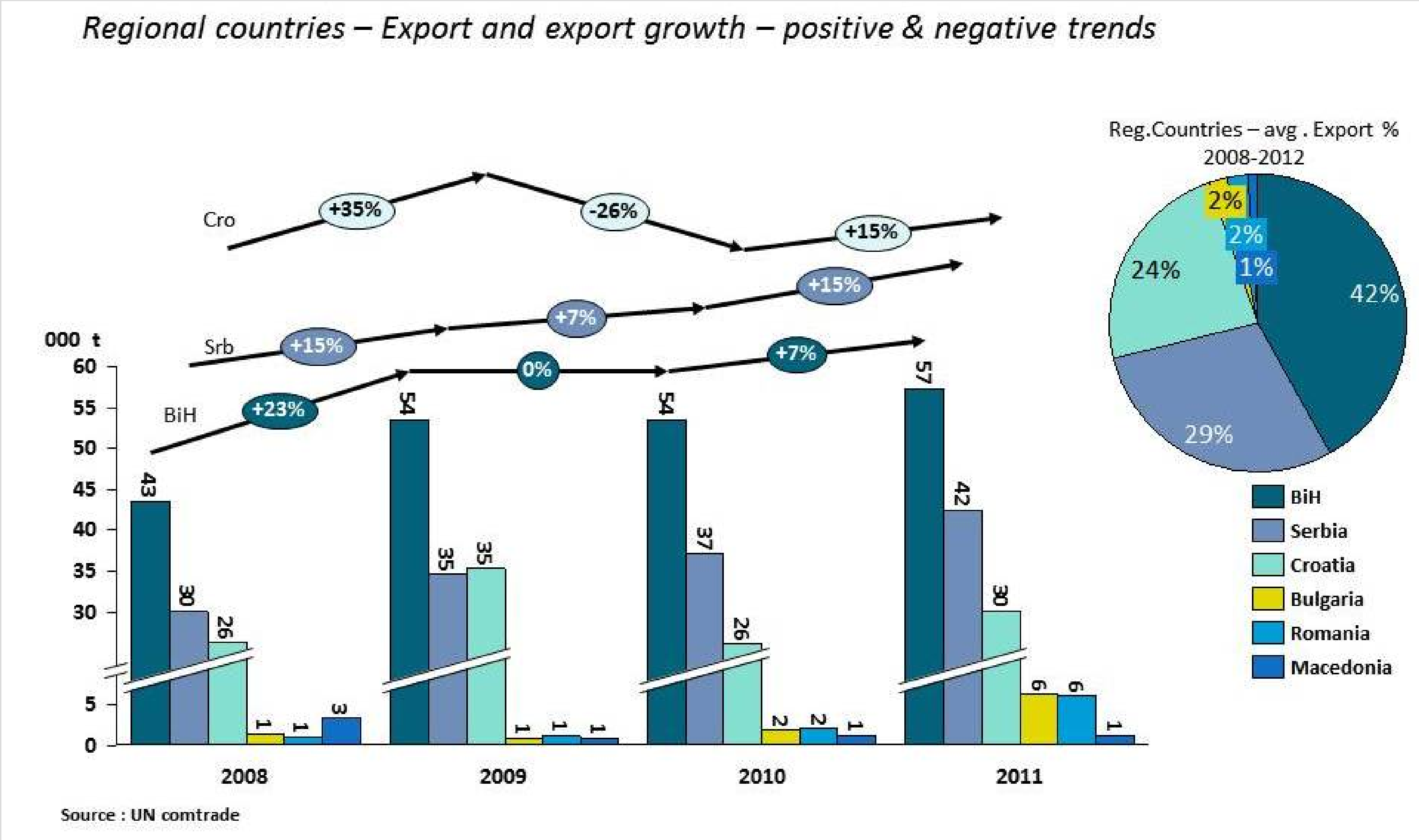
Regional Country & world's prod. place	Av. Prod. 2008-2012 (t)
Romania[32]	4.788.808
Serbia[60]	1.499.685
Bulgaria[66]	1.111.962
Albania[71]	928.940
Croatia[76]	791.936
BiH[81]	727.300
Macedonia[99]	361.295
Montenegro[116]	157.891

Source : FAOSTAT

Competition for production of Fresh Milk – Regional countries production charts

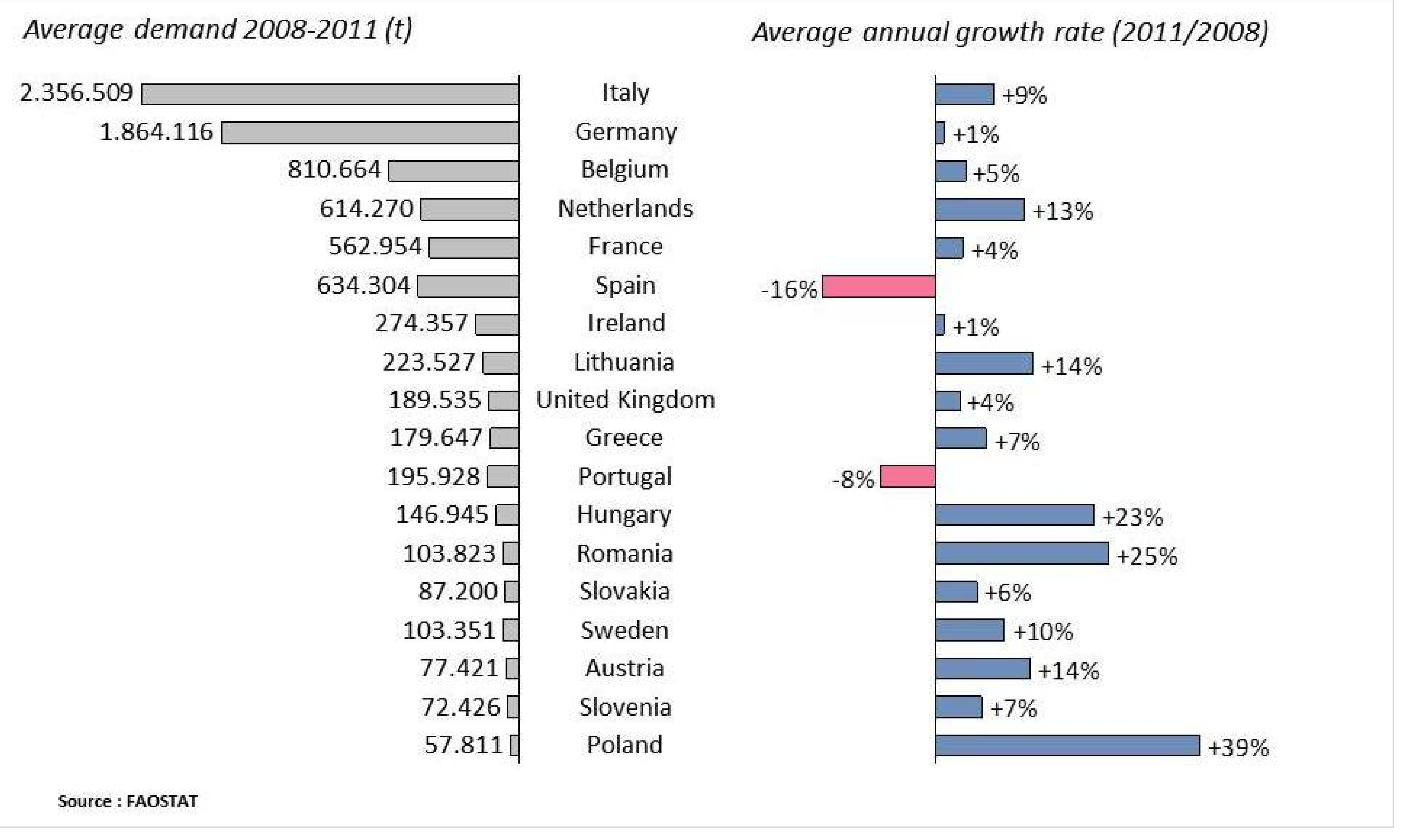


Competition for production of Fresh Milk – Regional countries export to the World



*The very first Balkan's export country is BiH with 42% of total export Balkan countries share. (2008-2012)

International Demand for Fresh Milk



DAIRY VALUE CHAIN / MILK PROCESSING/ CREATING VALUE ADDED IN DAIRY VALUE CHAIN

Dairy industry in BIH is concentrated in six major companies, where the emphasis is placed mainly on the production of milk, yogurt, and milk cream. In addition to this, in BiH is also produced cheese, milk powder and butter. Milk production and cream, yogurt, butter and milk powder has increased production (average growth rate ranges from 2-6% for the reference period 2012/2008). The same applies to export these products where the average growth rate ranges from 10-75%.

Key markets are: Serbia, Croatia, Austria, Germany and Albania. Competition in the region is high, while all countries in the region have a positive production growth rate (2012/2008).

International demand is increasing, especially for the processing of cheese where only a few countries have negative average growth rate.

More detailed statistical calculations of fruit industry are given in the following five tables.

Milk Production Including cream – market opportunity

Segment/ Product	Production Size[I] -FBIH			Exports[II] -FBIH		
	Year	Size (000 t)	Growth	Year	Euro (000 €)	Growth
Milk processed	2009/2008	77,4/78,5	↓ -1,3%	2009/2008	11772/8418	↑ 40%
	2010/2009	76,5/77,4	↓ -1,1%	2010/2009	12208/11772	↑ 4%
	2011/2010	76,4/76,5	↓ -0,1%	2011/2010	13685/12208	↑ 12%
	2012/2011	77,5/76,4	↑ 1,4%	2012/2011	14662/13685	↑ 7%
	AVG. 2012/2008		↓ **-0,3%**	**AVG. 2012/2008**		↑ **14,9%**

Key markets - name sofictication[III]-FBIH				Competition for production/processing [IV]				International Demand [V] (avg. 2008-		
Country	Year	Euro (000 €)	Growth	Country	Year	Size (000 t)	Growth	Country	Size (t)	Growth
Serbia	2009/2008	1904,1/1700,6	↑ 12%	Romania	2009/2008	0,4/0,6	↓ -38%	Italy	1.809.354	↑ 4%
	2010/2009	2346,3/1904,1	↑ 23%		2010/2009	1,1/0,4	↑ 187%	Germany	1.616.545	↓ 0%
	2011/2010	1654/2346,3	↓ -30%		2011/2010	4,5/1,1	↑ 308%	Belgium	686.488	↑ 8%
	2012/2011	1357,5/1654	↓ -18%		2012/2011	15,9/4,5	↑ 257%	Netherlands	416.290	↑ 7%
	AVG. 2012/2008		↓ -5%		**AVG. 2012/2008**		↑ 125%	Spain	465.821	↓ -10%
Croatia	2009/2008	1840,1/1712,3	↑ 7%	Serbia	2009/2008	31,5/28,1	↑ 12%	Lithuania	253.397	↑ 19%
	2010/2009	1307,9/1840,1	↓ -29%		2010/2009	35,6/31,5	↑ 13%	France	316.950	↑ 4%
	2011/2010	2920/1307,9	↑ 123%		2011/2010	41,1/35,6	↑ 15%	Ireland	255.387	↑ 4%
	2012/2011	4450,3/2920	↑ 52%		2012/2011	47,1/41,1	↑ 15%	Russian Fed.	48.354	↑ 147%
	AVG. 2012/2008		↑ 27%		**AVG. 2012/2008**		↑ 14%	Portugal	161.707	↓ -8%
Macedonia	2009/2008	5643,1/3154,2	↑ 79%	Macedonia	2009/2008	N/A	no data	Romania	97.875	↑ 21%
	2010/2009	4963,6/5643,1	↓ -12%		2010/2009	1,2/1,1	↑ 3%	United Kingdom	99.618	↑ 10%
	2011/2010	5628,3/4963,6	↑ 13%		2011/2010	1/1,2	↓ -14%	Poland	51.265	↑ 39%
	2012/2011	5462,6/5628,3	↓ -3%		2012/2011	3,7/1	↑ 271%	Hungary	126.480	↑ 3%
	AVG. 2012/2008		↑ 15%		**AVG. 2012/2008**		↑ 48%	Slovenia	72.302	↑ 10%
Albania	2009/2008	168,2/74,6	↑ 125%	Croatia	2009/2008	32,4/22,2	↑ 45%	Croatia	53.764	↑ 17%
	2010/2009	365,6/168,2	↑ 117%		2010/2009	22,6/32,4	↓ -30%	Greece	118.059	↓ -10%
	2011/2010	319/365,6	↓ -13%		2011/2010	26,1/22,6	↑ 15%	Austria	49.382	↑ 23%
	2012/2011	306,3/319	↓ -4%		2012/2011	31/26,1	↑ 19%	China	22.495	↑ 109%
	AVG. 2012/2008		↑ 42%		**AVG. 2012/2008**		↑ 9%	Singapore	52.891	↑ 14%
Kosovo	2009/2008	1636,1/1376,4	↑ 19%	Bulgaria	2009/2008	0,4/1,1	↓ -58%	China Hong Kong SAR	55.720	↑ 7%
	2010/2009	1665,3/1636,1	↑ 2%		2010/2009	1/0,4	↑ 130%	Czech Rep.	70.742	↓ -11%
	2011/2010	1791,1/1665,3	↑ 8%		2011/2010	5,7/1	↑ 461%	Latvia	36.322	↑ 8%
	2012/2011	1690,8/1791,1	↓ -6%		2012/2011	34/5,7	↑ 492%	Kazakhstan	44.457	↑ 11%
	AVG. 2012/2008		↑ 5%		**AVG. 2012/2008**		↑ 138%	Slovakia	64.509	↓ -11%
Other countries	2009/2008	579,8/0,5	↑ 113300%	BiH	2009/2008	52,5/43,1	↑ 22%	Canada	28.836	↑ 11%
	2010/2009	1559,4/579,8	↑ 169%		2010/2009	51,1/52,5	↓ -3%	Luxembourg	29.326	↑ 4%
	2011/2010	1372,3/1559,4	↓ -12%		2011/2010	55,2/51,1	↑ 8%	Philippines	36.588	↓ -4%
	2012/2011	1394,3/1372,3	↑ 2%		2012/2011	67,9/55,2	↑ 23%	Finland	19.522	↑ 97%
	AVG. 2012/2008		↑ 623%		**AVG. 2012/2008**		↑ 12%	Oman	20.560	↑ 21%

I source: Statistics institute Republika Srpska, Statistics institute Federation BiH / Link - Chart name: *Production of milk*

II source: Indirect Taxation Authority of BiH / Link - Chart name: *Export of milk in 000€*

III source: Indirect Taxation Authority of BiH

IV source: FAOSTAT and Uncomtrade / Link - Chart name: *Competition for production of milk – Regional countries production charts*

V source: FAOSTAT and Uncomtrade / Link - Chart name: *International Demand for milk*

Cheese processing – market opportunity

Segment/ Product	Production Size[I] -FBIH Year	Size (t)	Growth	Exports[II] -FBIH Year	Euro (000 €)	Growth
Cheese	2009/2008	3017/1310	↑ 130%	2009/2008	2302/2616	↓ -12%
	2010/2009	2341/3017	↓ -22%	2010/2009	2602/2302	↑ 13%
	2011/2010	2418/2341	↑ 3%	2011/2010	3293/2602	↑ 27%
	2012/2011	2965/2418	↑ 23%	2012/2011	4017/3293	↑ 22%
	AVG. 2012/2008		↑ **23%**	**AVG. 2012/2008**		↑ **11%**

Key markets - name sofictication[III]-FBIH Country	Year	Euro (000 €)	Growth
Serbia	2009/2008	0/30,2	N/A
	2010/2009	no data	no data
	2011/2010	37,3/25,6	↑ 46%
	2012/2011	0/37,3	N/A
	AVG. 2012/2008		**N/A**
Croatia	2009/2008	2113,7/2414,8	↓ -12%
	2010/2009	2254,3/2113,7	↑ 7%
	2011/2010	2787,1/2254,3	↑ 24%
	2012/2011	3335,2/2787,1	↑ 20%
	AVG. 2012/2008		↑ **8%**
Macedonia	2009/2008	24/23	↑ 4%
	2010/2009	87,4/24	↑ 264%
	2011/2010	92,5/87,4	↑ 6%
	2012/2011	248,5/92,5	↑ 169%
	AVG. 2012/2008		↑ **81%**
Albania	2009/2008	no data	no data
	2010/2009	no data	no data
	2011/2010	26,1/17,4	↑ 50%
	2012/2011	33,7/26,1	↑ 29%
	AVG. 2012/2008		↑ **39%**
Kosovo	2009/2008	73,1/64,9	↑ 13%
	2010/2009	42,4/73,1	↓ -42%
	2011/2010	49,1/42,4	↑ 16%
	2012/2011	86,4/49,1	↑ 76%
	AVG. 2012/2008		↑ **7%**
Other countries	2009/2008	91,5/20,5	↑ 348%
	2010/2009	174,9/91,5	↑ 91%
	2011/2010	300,6/174,9	↑ 72%
	2012/2011	312,9/300,6	↑ 4%
	AVG. 2012/2008		↑ **98%**

Competition for production/processing[IV] Country	Year	Size (000 t)	Growth
Romania	2009/2008	2,5/1	↑ 134%
	2010/2009	3,7/2,5	↑ 52%
	2011/2010	3,1/3,7	↓ -18%
	2012/2011	no data	no data
	AVG. 2012/2008		↑ **43%**
Serbia	2009/2008	3,5/3,9	↓ -12%
	2010/2009	3,9/3,5	↑ 12%
	2011/2010	5,4/3,9	↑ 41%
	2012/2011	no data	no data
	AVG. 2012/2008		↑ **12%**
Macedonia	2009/2008	N/A	no data
	2010/2009	1,1/0,6	↑ 91%
	2011/2010	1,8/1,1	↑ 57%
	2012/2011	no data	no data
	AVG. 2012/2008		↑ **73%**
Croatia	2009/2008	1,8/2	↓ -11%
	2010/2009	2,1/1,8	↑ 20%
	2011/2010	2,1/2,1	↑ 1%
	2012/2011	no data	no data
	AVG. 2012/2008		↑ **3%**
Bulgaria	2009/2008	20,5/21,6	↓ -5%
	2010/2009	23,1/20,5	↑ 13%
	2011/2010	22,9/23,1	↓ -1%
	2012/2011	no data	no data
	AVG. 2012/2008		↑ **2%**

International Demand[V] (avg. 2008-2011) Country	Size (t)	Growth
Germany	624.930	↑ 3%
Italy	466.205	↑ 2%
United Kingdom	437.388	↓ -1%
Russian Fed.	292.960	↑ 13%
Netherlands	214.777	↑ 12%
France	274.863	↑ 2%
Belgium	264.254	↑ 2%
Spain	243.356	↑ 4%
Japan	203.941	↑ 6%
USA	147.229	↓ -8%
Saudi Arabia	105.443	↑ 17%
Greece	116.084	↓ -1%
Austria	88.296	↑ 3%
Sweden	86.496	↑ 5%
Mexico	77.810	↑ 7%
Czech Rep.	77.132	↑ 7%
Denmark	74.212	↑ 2%
Rep. of Korea	62.221	↑ 13%
Australia	71.766	↑ 2%
Finland	47.975	↑ 14%
Poland	44.631	↑ 18%
Ireland	49.517	↑ 7%
Luxembourg	50.452	↑ 4%
Switzerland	46.360	↑ 5%
China	24.240	↑ 29%
Romania	30.904	↑ 7%
Portugal	35.899	↑ 0%
Hungary	36.647	↑ 1%
Lebanon	31.877	↑ 6%
El Salvador	27.309	↑ 4%

I source: Statistics institute Republika Srpska, Statistics institute Federation BiH
II source: Indirect Taxation Authority of BiH
III source: Indirect Taxation Authority of BiH
IV source: FAOSTAT and Uncomtrade
V source: FAOSTAT and Uncomtrade

Yoghurt processing Including buttermilk – market opportunity

Segment/ Product	Production Size[I] -FBIH			Exports[II] -FBIH		
	Year	Size (000t)	Growth	Year	Euro (000 €)	Growth
Curdled milk, cream, yogurt and other fermented products	2009/2008	21,6/22,4	↓ -4%	2009/2008	1059/749	↑ 41%
	2010/2009	21,9/21,6	↑ 1%	2010/2009	1402/1059	↑ 32%
	2011/2010	22,6/21,9	↑ 3%	2011/2010	1860/1402	↑ 33%
	2012/2011	24,7/22,6	↑ 10%	2012/2011	2357/1860	↑ 27%
	AVG. 2012/2008		↑ 3%	AVG. 2012/2008		↑ 33%

Key markets - name sofictication[III]-FBIH			
Country	Year	Euro (000 €)	Growth
Serbia	2009/2008	67,5/38,3	↑ 76%
	2010/2009	67/67,5	↓ -1%
	2011/2010	70/67	↑ 5%
	2012/2011	75,7/70	↑ 8%
	AVG. 2012/2008		↑ **19%**
Croatia	2009/2008	376,3/45	↑ 736%
	2010/2009	505,2/376,3	↑ 34%
	2011/2010	609,5/505,2	↑ 21%
	2012/2011	1111,5/609,5	↑ 82%
	AVG. 2012/2008		↑ **123%**
Macedonia	2009/2008	206,6/242,9	↓ -15%
	2010/2009	305,2/206,6	↑ 48%
	2011/2010	359,4/305,2	↑ 18%
	2012/2011	399,3/359,4	↑ 11%
	AVG. 2012/2008		↑ **13%**
Albania	2009/2008	no data	no data
	2010/2009	no data	no data
	2011/2010	9,2/2,6	↑ 260%
	2012/2011	1/9,2	↓ -89%
	AVG. 2012/2008		↓ **-37%**
Kosovo	2009/2008	401,4/413,6	↓ -3%
	2010/2009	496/401,4	↑ 24%
	2011/2010	659,6/496	↑ 33%
	2012/2011	651,4/659,6	↓ -1%
	AVG. 2012/2008		↑ **12%**
Other countries	2009/2008	7,2/4,6	↑ 56%
	2010/2009	26,1/7,2	↑ 264%
	2011/2010	152,4/26,1	↑ 484%
	2012/2011	118,1/152,4	↓ -22%
	AVG. 2012/2008		↑ **125%**

