

1. BULGARIA

ECONOMY

Table 1.1. Macroeconomic indicators (2015)

Population (1st Jan.)	2016	2030 (forecast)	Total popul. change 2015
	7.153m	6.408m	-48 414
GDP at current prices	Total (m€)		Per capita (€)
	45 286.5		6 300
Export (m€)	29 031.9		
Export/GDP (%)	64%		
Import (m€)	28 965.0		
Import/GDP (%)	64%		
Length of motorways and express-roads (2013, km)	3 504		

AGRICULTURE

Table 1.2. Farm indicators (2015)

Gross value added of the agricultural industry	m€	% (2014)
	1 620.73	5.3%
Output of the agricultural industry (basic and producer prices, m€)	4 033.15	
Share of total utilised agricultural area occupied by organic farming (%)	2.4%	
Landuse (ha)	11 037 000	
Utilised agricultural area (2013)	ha	%
	4 650 940	42%
Total number of farms (2013)	254 410	
Average area of a farm (2013, ha)	Aver.	Natural Legal
	22.0	7.2 644.0
Number of tractors used in 2000-2009	53 100	

Figure 1.1. Landuse for agriculture (2013, %)

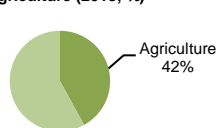


Figure 1.2. Types of farms (2013, %)

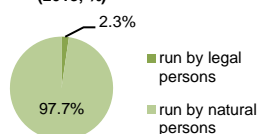


Table 1.3. Employment in agriculture

Agriculture in total employment (2014, %)	19.4%
Employment on farms (2013, annual working unit)	320 230

Figure 1.3. Standard output (SO) of farms (2013, €)

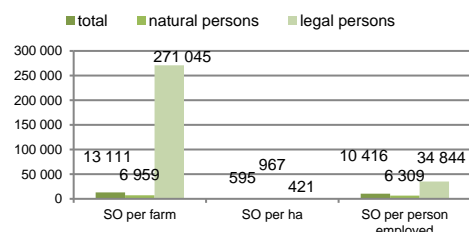


Table 1.4. Top types of plant and animal production compared with EU-28 production (2015)

Plant production	1000t	% of EU-28
Wheat and spelt	5 140.14	3.3%*
Maize	2 696.92	4.6%
Sunflower seed	1 699.23	21.49%
Animal production		
Milk	488.5	0.32%
Meat of poultry	101.25	0.81%*
Cheese	76.8	0.81%*

Top 3 plant production area (1000 ha): wheat and spelt (1105.92), sunflower seed (810.84), maize (498.64).

Top 3 % of EU-28 plant and animal production: sunflower seed (21.5%), maize (4.6%), wheat and spelt (3.35%) and fish production (2.38%), meat of poultry (0.81%), cheese (0.81%).

* incomplete data

CONTACT DATA

Table 1.5. Environmental impacts of agri-food sector

Greenhouse Gas Emissions (CO2 equivalent) by agriculture (2015, % all sectors)	11.1%
Total waste generated (2014, t)	378 668
Share of waste recovered (2014, %)	62.2%
Water withdrawal by agriculture (2009, %)	16.3%
Total water withdrawal per capita (2009, m3/yr/cap)	817
Pesticides use (2000-2009, kg/ha)	NA
Nitrogen, phosphate and potash fertilizers use (2009, kg/ha)	99.5

Figure 1.4. Expenditure on environmental protection by food and beverage sectors (2014)

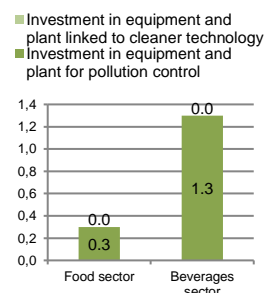


Figure 1.5. Emissions from agriculture in all emissions (2015, %)

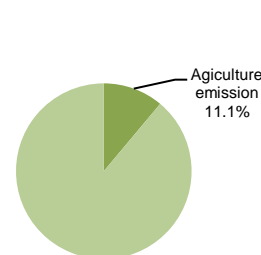
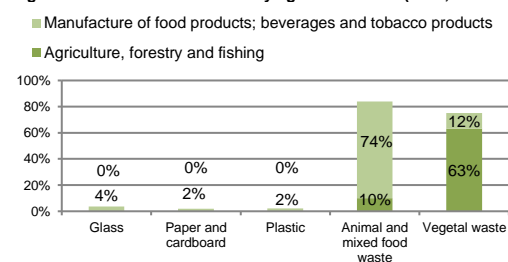


Figure 1.6. Generation of waste by agri-food sector (2014, % of total)

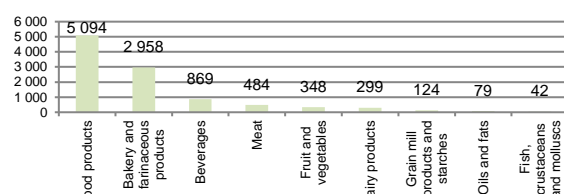


AGRICULTURAL PROCESSING

Table 1.6