Competition for production/processing[IV]			
Country	Year	Size (000 t)	Growth
Romania	2009/2008	0,4/0,2	↑ 151%
	2010/2009	0,5/0,4	↑ 19%
	2011/2010	1/0,5	↑ 89%
	2012/2011	no data	no data
	AVG. 2012/2008		↑ **78%**
Serbia	2009/2008	1,3/1	↑ 29%
	2010/2009	1,5/1,3	↑ 17%
	2011/2010	1,9/1,5	↑ 24%
	2012/2011	no data	no data
	AVG. 2012/2008		↑ **23%**
Bulgaria	2009/2008	2,8/1,5	↑ 90%
	2010/2009	1,8/2,8	↓ -37%
	2011/2010	2,7/1,8	↑ 52%
	2012/2011	no data	no data
	AVG. 2012/2008		↑ **22%**
Croatia	2009/2008	7/6,4	↑ 9%
	2010/2009	6,4/7	↓ -9%
	2011/2010	6/6,4	↓ -5%
	2012/2011	no data	no data
	AVG. 2012/2008		↓ **-2%**

International Demand[V] (avg. 2008-2011)		
Country	Size (t)	Growth
United Kingdom	168.687	↑ 4%
Netherlands	85.506	↑ 9%
Belgium	57.853	↑ 7%
Italy	65.786	↓ -1%
Germany	48.009	↑ 10%
France	59.865	↓ -7%
Portugal	30.823	↑ 6%
Spain	23.723	↑ 23%
Kazakhstan	26.726	↑ 0%
Russian Fed.	12.827	↑ 21%
Philippines	21.613	↑ 10%
Czech Rep.	24.442	↓ -5%
Hungary	21.426	↓ -5%
Thailand	15.478	↑ 6%
Saudi Arabia	11.008	↑ 21%
Slovakia	13.571	↑ 1%
Poland	14.080	↓ -11%
Romania	8.566	↑ 12%
Mexico	13.319	↓ -12%
Austria	9.375	↓ -1%
Guatemala	1.750	↑ 187%
Ireland	7.817	↑ 9%
BIH	7.679	↓ -3%
Latvia	7.456	↑ 2%
Finland	5.353	↑ 7%
Slovenia	6.567	↑ 2%
Indonesia	8.360	↓ 0%
Ukraine	7.727	↓ -22%
Sweden	4.988	↑ 3%
Peru	3.781	↑ 12%

I source: Statistics institute Republika Srpska, Statistics institute Federation BiH
II source: Indirect Taxation Authority of BiH
III source: Indirect Taxation Authority of BiH
IV source: FAOSTAT and Uncomtrade
V source: FAOSTAT and Uncomtrade

Butter processing including other fats and oils derived from milk – market opportunity

Segment/ Product	Production Size[I] -FBIH: Year	Size (t)	Growth	Exports[II] -FBIH: Year	Euro (000 €)	Growth
Butter (incul. other fats and oils from milk) processed	2009/2008	451/512	↓ -12%	2009/2008	237/414	↓ -43%
	2010/2009	552/451	↑ 22%	2010/2009	513/237	↑ 116%
	2011/2010	311/552	↓ -44%	2011/2010	806/513	↑ 57%
	2012/2011	319/311	↑ 3%	2012/2011	692/806	↓ -14%
	AVG. 2012/2008		↓ **-11%**	**AVG. 2012/2008**		↑ **14%**

Key markets - name sofictication[III]-FBIH: Country	Year	Euro (000 €)	Growth	Competition for production/processing[IV]: Country	Year	Size (000 t)	Growth	International Demand[V] (avg. 2008-: Country	Size (t)	Growth
Serbia	2009/2008	19,9/5,6	↑ 255%	Romania	2009/2008	8,8/7,1	↑ 24%	France	149.518	↑ 3%
	2010/2009	0/19,9	↓ -100%		2010/2009	8,2/8,8	↓ -7%	Germany	130.951	↑ 1%
	2011/2010	no data	no data		2011/2010	7,9/8,2	↓ -4%	Belgium	113.285	↑ 5%
	2012/2011	60,8/34,8	↑ 75%		2012/2011	7,5/7,9	↓ -5%	United Kingdom	95.687	↑ 8%
	AVG. 2012/2008		↑ 121%		**AVG. 2012/2008**		↑ 1%	Russian Federation	75.289	↓ -3%
Croatia	2009/2008	126,8/252,6	↓ -50%	Serbia	2009/2008	1,7/1,4	↑ 27%	Netherlands	60.743	↓ -2%
	2010/2009	173,8/126,8	↑ 37%		2010/2009	1,8/1,7	↑ 5%	Italy	58.972	↑ 3%
	2011/2010	263,3/173,8	↑ 51%		2011/2010	1,4/1,8	↓ -25%	Egypt	51.536	↑ 20%
	2012/2011	274,1/263,3	↑ 4%		2012/2011	2,1/1,4	↑ 55%	Iran	51.148	↑ 4%
	AVG. 2012/2008		↑ 2%		**AVG. 2012/2008**		↑ 12%	Mexico	42.538	↓ -11%
Macedonia	2009/2008	41,4/106,9	↓ -61%	Macedonia	2009/2008	8,2/8,1	↑ 1%	China	39.363	↑ 7%
	2010/2009	177,9/41,4	↑ 330%		2010/2009	8,2/8,2	→ 0%	Denmark	37.982	↑ 2%
	2011/2010	241,3/177,9	↑ 36%		2011/2010	8,2/8,2	→ 0%	China ex.int	36.231	↑ 21%
	2012/2011	230,6/241,3	↓ -4%		2012/2011	7,1/8,2	↓ -13%	Saudi Arabia	35.551	↑ 14%
	AVG. 2012/2008		↑ 21%		**AVG. 2012/2008**		↓ -3%	Morocco	26.420	↓ -17%
Albania	2009/2008	no data	no data	Croatia	2009/2008	4,9/4,3	↑ 16%	Singapore	23.109	↓ -1%
	2010/2009	no data	no data		2010/2009	3,7/4,9	↓ -25%	China, mainland	18.827	↑ 11%
	2011/2010	26,1/29,7	↓ -12%		2011/2010	3,8/3,7	↑ 3%	Czech Republic	18.452	↑ 7%
	2012/2011	38,9/26,1	↑ 49%		2012/2011	3,7/3,8	↓ -3%	Philippines	18.092	↑ 17%
	AVG. 2012/2008		↑ 14%		**AVG. 2012/2008**		↓ -3%	Australia	17.128	↑ 3%
Kosovo	2009/2008	35,3/29,7	↑ 19%	Bulgaria	2009/2008	1,2/1,3	↓ -13%	Spain	16.528	↑ 5%
	2010/2009	33,7/35,3	↓ -4%		2010/2009	1,1/1,2	↓ -6%	Austria	14.145	↓ -1%
	2011/2010	37,3/33,7	↑ 11%		2011/2010	1,1/1,1	↑ 4%	Indonesia	13.015	↑ 17%
	2012/2011	35,3/37,3	↓ -5%		2012/2011	1,1/1,1	↓ -1%	Malaysia	12.257	↑ 3%
	AVG. 2012/2008		↑ 4%		**AVG. 2012/2008**		↓ -4%	United Arab Emirates	11.615	↓ -1%
Other countries	2009/2008	13,8/14,8	↓ -7%	Albania	2009/2008	2,8/2,5	↑ 10%	China, Taiwan Province	11.273	↑ 7%
	2010/2009	98,2/13,8	↑ 611%		2010/2009	3,1/2,8	↑ 12%	Viet Nam	11.134	↑ 18%
	2011/2010	203/98,2	↑ 107%		2011/2010	3,2/3,1	↑ 3%	Sweden	10.906	↑ 23%
	2012/2011	52,7/203	↓ -74%		2012/2011	3,5/3,2	↑ 9%	Turkey	10.905	↑ 14%
	AVG. 2012/2008		↑ 37%		**AVG. 2012/2008**		↑ 9%	Poland	10.900	↑ 34%

I source: Statistics institute Republika Srpska, Statistics institute Federation BiH
II source: Indirect Taxation Authority of BiH
III source: Indirect Taxation Authority of BiH
IV source: FAOSTAT and Uncomtrade
V source: FAOSTAT and Uncomtrade

Skimmed milk powder – market opportunity

Segment/ Product	Production Size[I] -FBIH Year	Size (t)	Growth	Exports[II] -FBIH Year	Euro (000 €)	Growth
Skimmed milk powder	2009/2008	3/330	-99%	2009/2008	63/154	-59%
	2010/2009	12/3	380%	2010/2009	26/63	-59%
	2011/2010	15/12	24%	2011/2010	27/26	2%
	2012/2011	10/15	-37%	2012/2011	132/27	398%
	AVG. 2012/2008		-59%	**AVG. 2012/2008**		-4%

Key markets - name sofictication[III]-FBIH Country	Year	Euro (000 €)	Growth
Albania	2009/2008	no data	no data
	2010/2009	no data	no data
	2011/2010	no data	no data
	2012/2011	6,6/7,2	-7%
	AVG. 2012/2008		**-7%**
Kosovo	2009/2008	63,4/109,4	-42%
	2010/2009	20,5/63,4	-68%
	2011/2010	17,4/20,5	-15%
	2012/2011	41,4/17,4	138%
	AVG. 2012/2008		**-22%**
Other countries	2009/2008	no data	no data
	2010/2009	no data	no data
	2011/2010	2/5,6	-64%
	2012/2011	57,8/2	2725%
	AVG. 2012/2008		**221%**

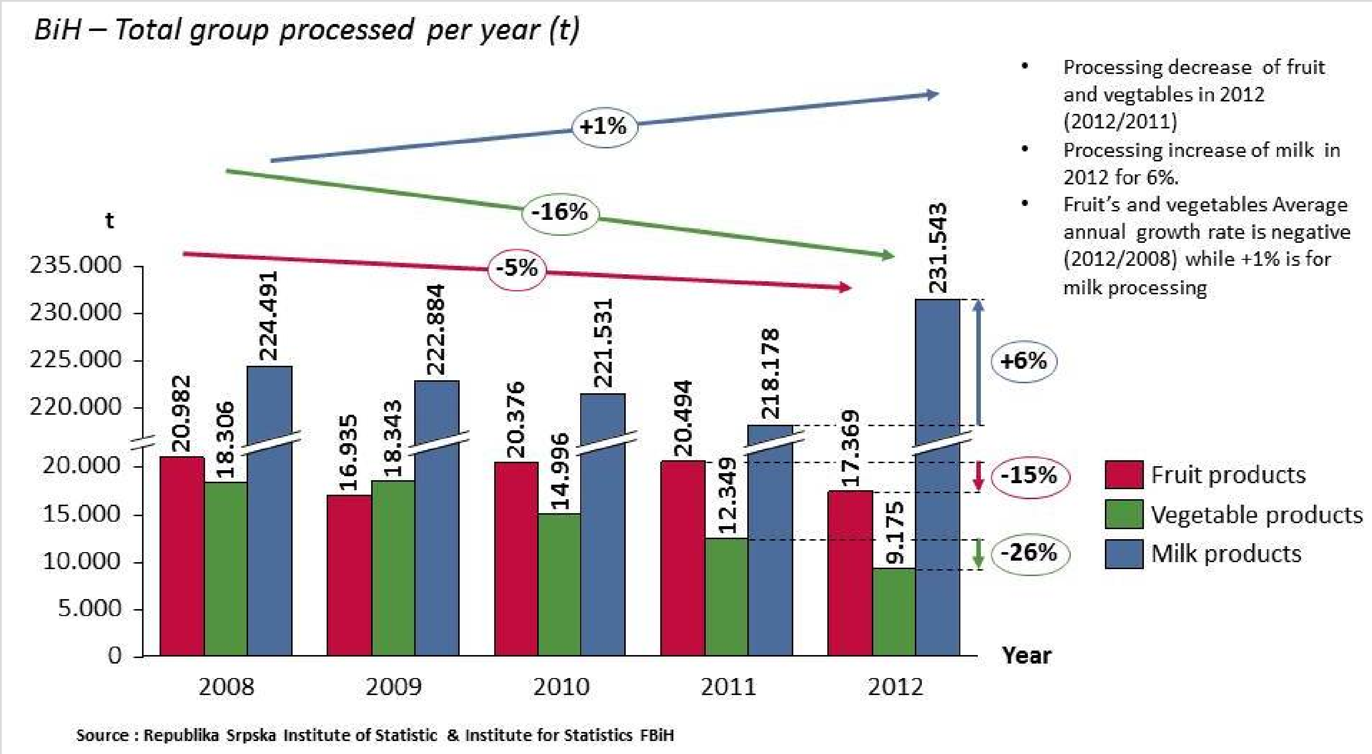
Competition for production/processing[IV] Country	Year	Size (000 t)	Growth
Romania	2009/2008	192,6/157	23%
	2010/2009	192,6/192,6	0%
	2011/2010	192,6/192,6	0%
	2012/2011	192,6/192,6	0%
	AVG. 2012/2008		**5%**
Serbia	2009/2008	39/31,7	23%
	2010/2009	38,9/39	0%
	2011/2010	38,9/38,9	0%
	2012/2011	38,9/38,9	0%
	AVG. 2012/2008		**5%**
Bulgaria	2009/2008	23,6/28,8	-18%
	2010/2009	23,6/23,6	0%
	2011/2010	23,6/23,6	0%
	2012/2011	23,6/23,6	0%
	AVG. 2012/2008		**-5%**
Croatia	2009/2008	94,7/80,7	17%
	2010/2009	71,8/94,7	-24%
	2011/2010	72,4/71,8	1%
	2012/2011	72,4/72,4	0%
	AVG. 2012/2008		**-3%**
Albania	2009/2008	56,1/50,8	11%
	2010/2009	62,6/56,1	11%
	2011/2010	64,7/62,6	3%
	2012/2011	64,7/64,7	0%
	AVG. 2012/2008		**6%**
Macedonia	2009/2008	152,5/150,7	1%
	2010/2009	152,5/152,5	0%
	2011/2010	152,5/152,5	0%
	2012/2011	132,1/152,5	-13%
	AVG. 2012/2008		**-3%**
Montenegro	2009/2008	13,8/13,8	0%
	2010/2009	13,8/13,8	0%
	2011/2010	13,8/13,8	0%
	2012/2011	13,8/13,8	0%
	AVG. 2012/2008		**0%**

International Demand[V] (avg. 2008-2011) Country	Size (t)	Growth
Italy	558.699	2%
Netherlands	256.725	24%
Spain	197.968	-5%
Mexico	167.137	8%
Germany	134.152	-14%
China	115.666	28%
Indonesia	111.842	18%
China ex.int	110.856	38%
Algeria	107.382	7%
Belgium	104.307	14%
Philippines	104.281	12%
France	99.666	-3%
China, mainland	87.762	34%
Malaysia	87.171	7%
United Kingdom	78.132	8%
Singapore	66.525	0%
Saudi Arabia	59.741	23%
Thailand	58.473	2%
Viet Nam	52.648	33%
Egypt	46.265	29%
Yemen	43.572	6%
Austria	42.659	-3%
Denmark	42.287	63%
Greece	33.968	5%
Portugal	32.003	10%
Japan	30.953	-5%
Nigeria	28.079	2%
Russian Federation	27.967	30%
Bulgaria	25.821	10%
Switzerland	25.408	1%

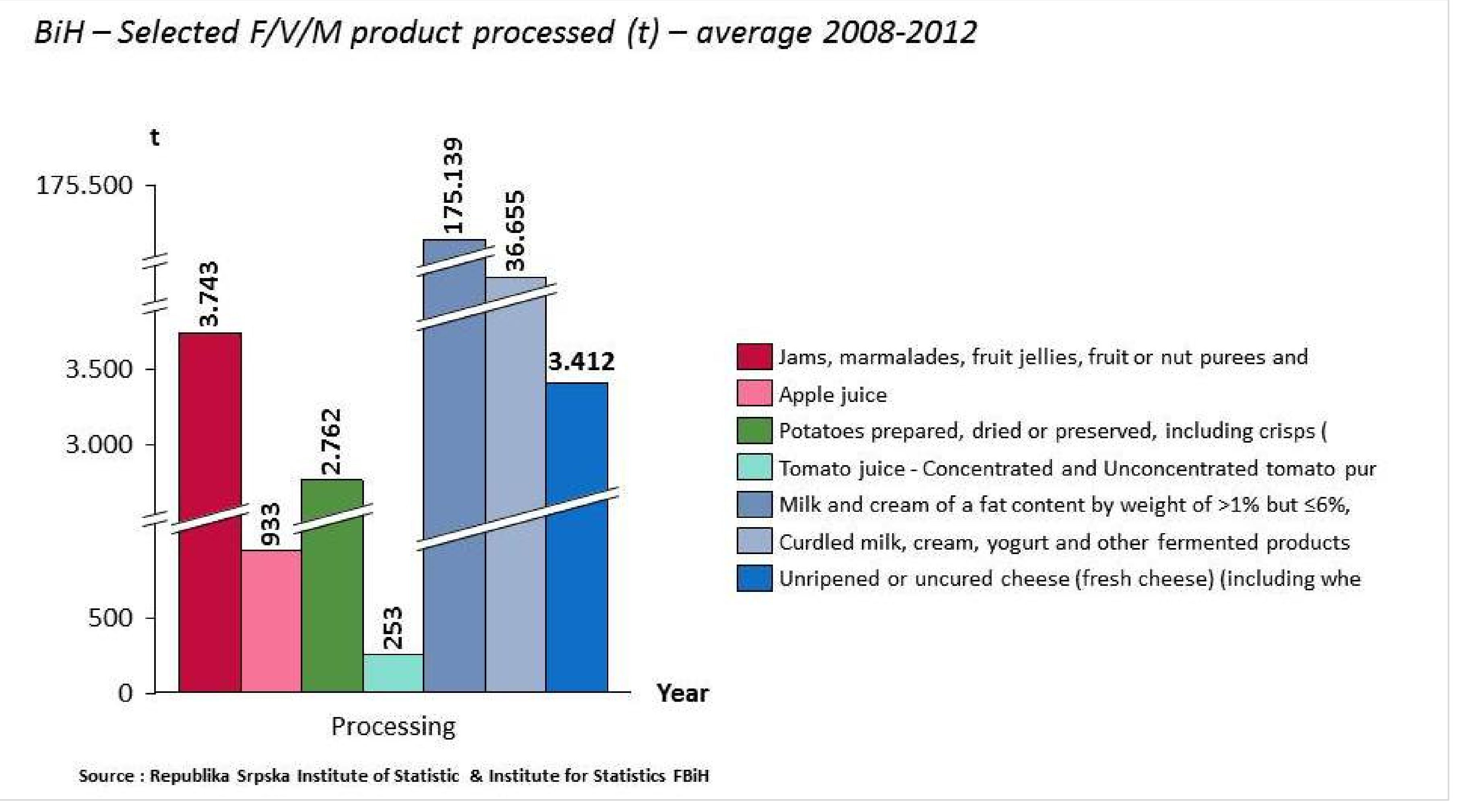
I source: Statistics institute Republika Srpska, Statistics institute Federation BiH
II source: Indirect Taxation Authority of BiH
III source: Indirect Taxation Authority of BiH
IV source: FAOSTAT and Uncomtrade
V source: FAOSTAT and Uncomtrade

Value Chain – processed groups of fruit, vegetable and milk products

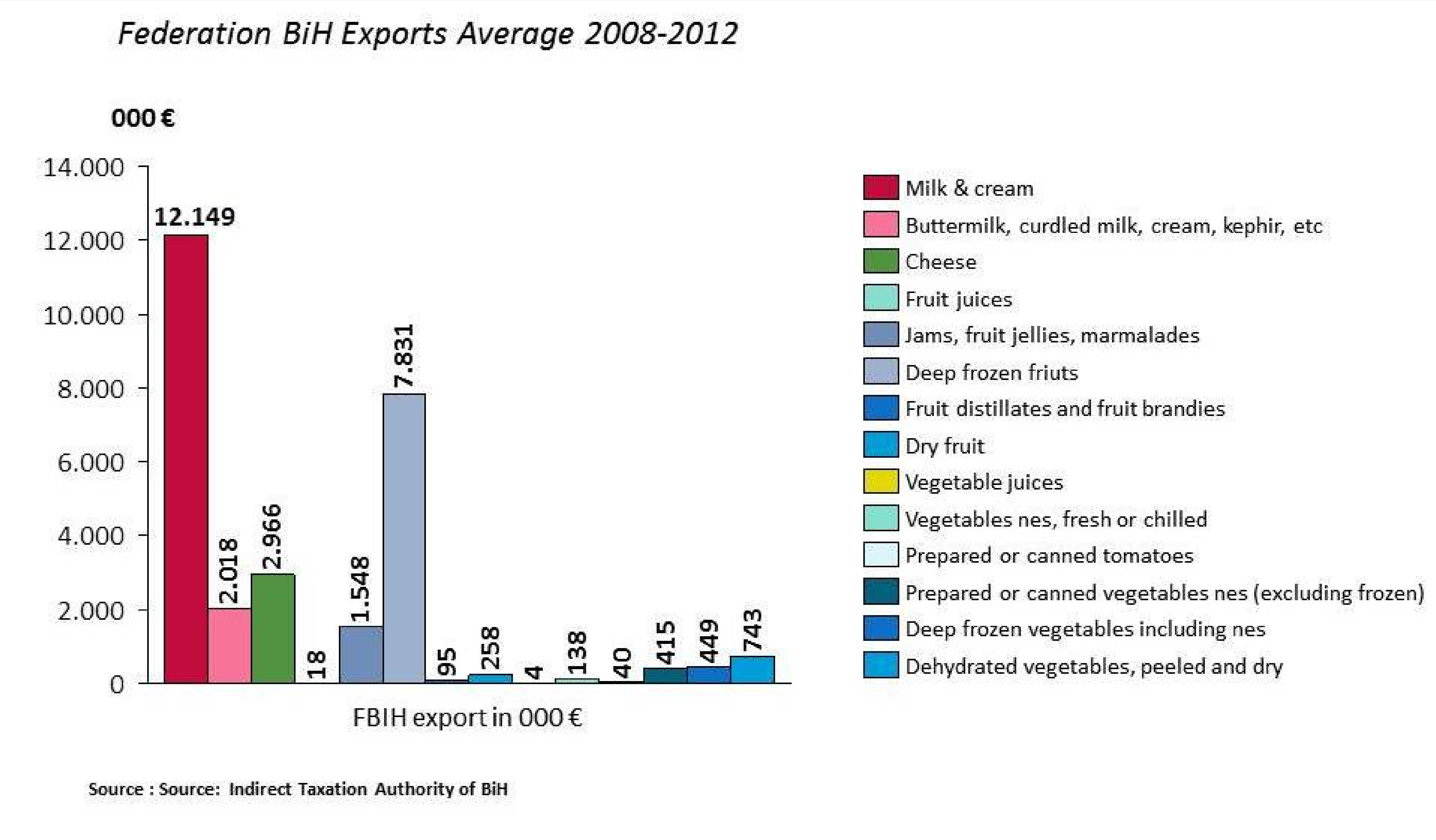
Statistical analysis of the value chain for three sectors (fruit, vegetables and milk):



Value Chain – processed selected fruit, vegetable and milk products

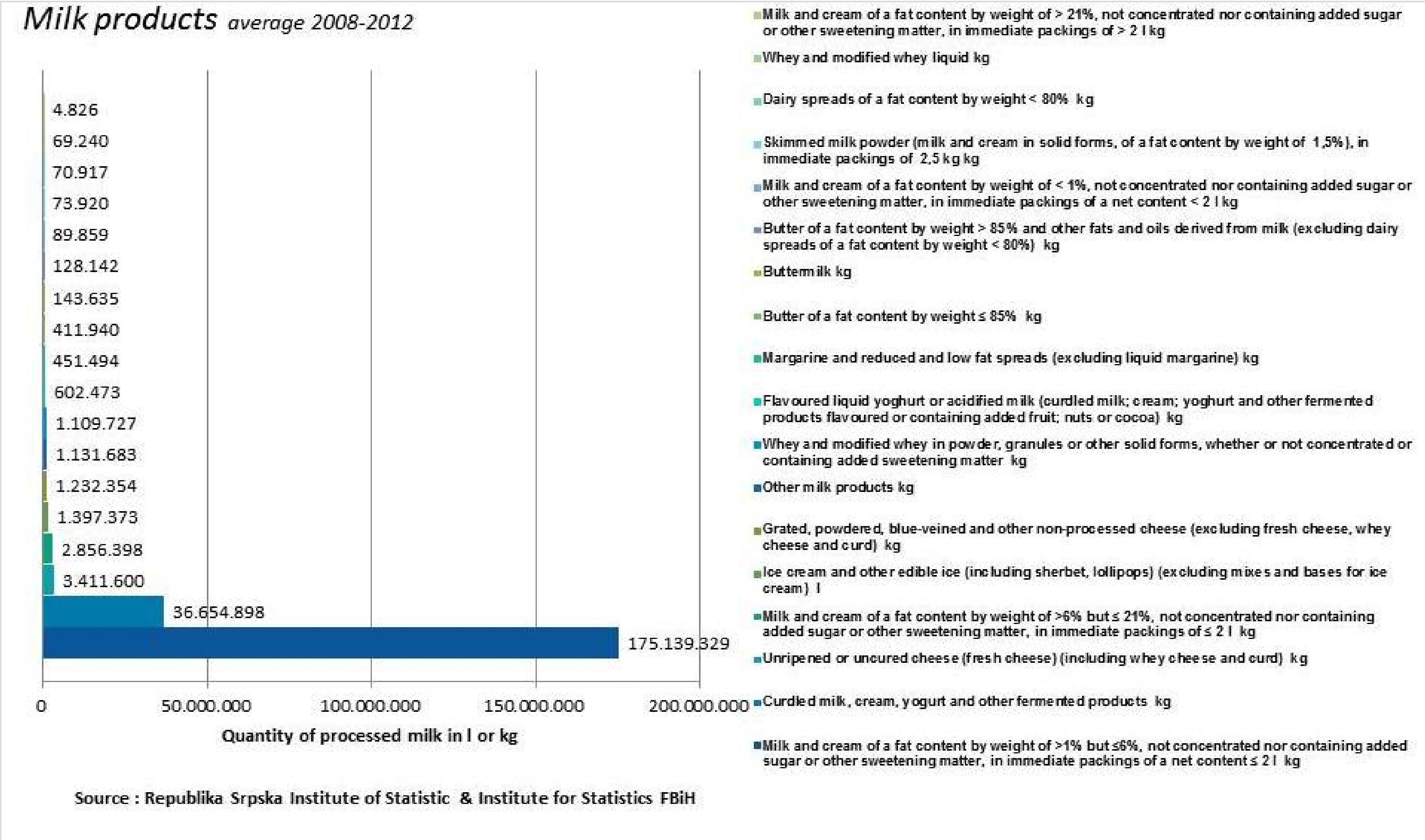


Value Chain – Export of processed fruit, vegetable and milk products in 000€



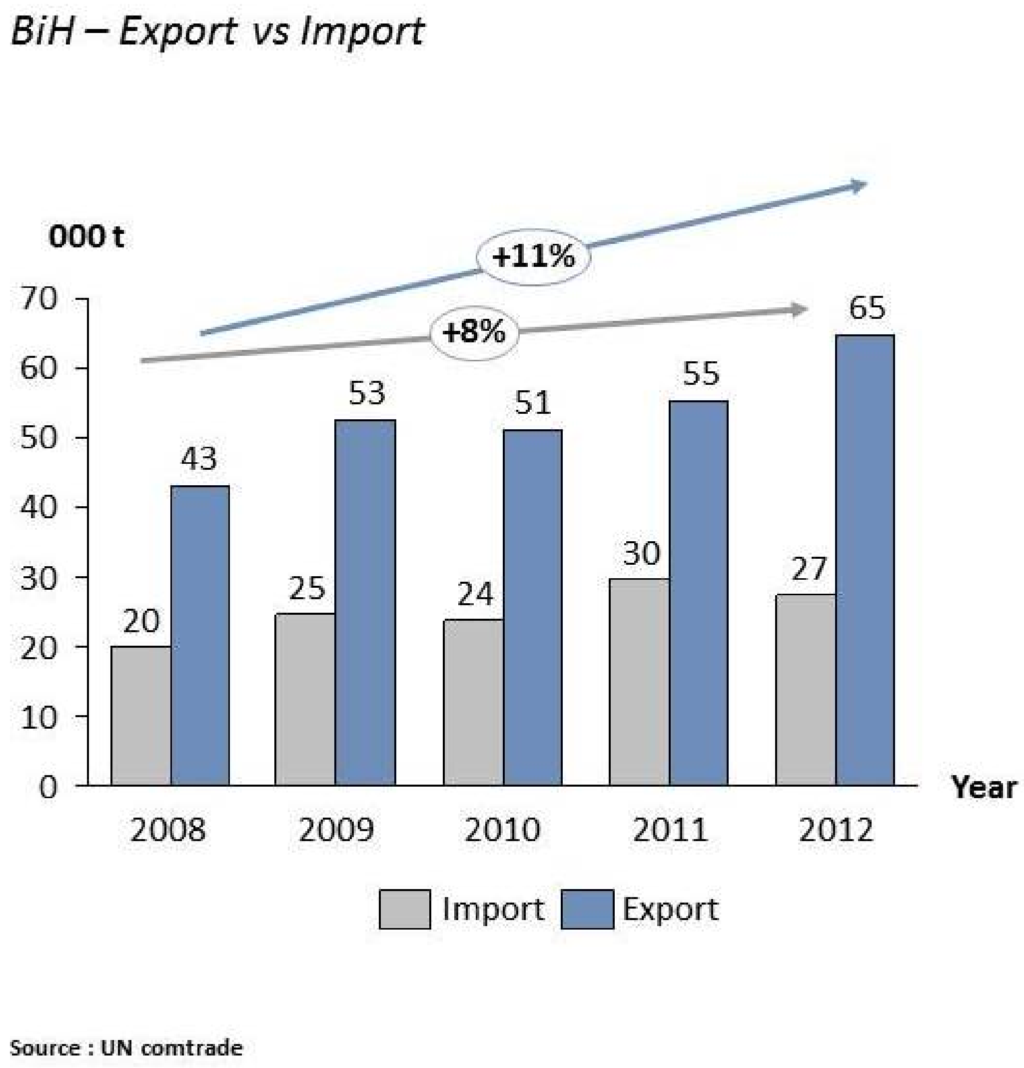
MILK PRODUCTS

Data analysis (from statistical yearbooks) calculated the average processing results which are shown in the chart (in liters or kilograms - depending on the types of processed milk product). The analysis includes the import of raw materials for processing/products.



Further analysis is devoted to the processing of milk products (milk, butter, sour milk / cream and cheese ...), as the top two products that are processed from domestic raw materials.
Exports have a positive average growth rate for these dairy products ranges from 4% to 31% (data were analyzed at the level of Bosnia and Herzegovina). Imports of butter, milk cream and cheese is dominant in comparison with exports, while export of milk is on average two times higher than imports.
The most significant markets are Croatia, Serbia, Montenegro.
The demand for these products in the world market is very large and almost all countries have a positive average growth rate in demand (Italy, Germany, France, Great Britain, Holland, Belgium and others.)

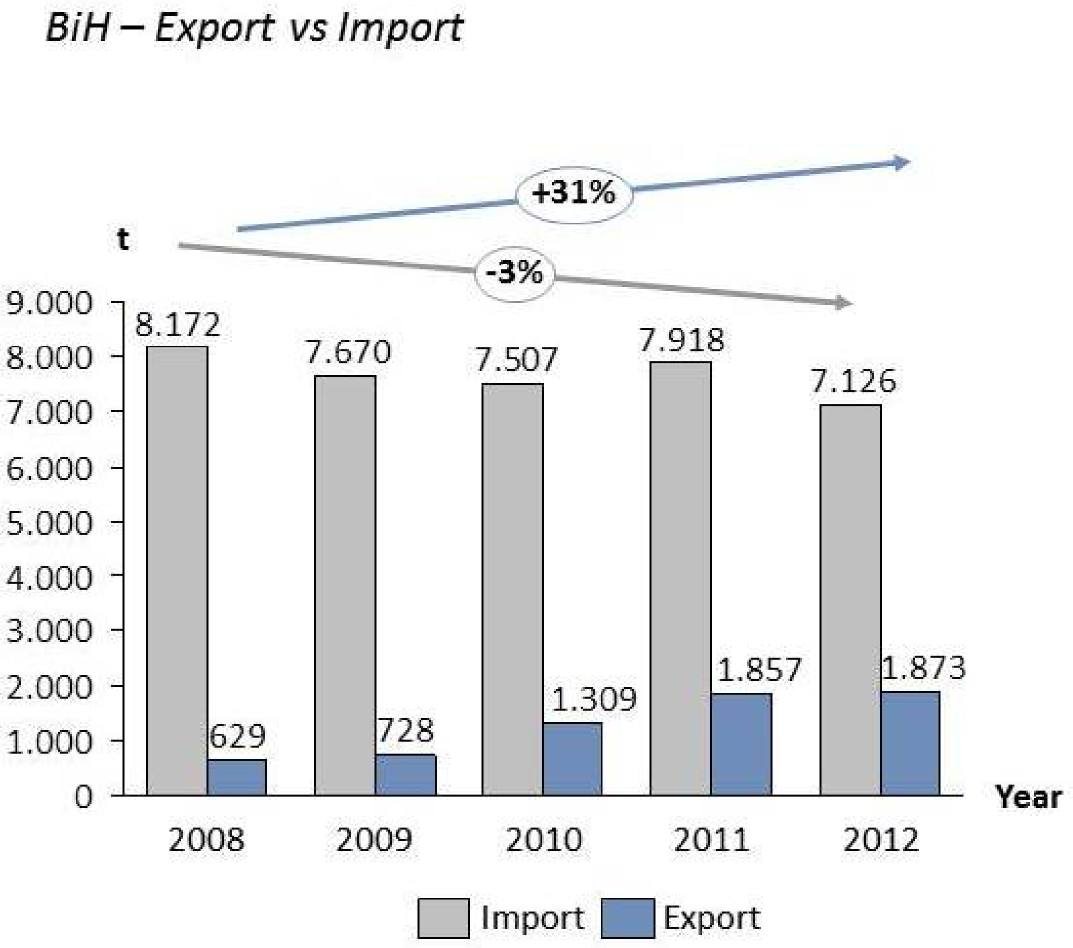
Milk products – Export vs Import - milk.



Milk not concentrated nor sweetened 1-6% fat

- Import is raising (Average annual growth rate is +8% for 2012/2008), as well as export (Average annual growth rate is +11% for 2012/2008).

Milk products – Export vs Import – Buttermilk, curdled milk, cream,...



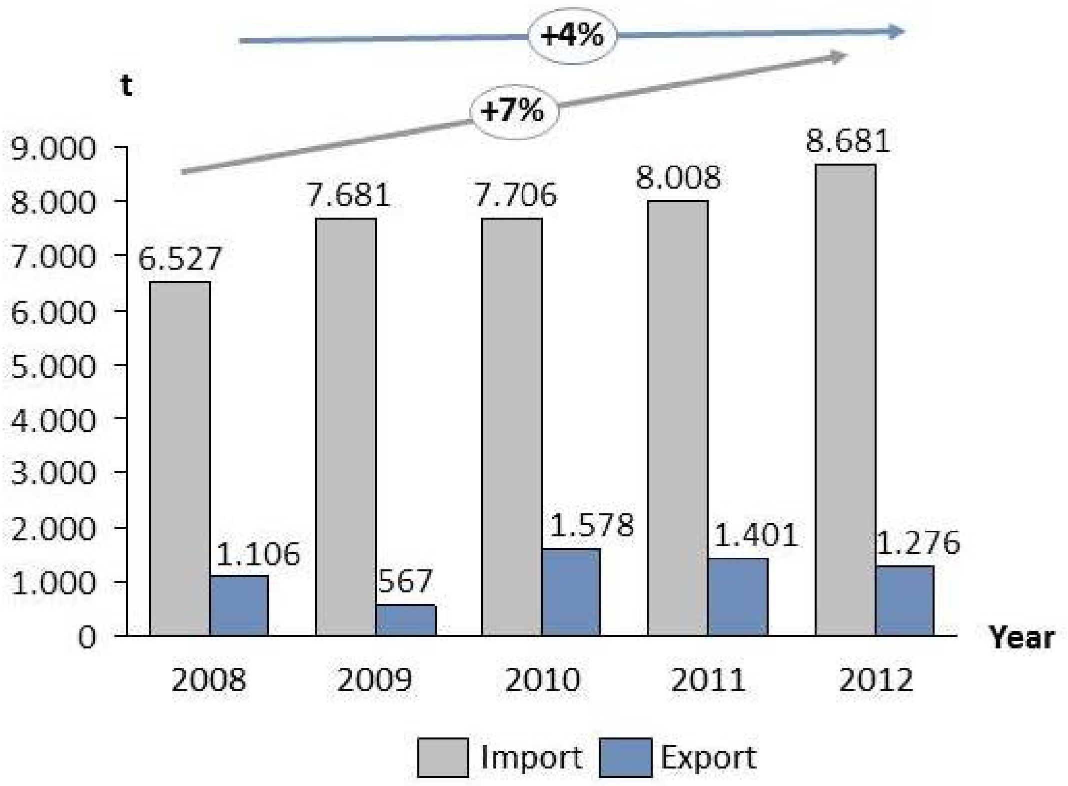
Buttermilk, curdled milk, cream, kephir, etc.

- Import is decreasing (Average annual growth rate is -3% for 2012/2008), while export is raising (Average annual growth rate is +31% for 2012/2008).

Source : UN comtrade

Milk products – Export vs Import – Cheese and curd,...

BiH – Export vs Import

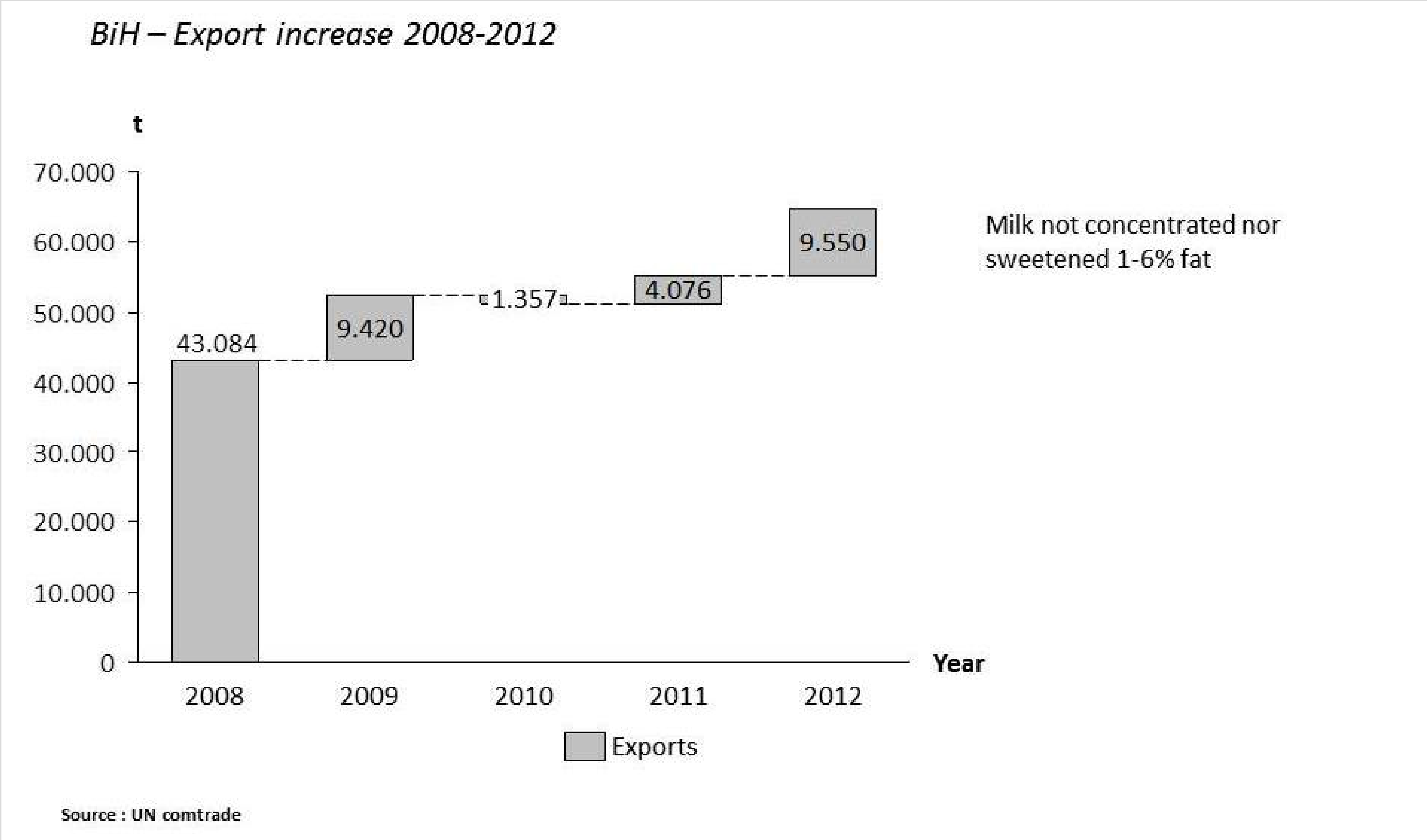


Cheese and curd

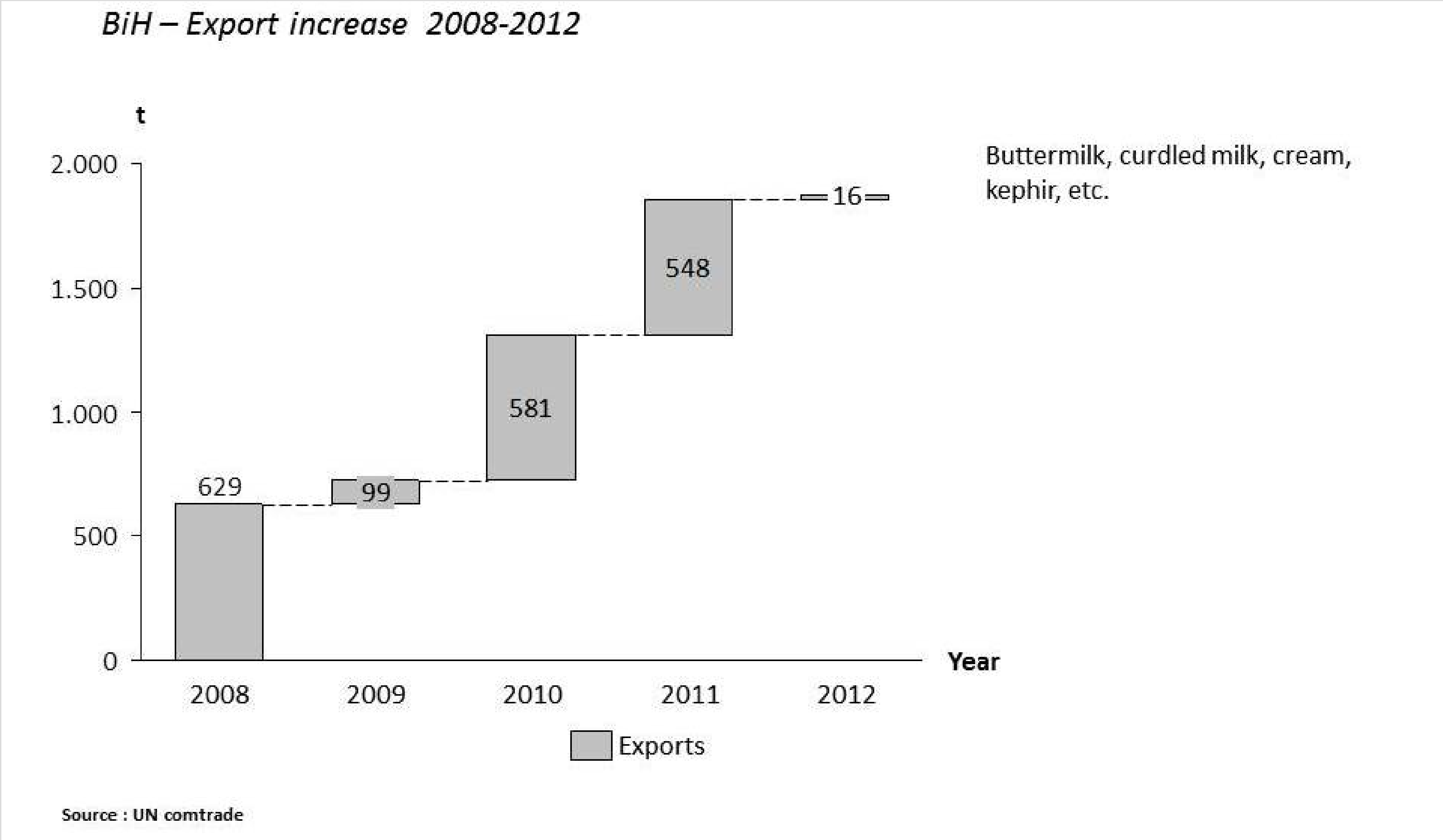
- Import is raising (Average annual growth rate is +7% for 2012/2008), as well as export (Average annual growth rate is +4% for 2012/2008).

Source : UN comtrade

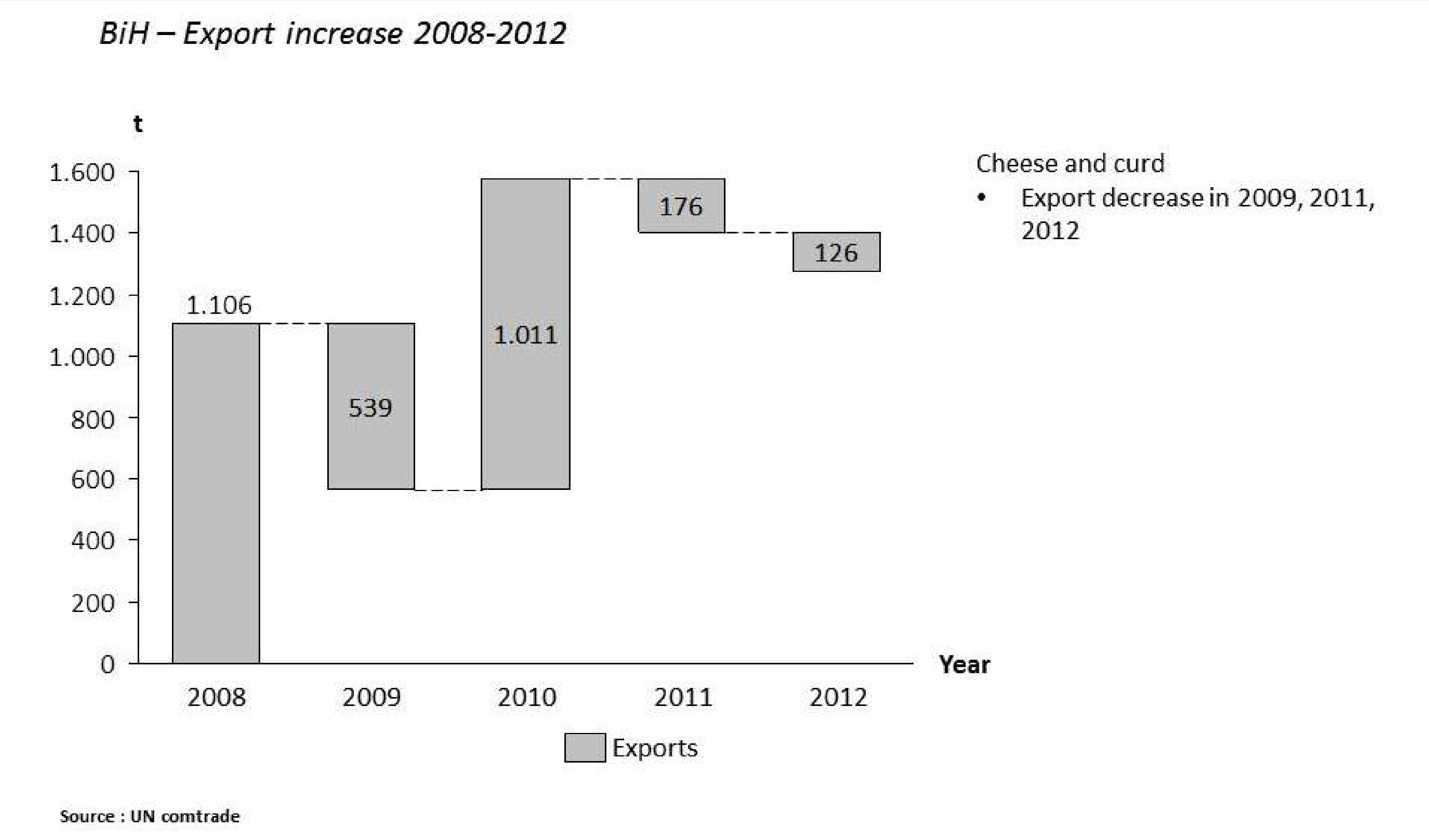
Milk products – Export of Milk



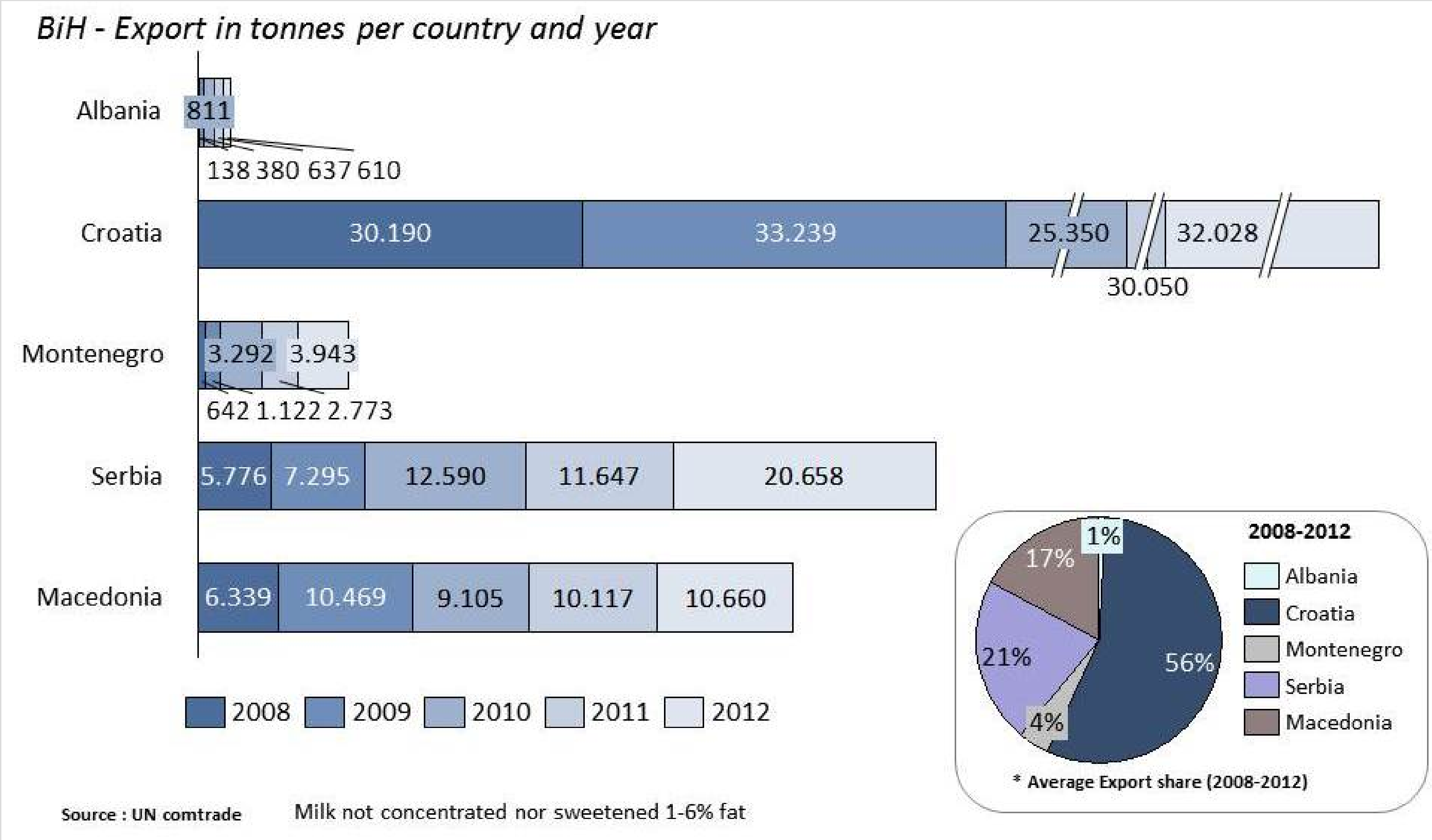
Milk products – Export of Buttermilk, curdled milk, cream



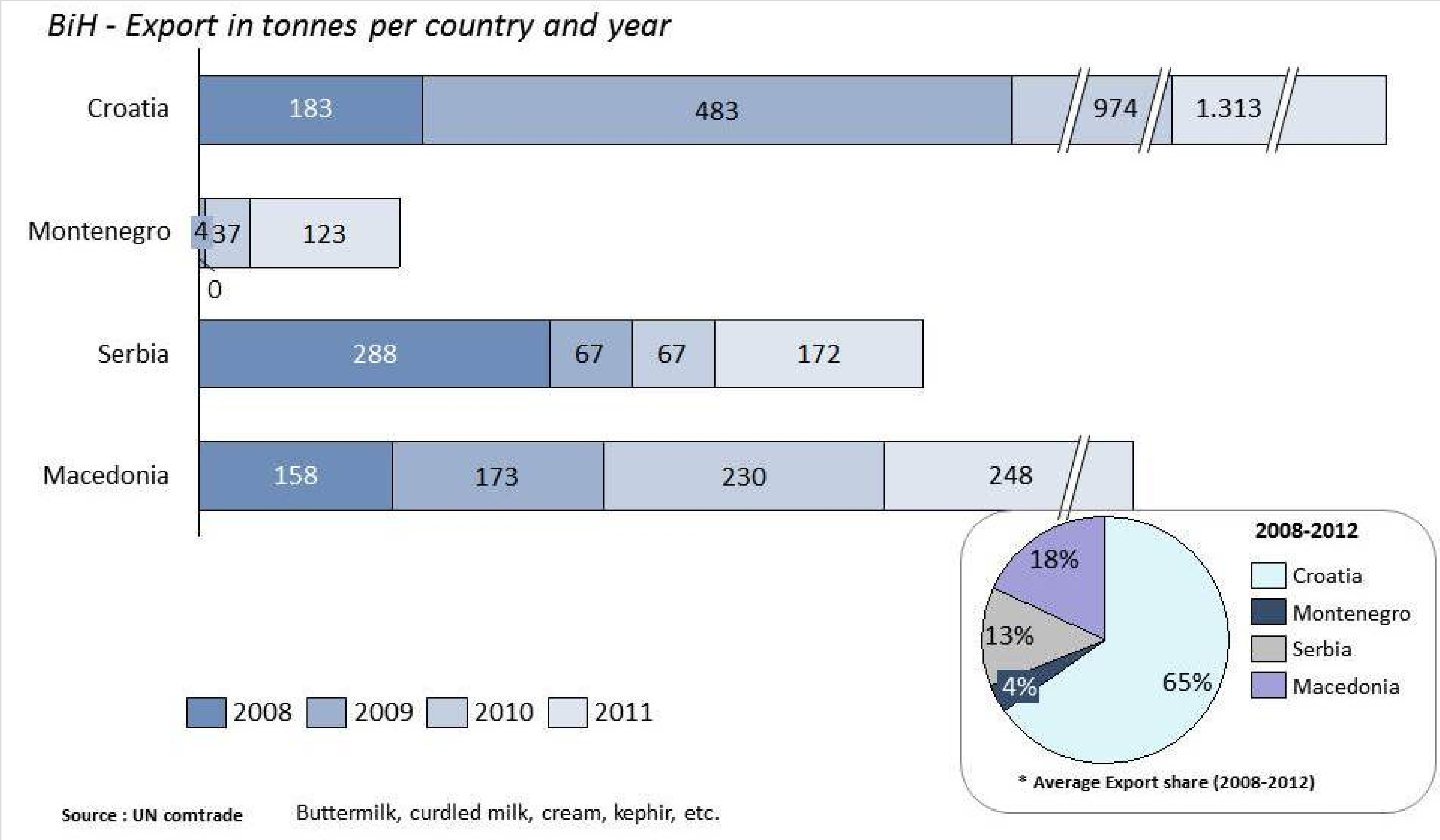
Milk products – Export of Cheese and curd



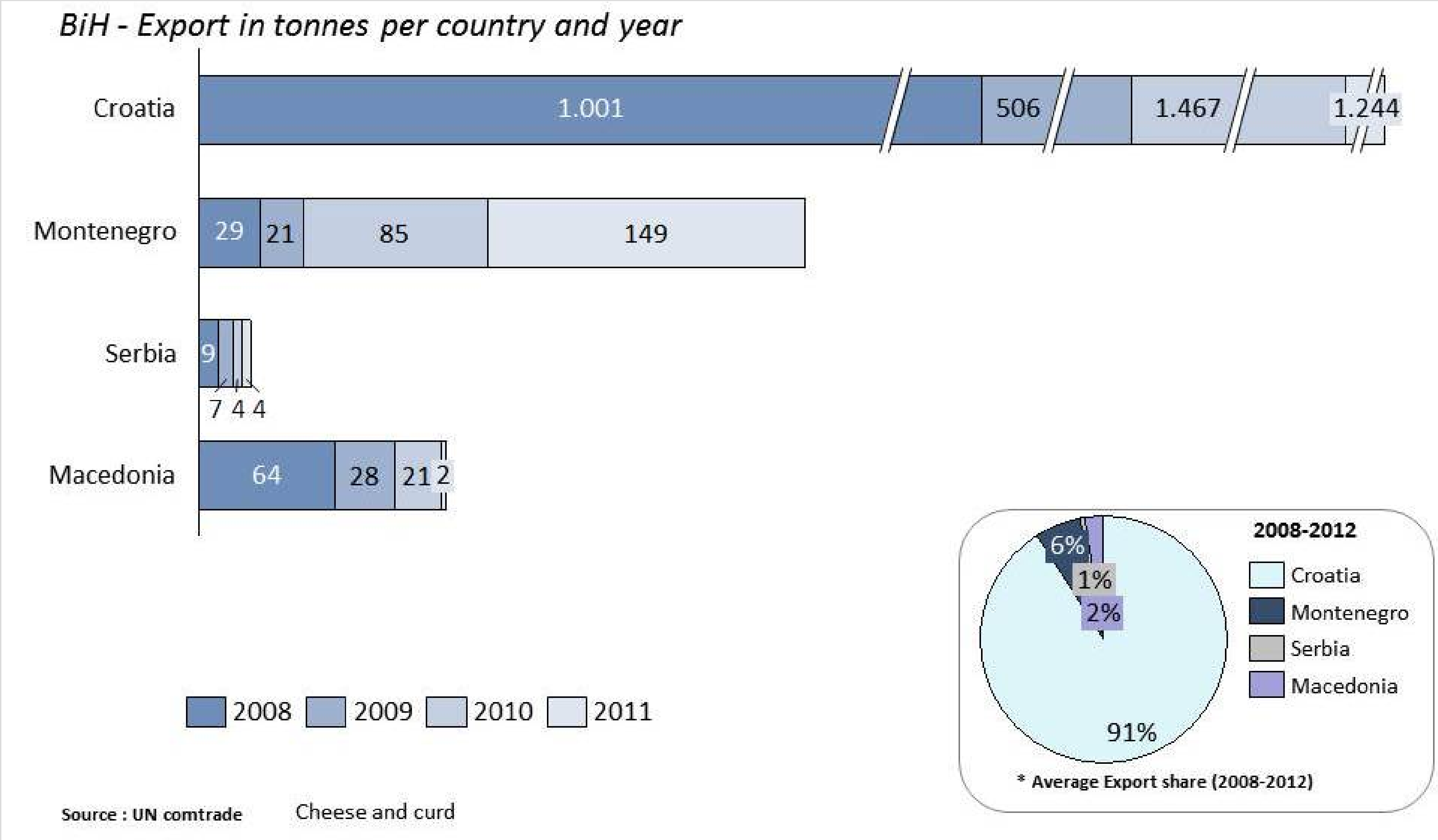
Milk products – Key markets - Milk - export per country



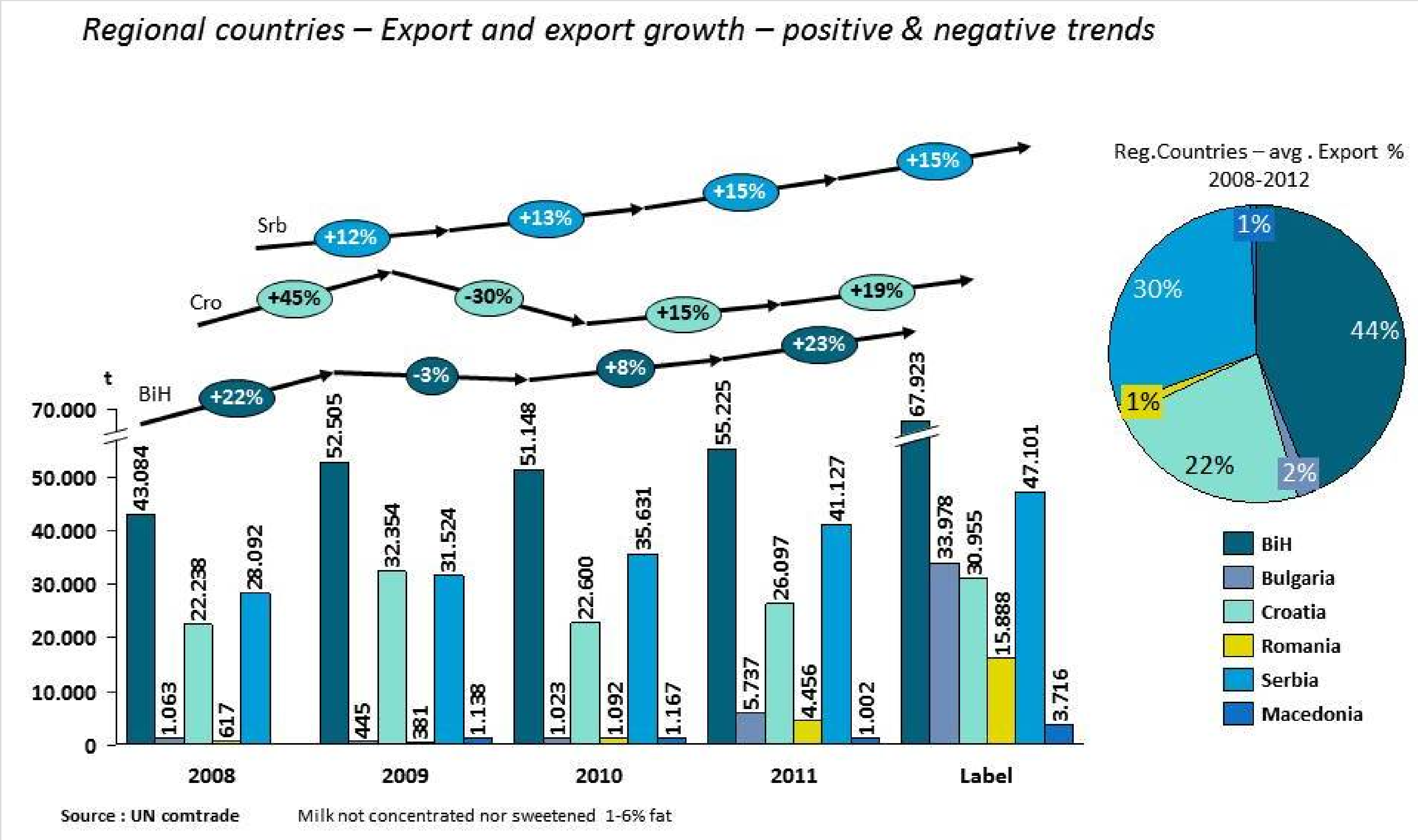
Milk products – Key markets - Buttermilk, curdled milk, cream - export per country



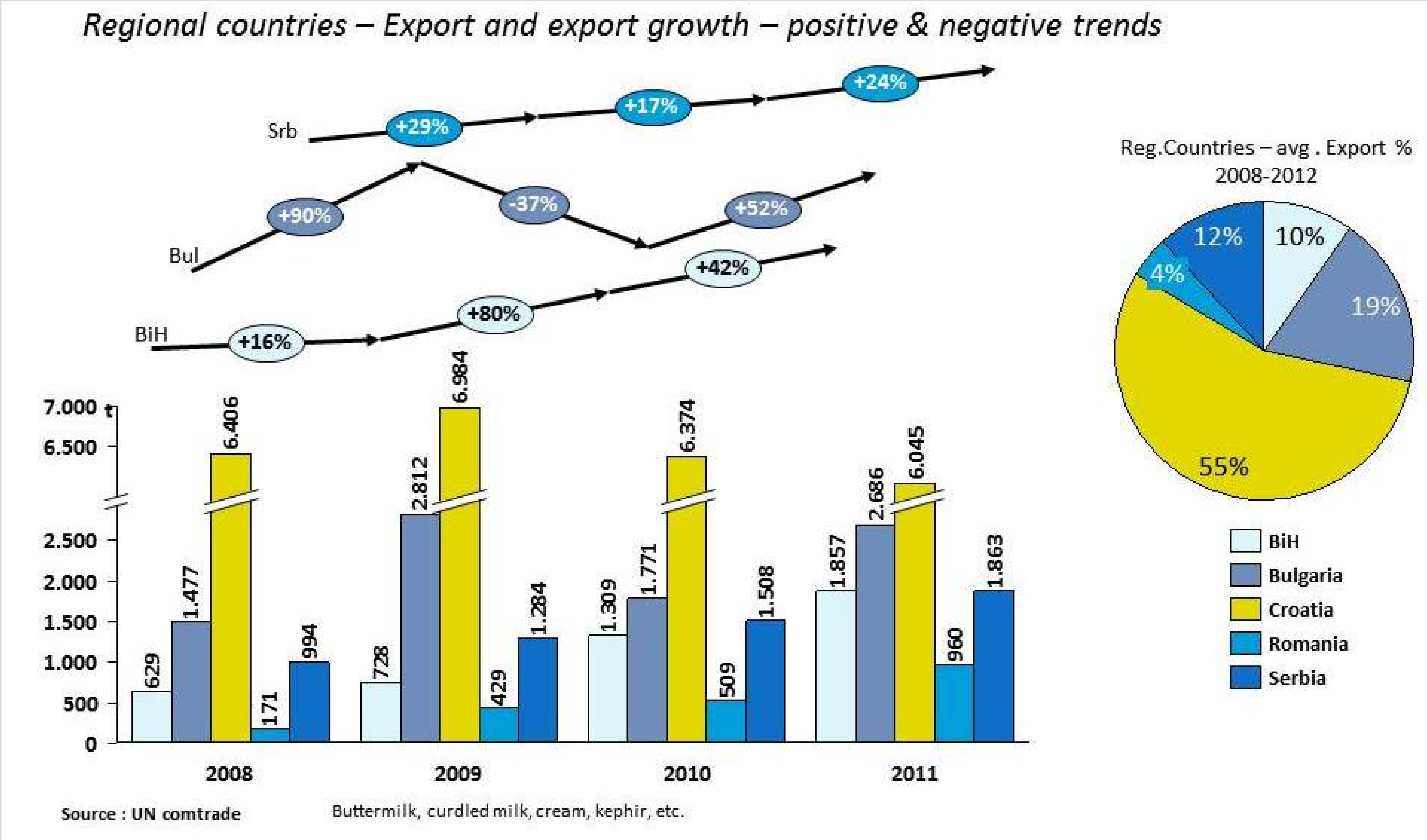
Milk products – Key markets - Cheese and curd - export per country



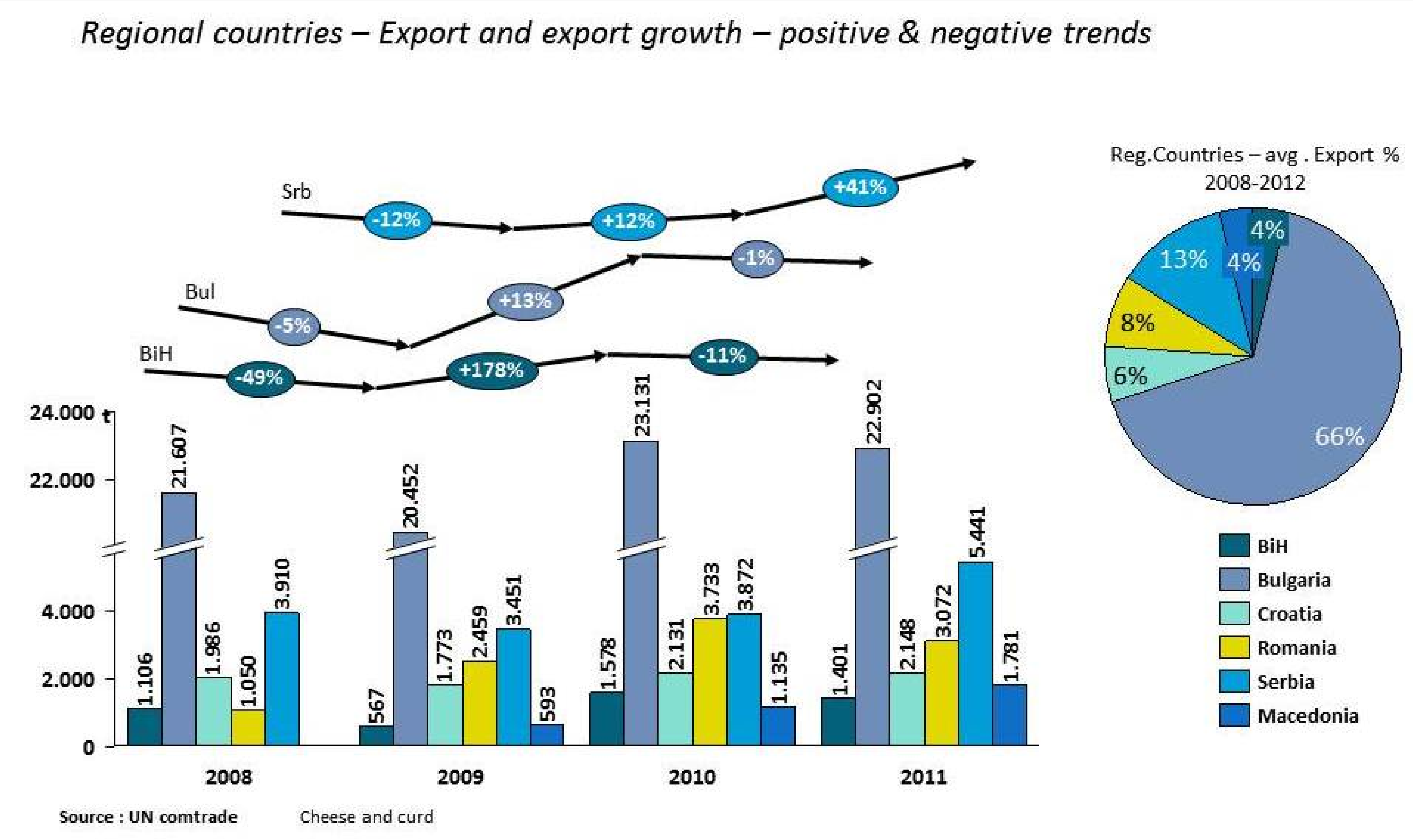
Competition for production of Milk – Regional countries export



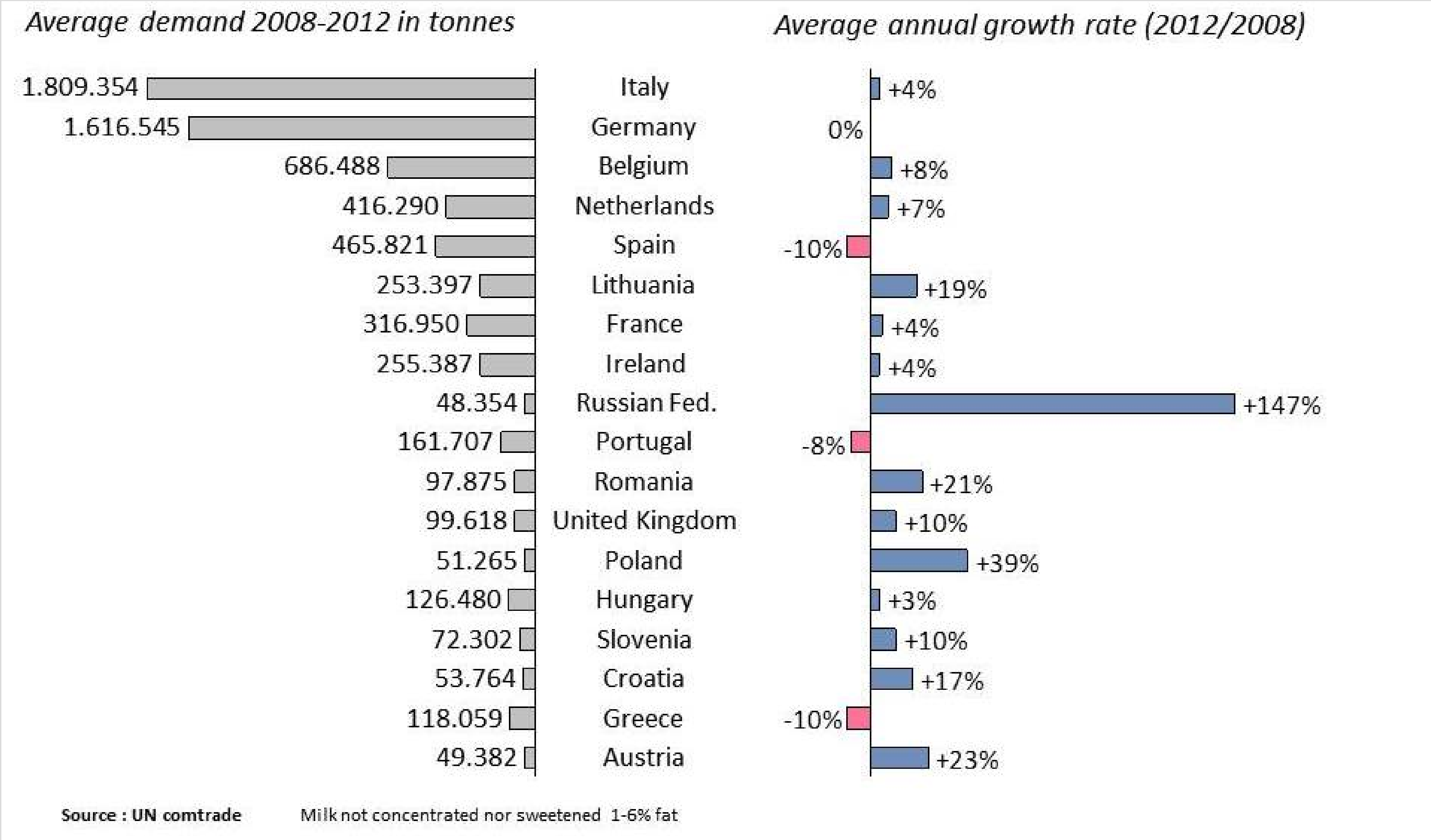
Competition for production of Buttermilk, curdled milk, cream – Regional countries export



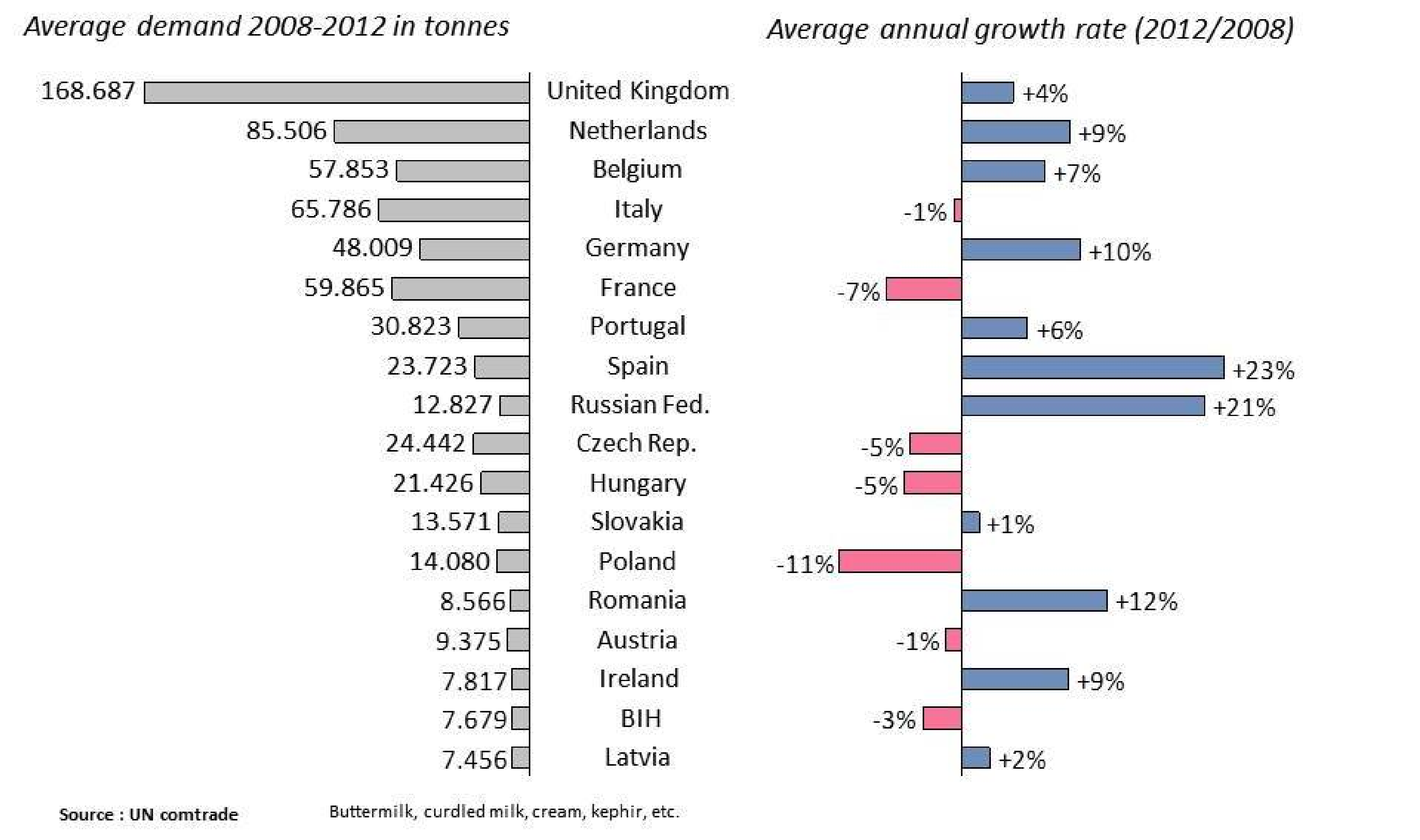
Competition for production of Cheese and curd – Regional countries export



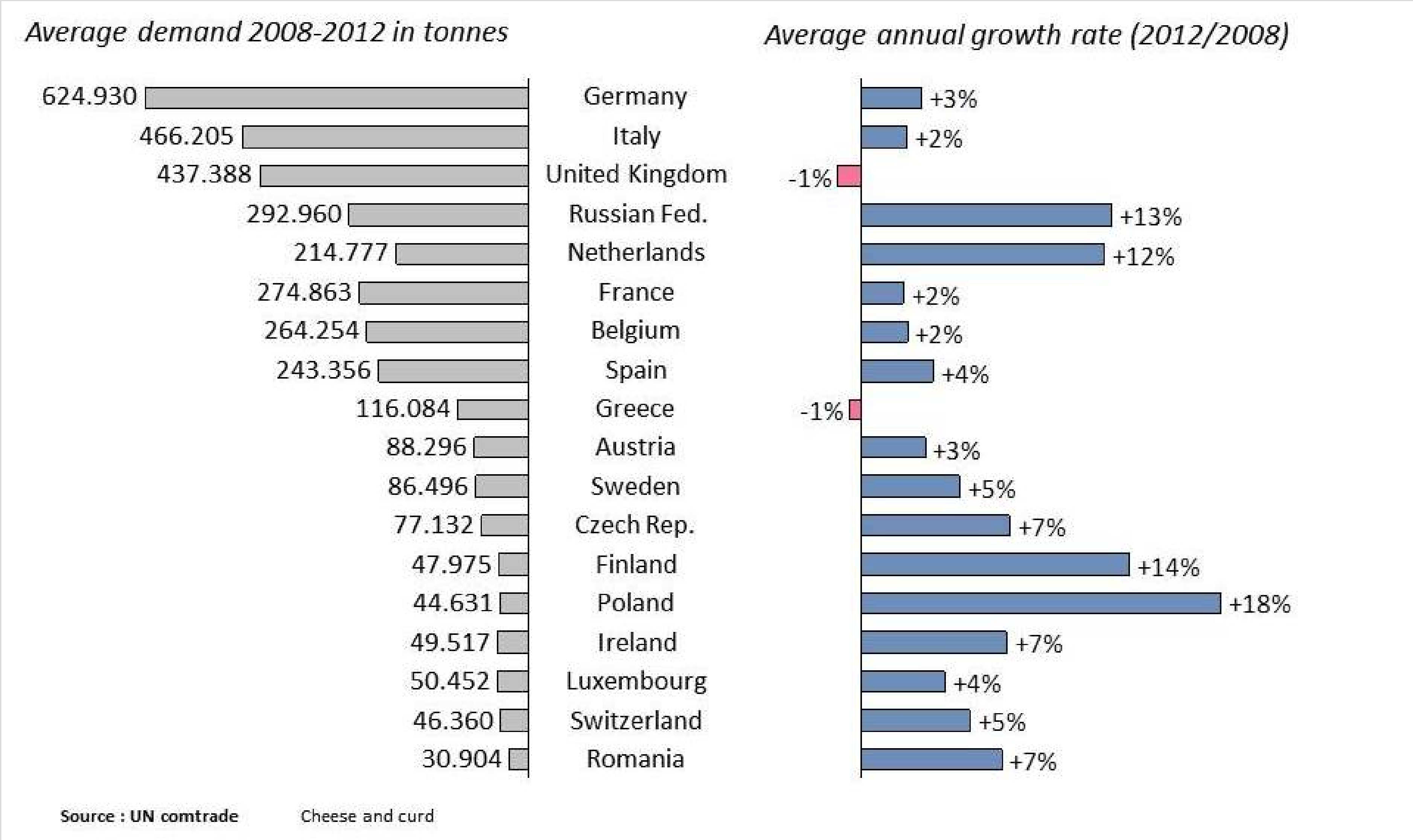
International Demand for Milk



International Demand for Buttermilk, curdled milk, cream

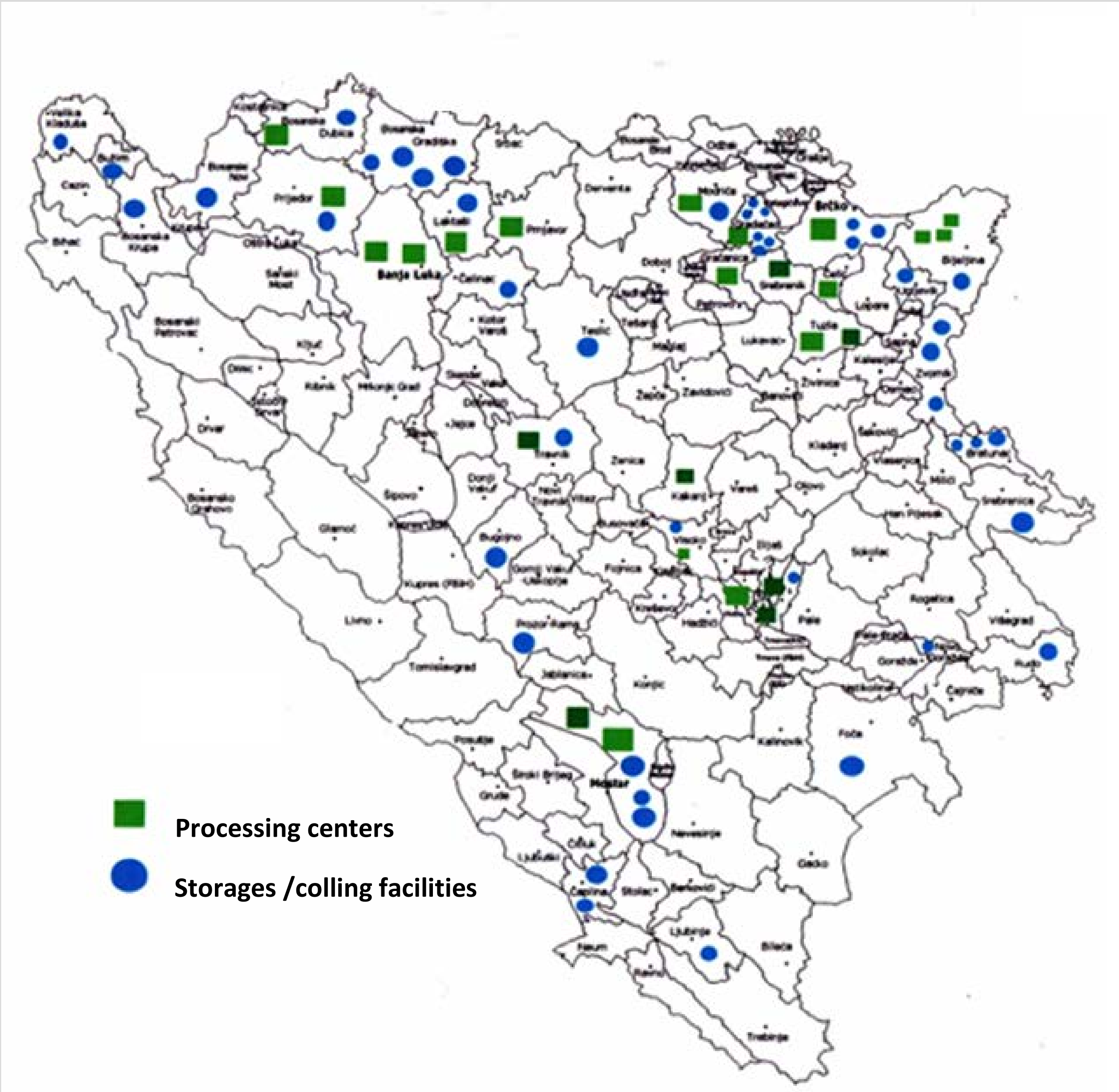


International Demand for Cheese and curd



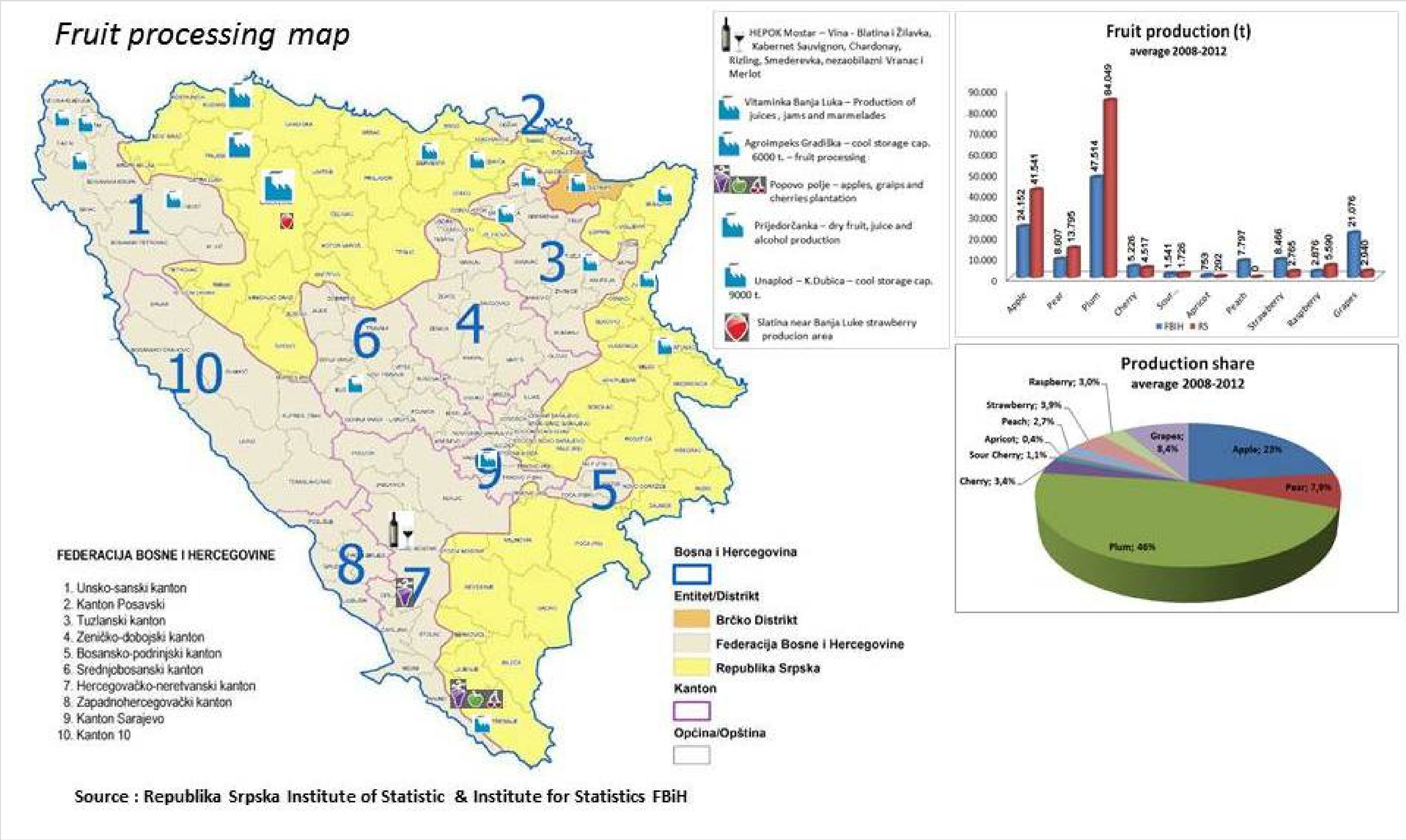
MAP THE OPPORTUNITIES TO INVESTORS

Overview of all cool storages and processing capacities for fruits and vegetables in BiH



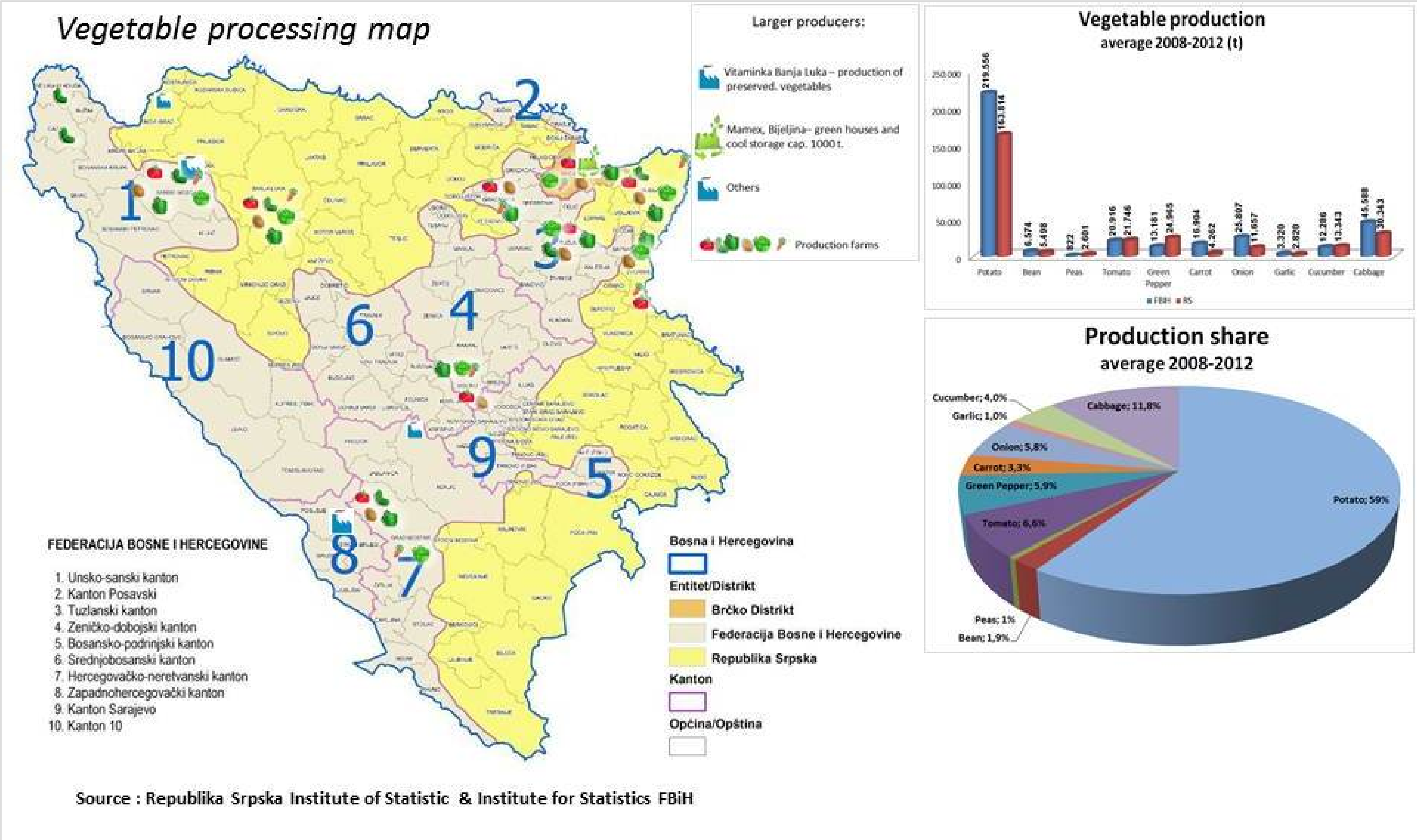
BiH – Fruit Processing Map

Map of Bosnia and Herzegovina is showed with both entities in which they indicated a higher processing fruits centers. In addition to this, two diagrams with data on average fruit production are given as part of each fruit production in total production. Data are presented for 2008-2012.



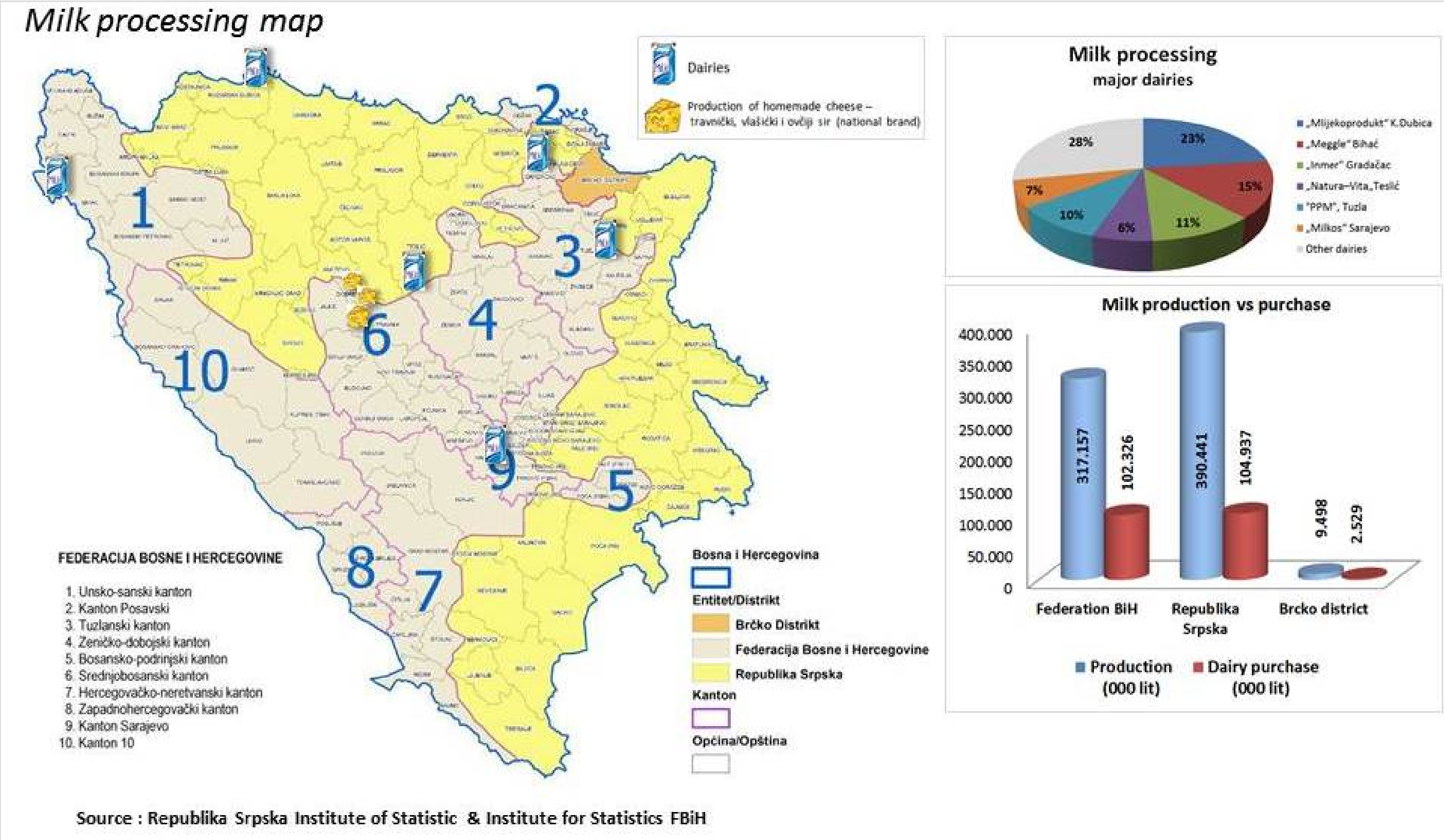
BiH – Vegetable Processing Map

Map of Bosnia and Herzegovina is showed with both entities in which they indicated a higher processing vegetables centers. In addition to this, two diagrams with data on average vegetable production are given as part of each vegetable production in total production. Data are presented for 2008-2012.



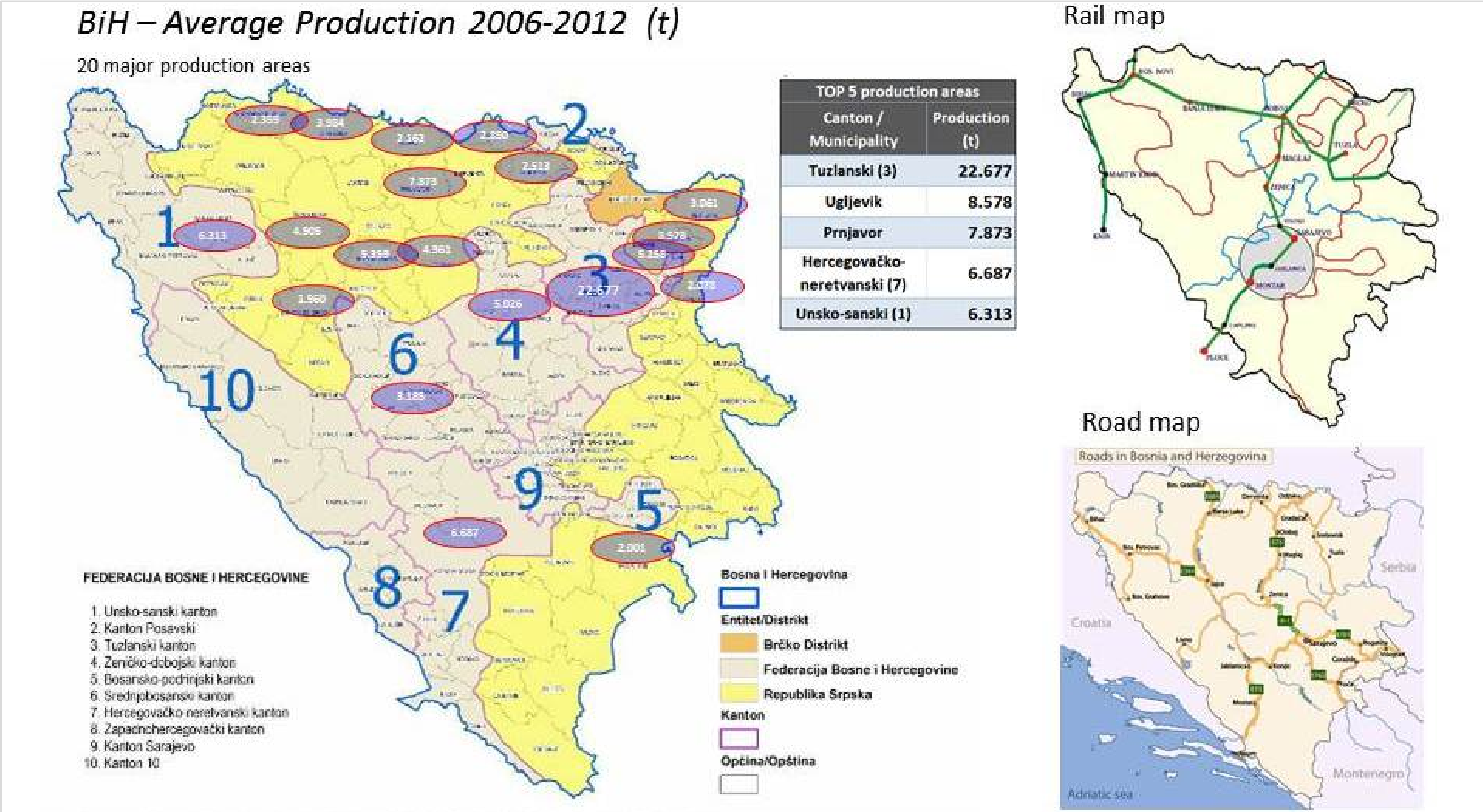
BiH – Milk Processing Map

Map of Bosnia and Herzegovina is showed with both entities in which they indicated higher dairy centers. In addition to this, two diagrams with data on the proportion of milk production by dairy, as well as the entity data of milk production on farms or purchase. Data are presented for 2008-2012.



Next 15 maps are provided to insight into the production capacities of municipalities, ie cantons with a top five list of those most productive. Special attanention is placed for maps with production capacities of Croatia and Serbia near the border with Bosnia and Herzegovina..

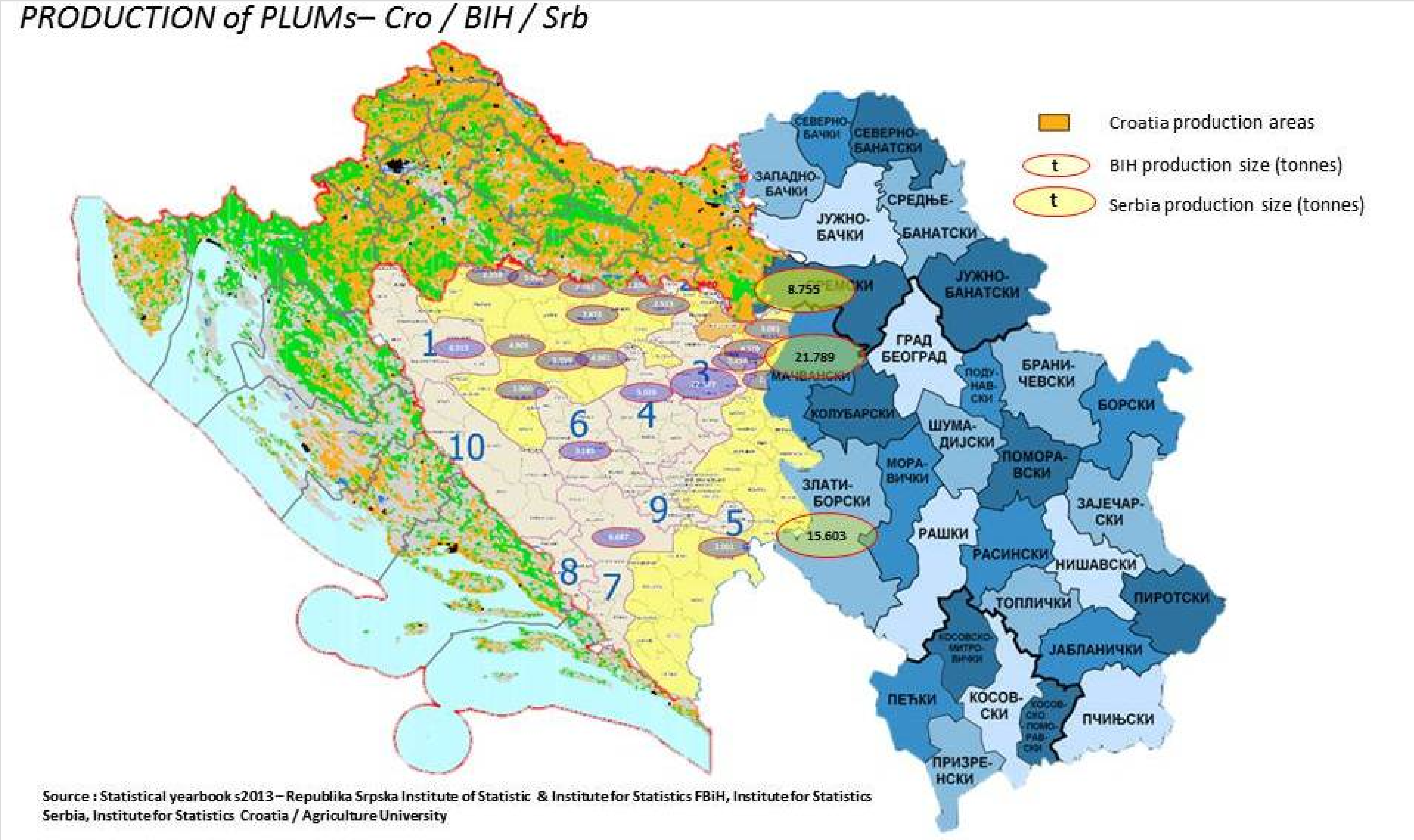
Plum's production map / infrastructure



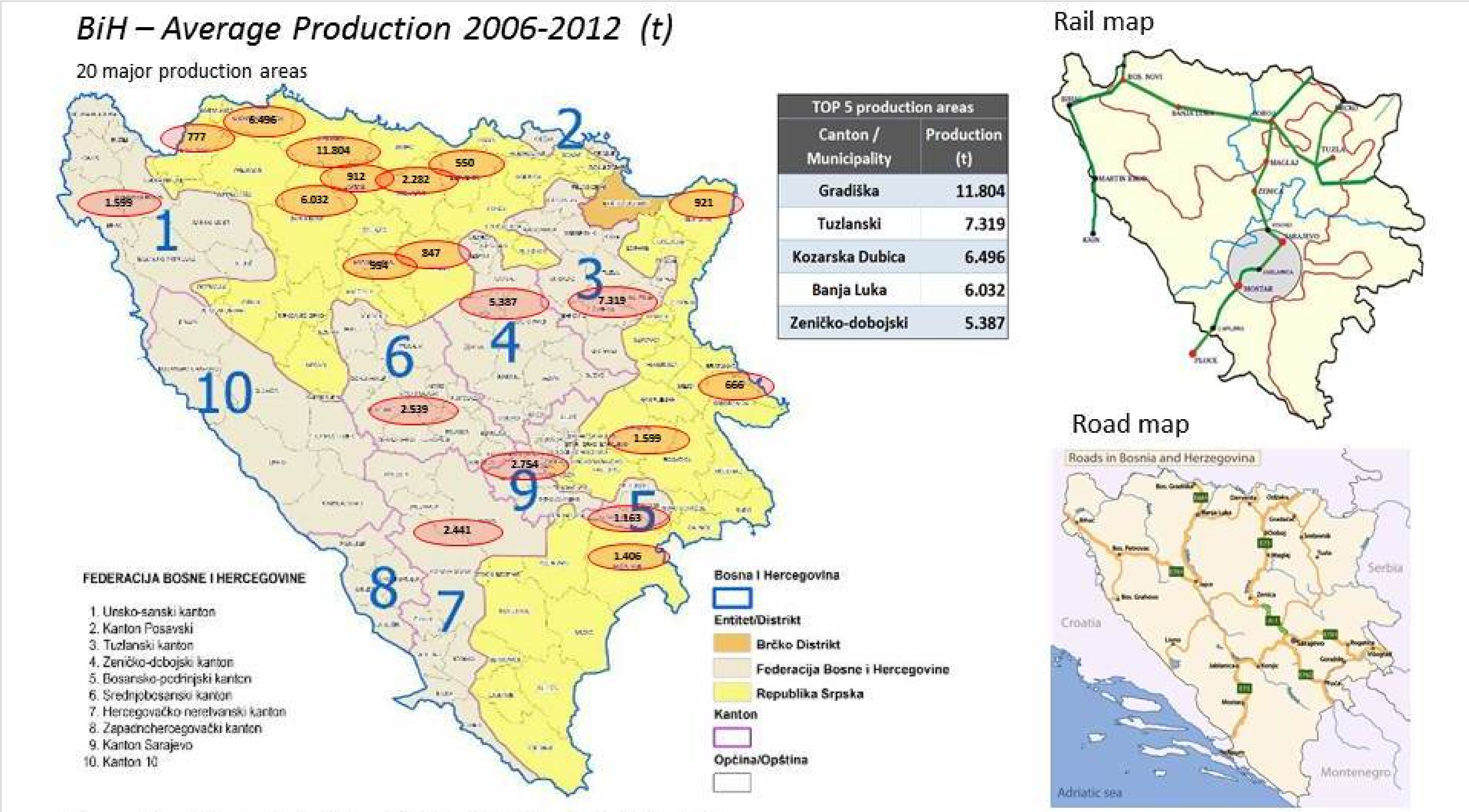
TOP 5 production areas	
Canton / Municipality	Production (t)
Tuzlanski (3)	22.677
Ugljevik	8.578
Prnjavor	7.873
Hercegovačko-neretvanski (7)	6.687
Unsko-sanski (1)	6.313

Source : Republika Srpska Institute of Statistic & Institute for Statistics FBiH

Plum's production map / Production areas in Croatia and Serbia

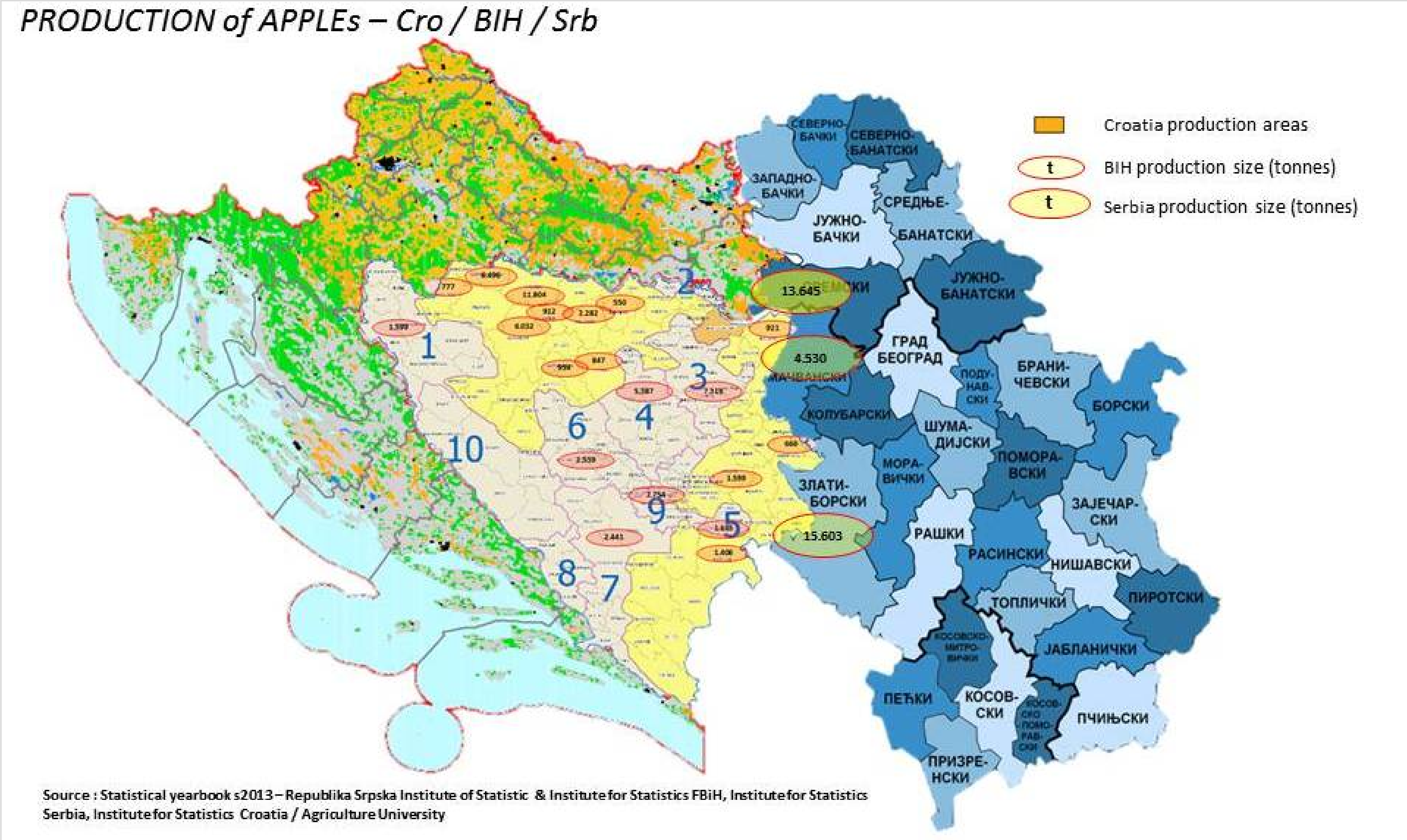


Apple’s production map / infrastructure

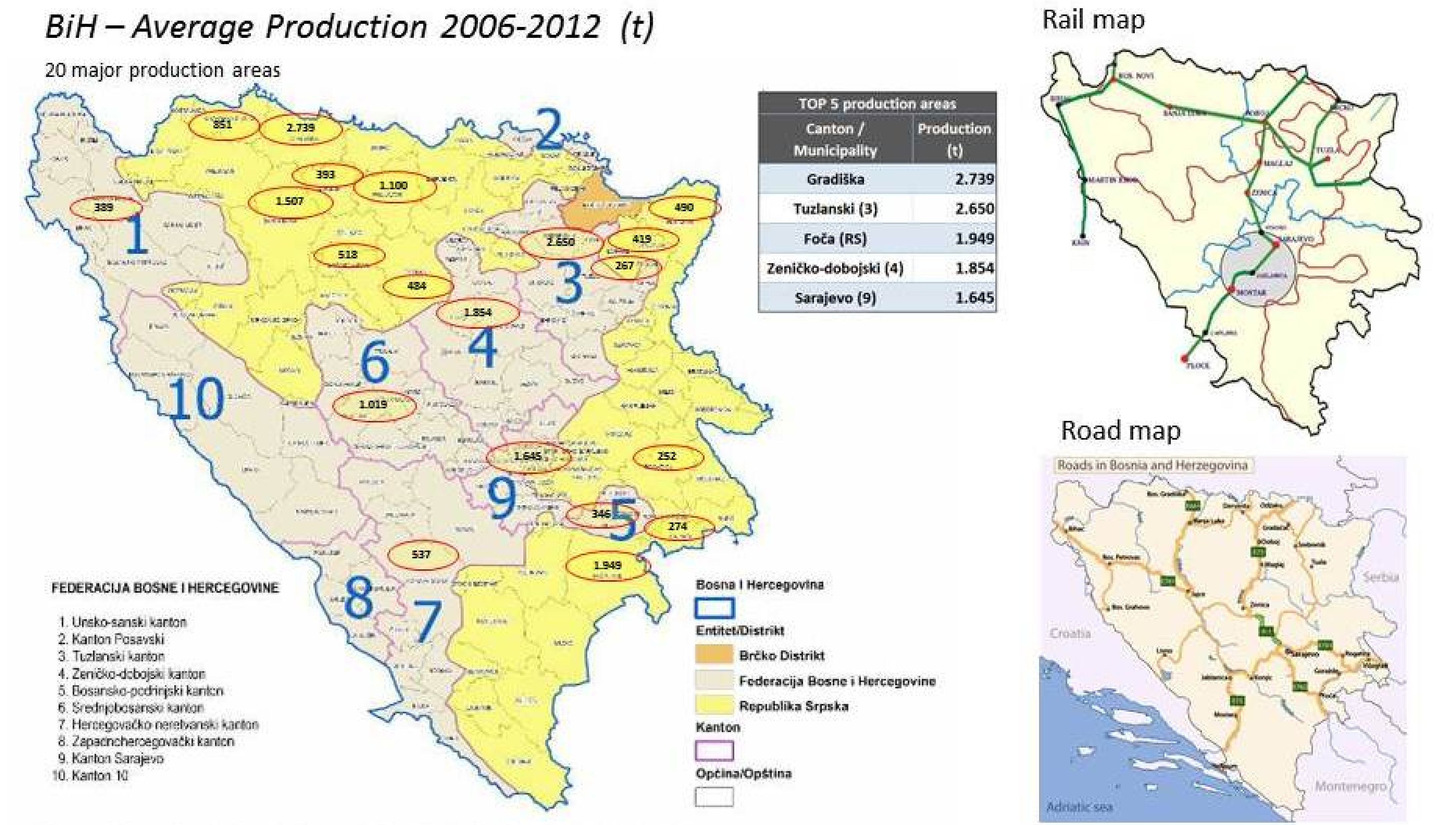


Source : Republika Srpska Institute of Statistic & Institute for Statistics FBiH

Apple's production map / Production areas in Croatia and Serbia

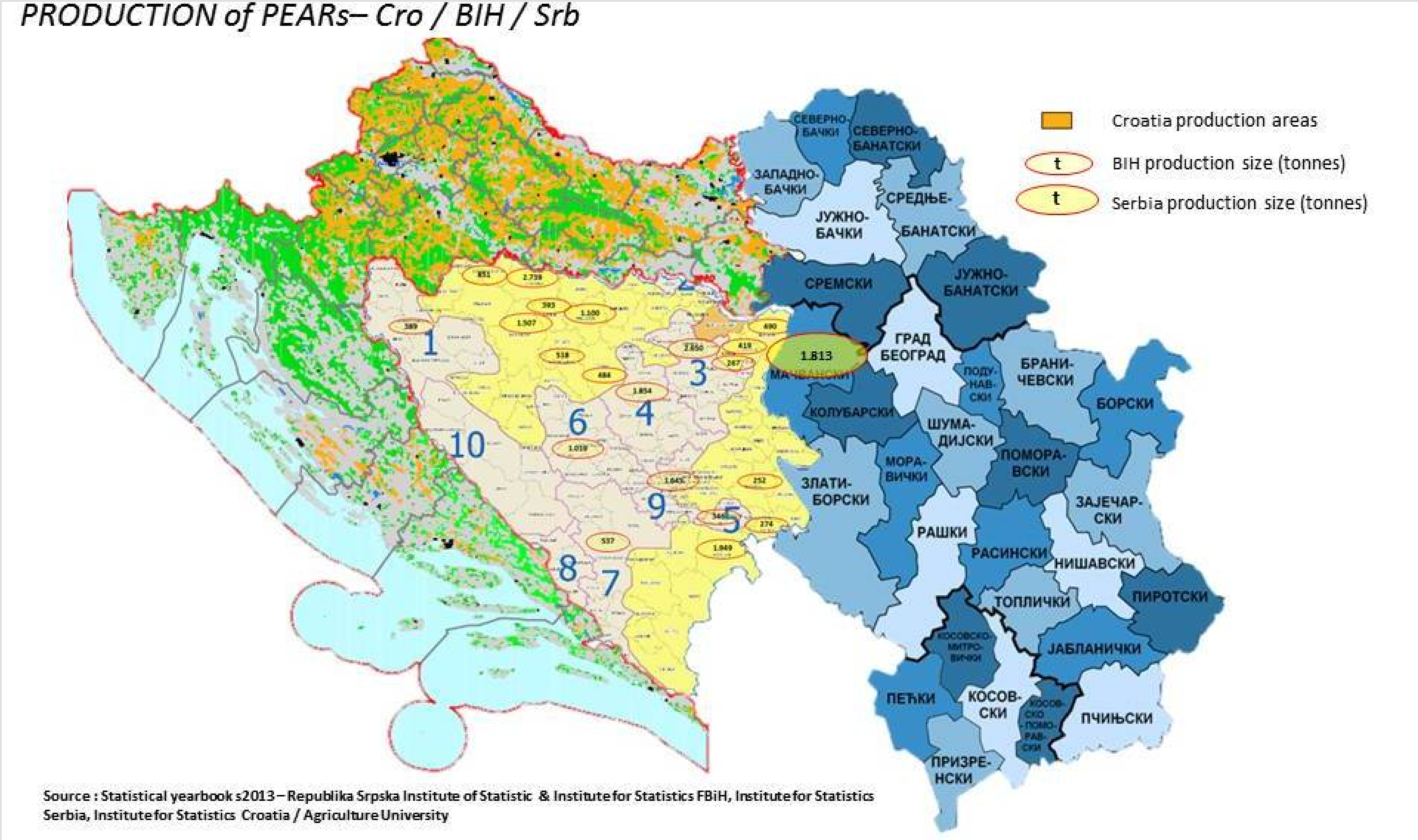


Pear’s production map / infrastructure

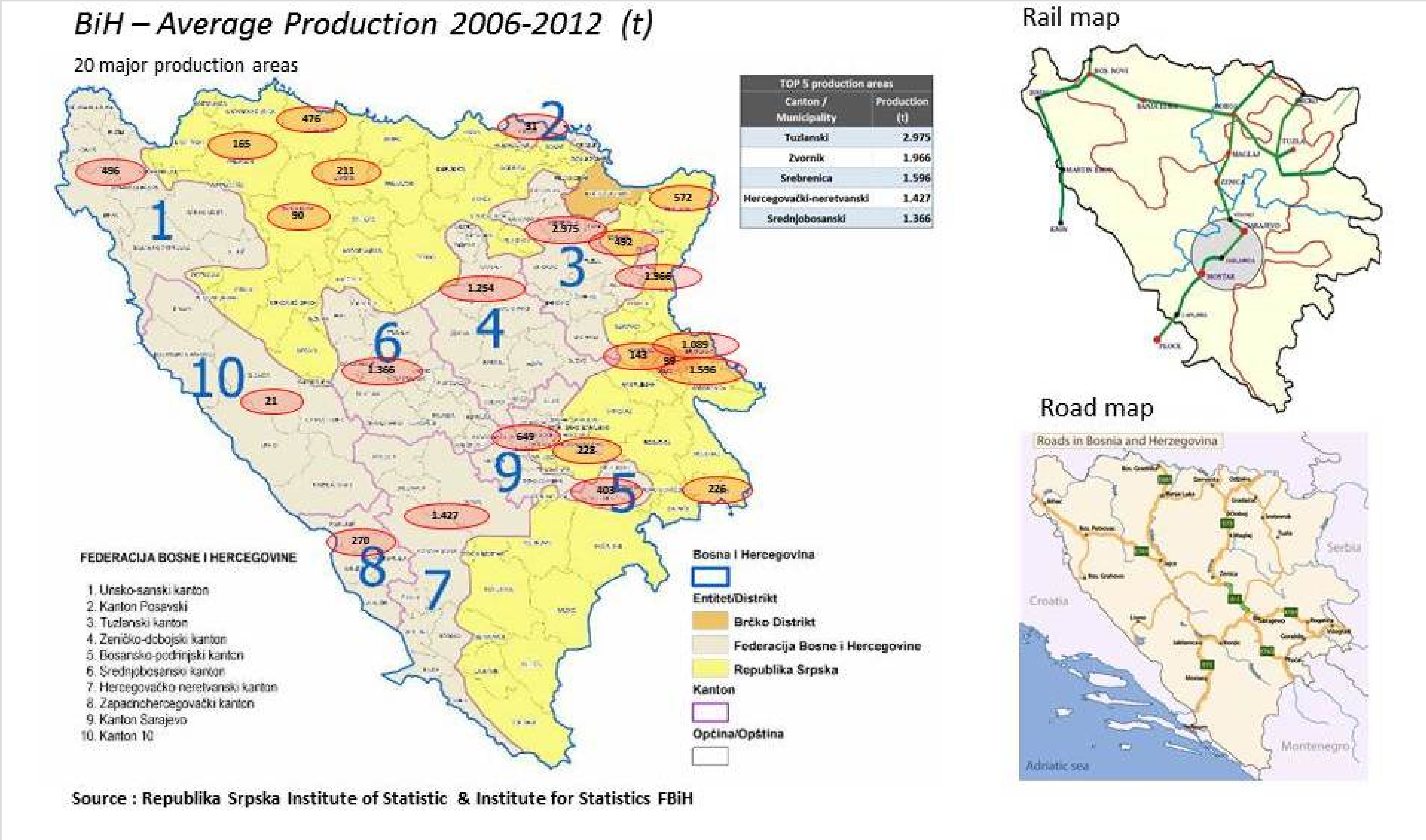


Source : Republika Srpska Institute of Statistic & Institute for Statistics FBiH

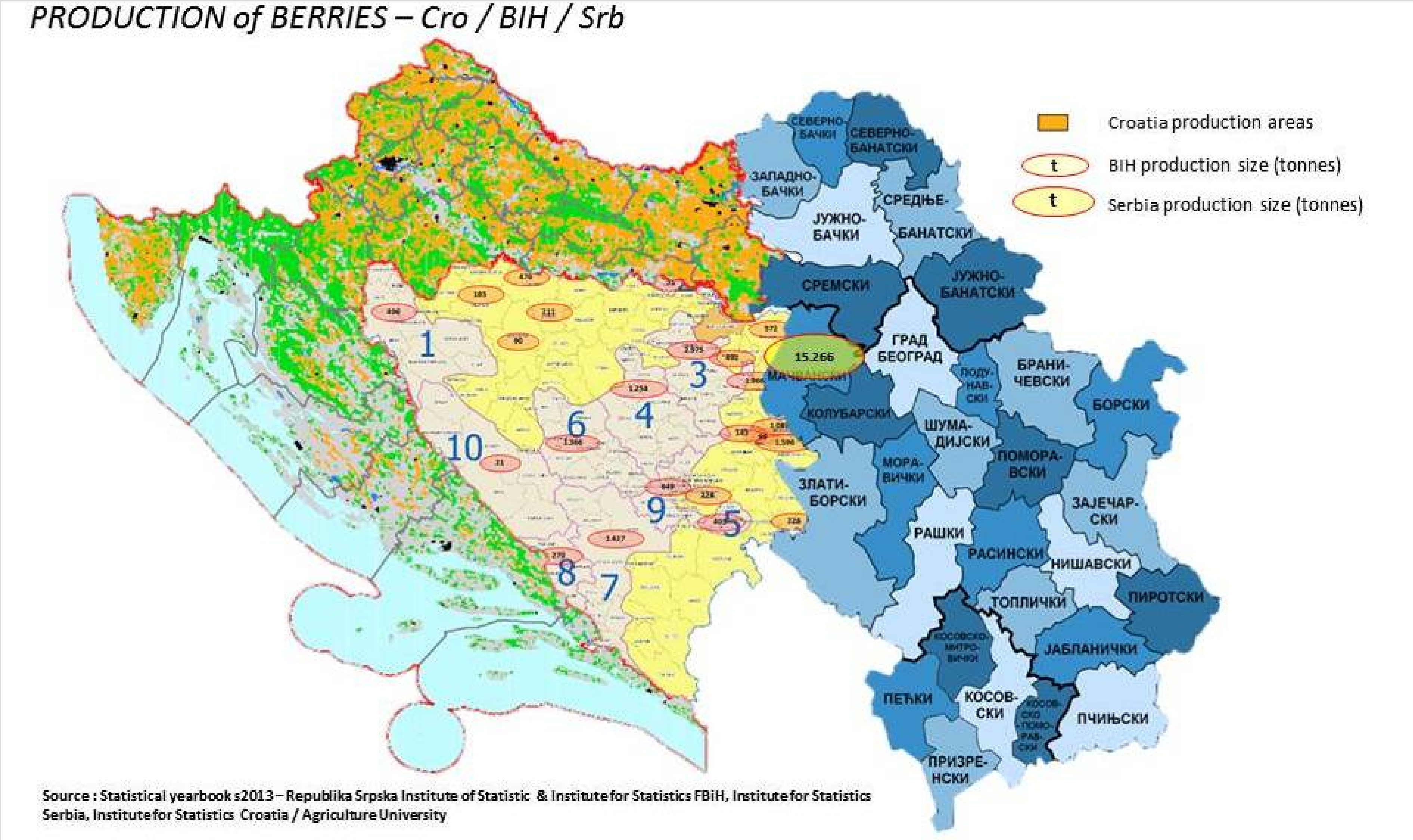
Pear’s production map / Production areas in Croatia and Serbia



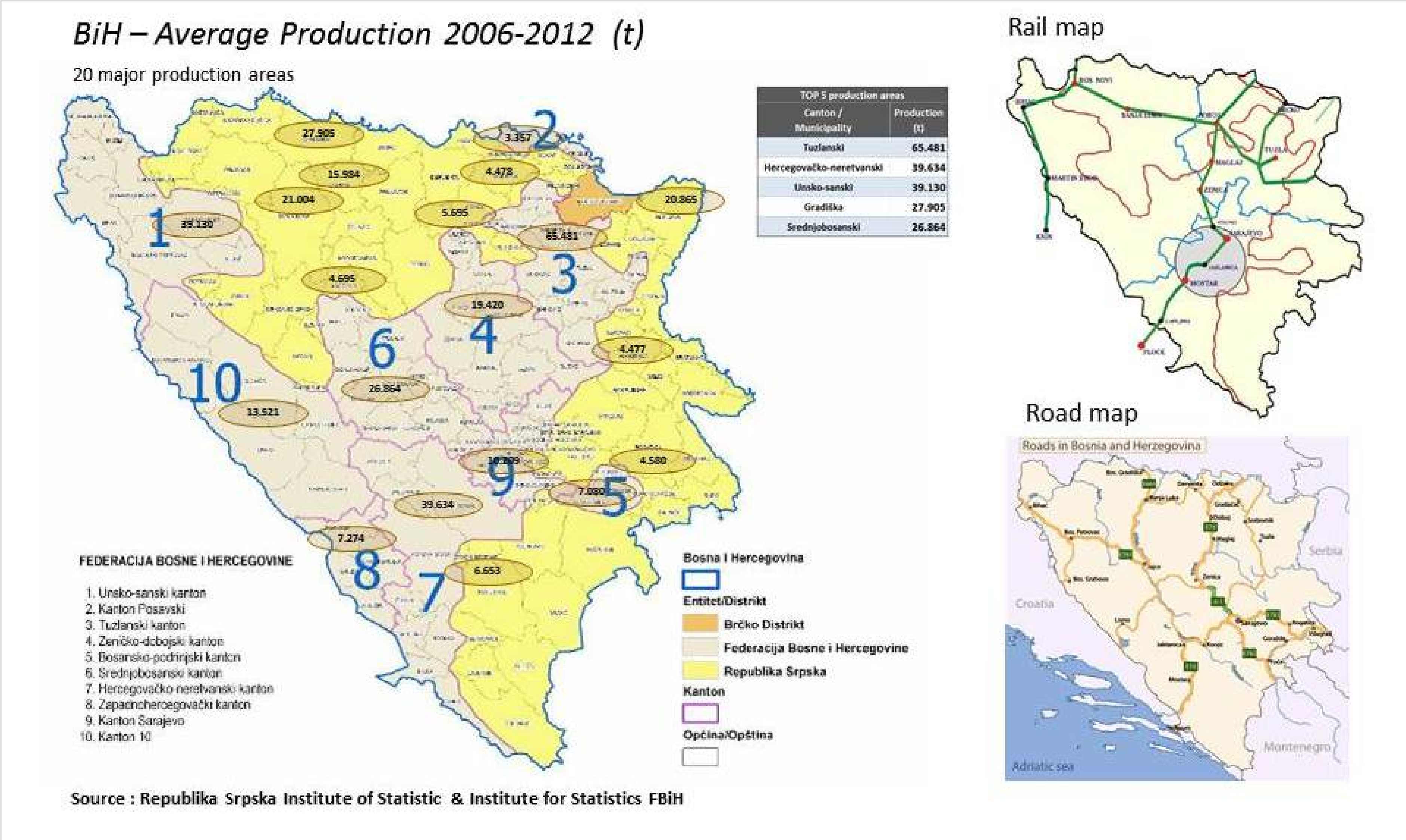
Strawberries and raspberries production map / infrastructure



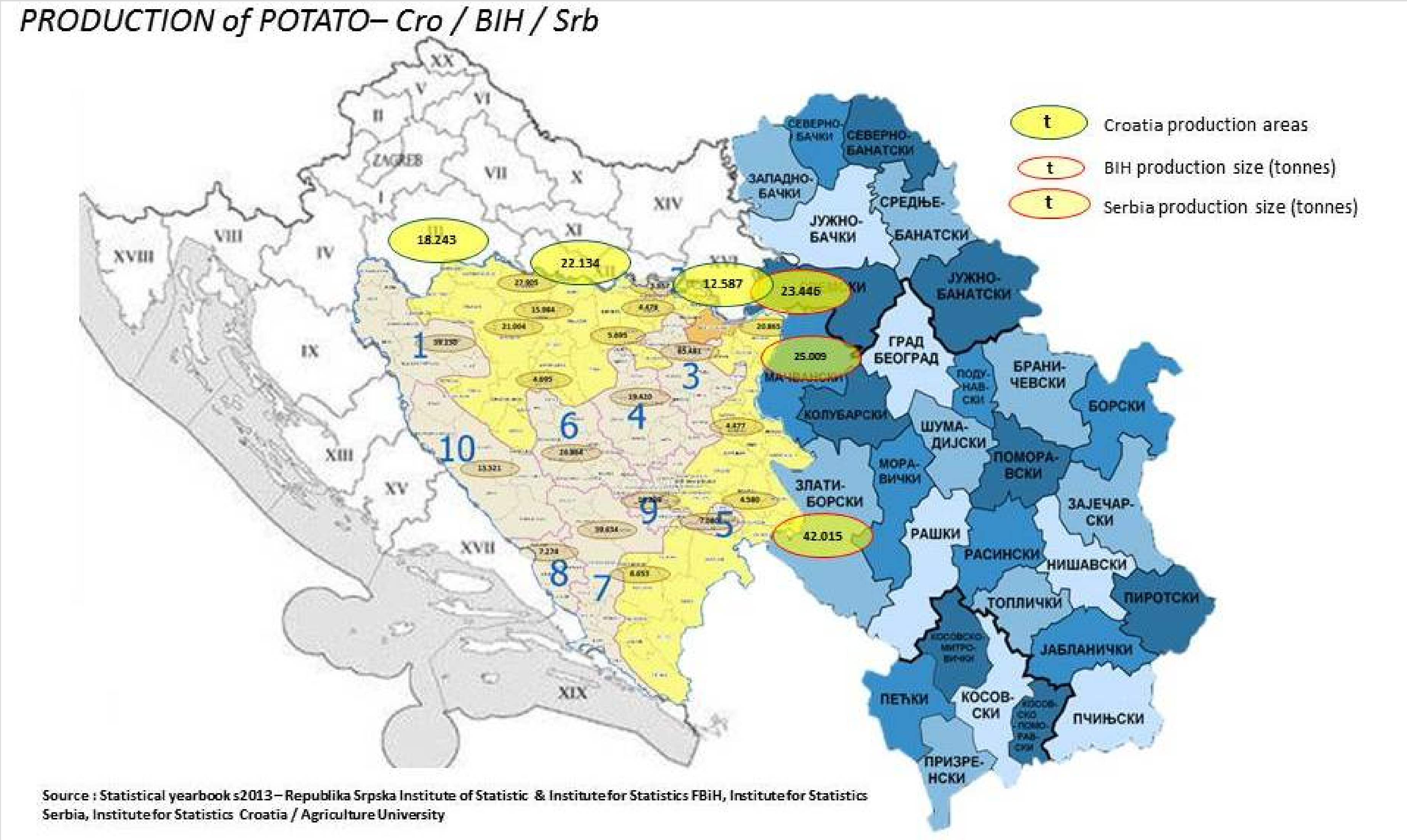
Strawberries and raspberries production map / Production areas in Croatia and Serbia



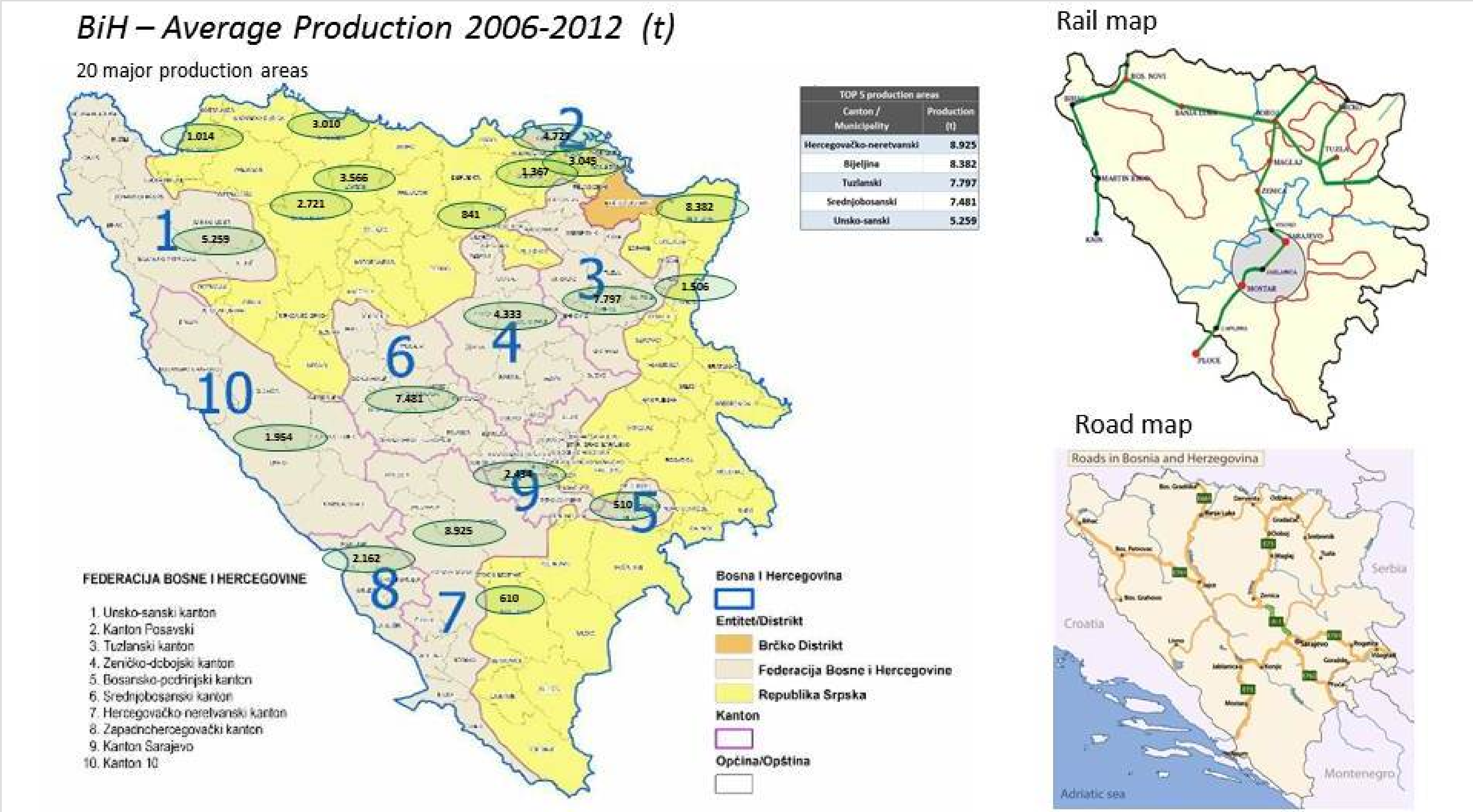
Potato production map / infrastructure



Potato production map / Production areas in Croatia and Serbia

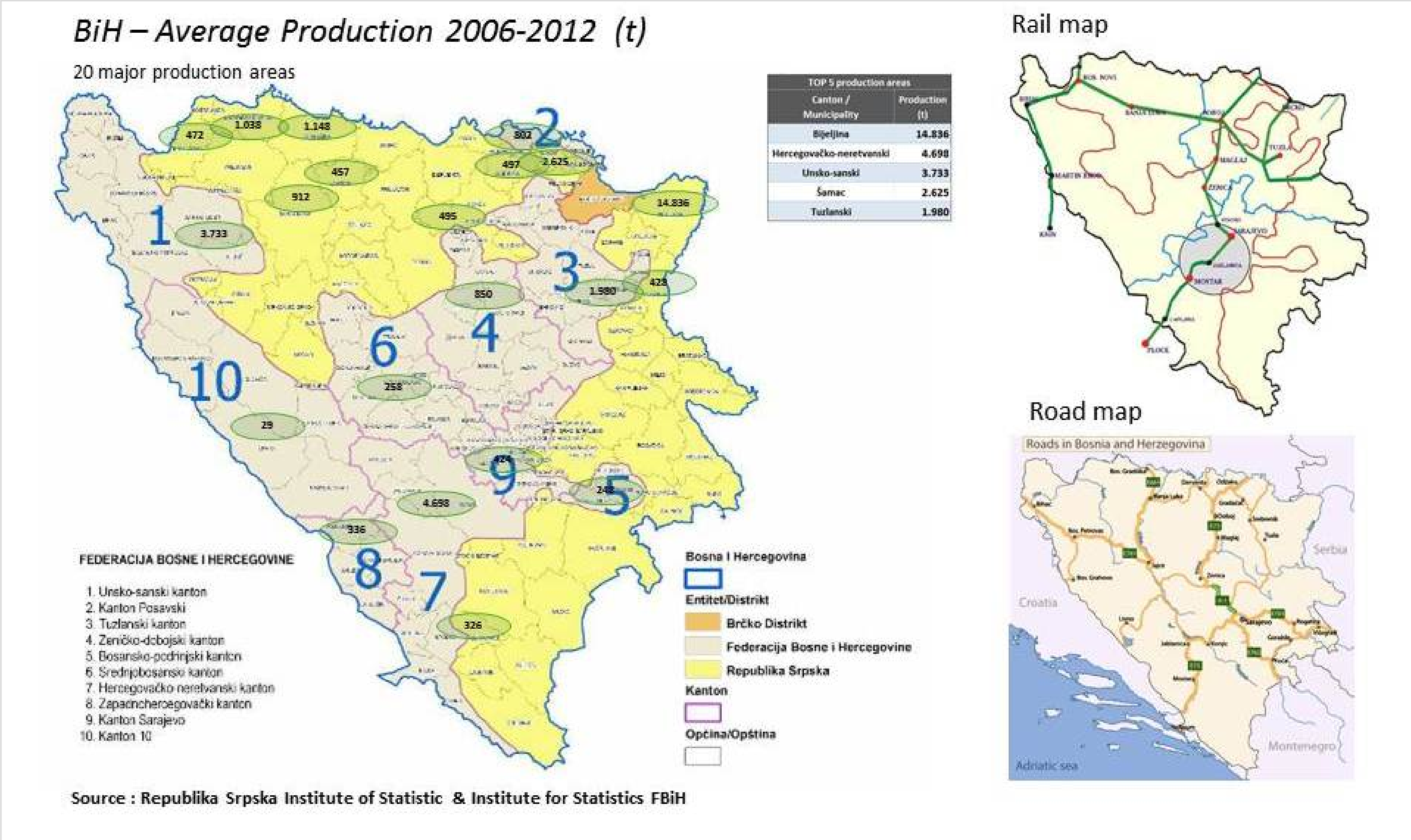


Cabbage production map / infrastructure

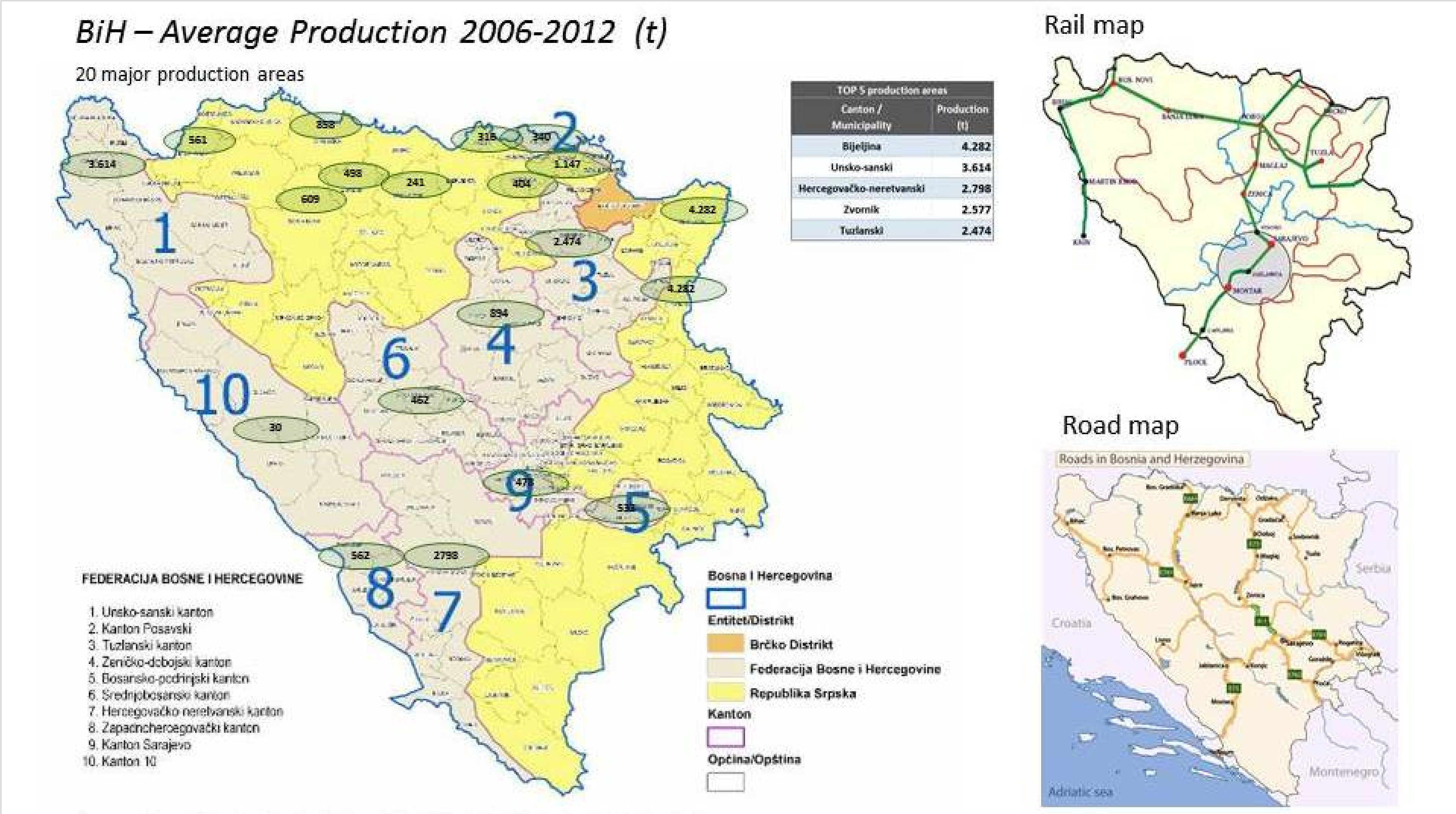


Source : Republika Srpska Institute of Statistic & Institute for Statistics FBiH

Green Pepper production map / infrastructure

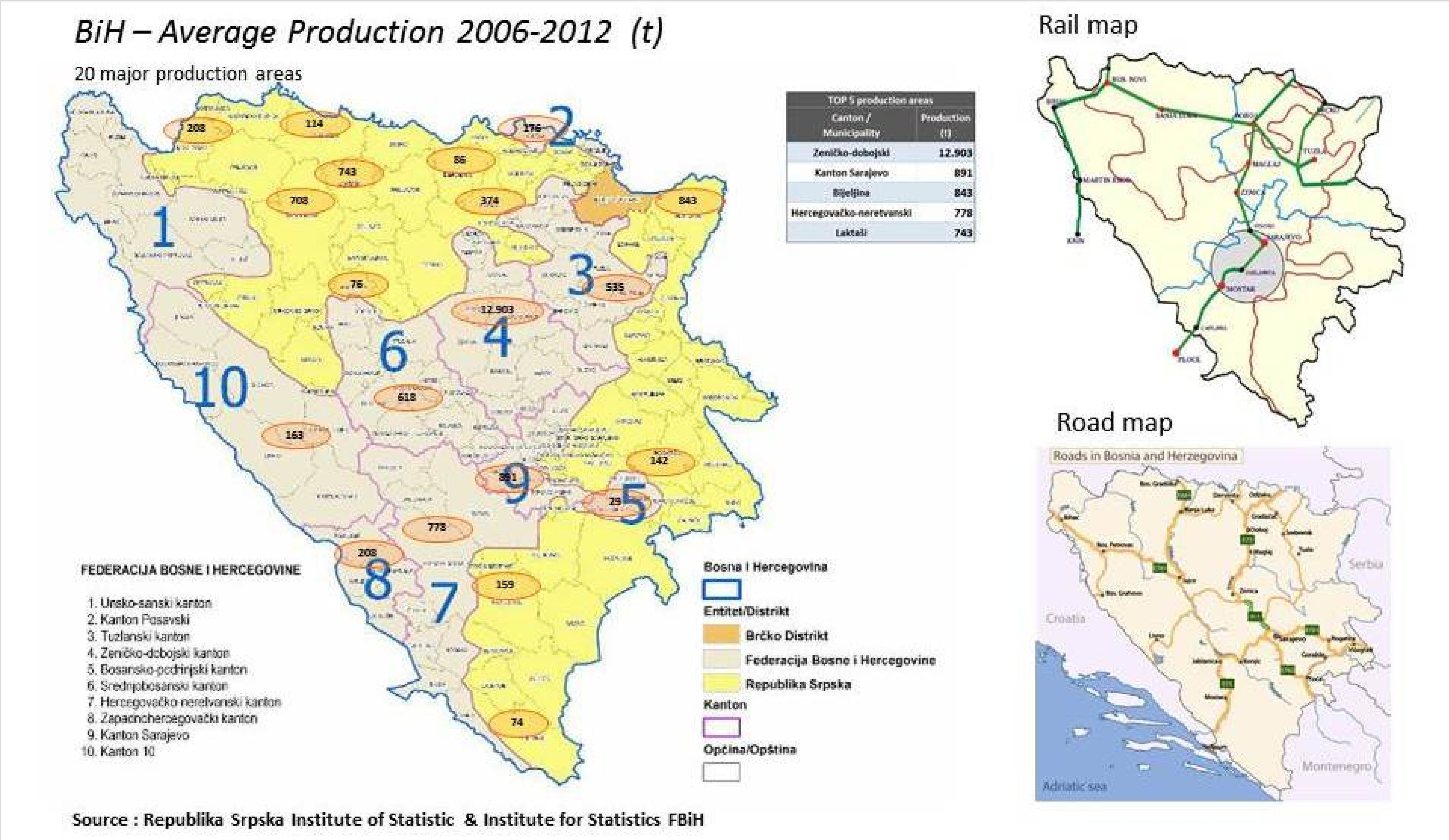


Cucumber production map / infrastructure



Source : Republika Srpska Institute of Statistic & Institute for Statistics FBiH

Carrot production map / infrastructure



Fresh Milk production map / infrastructure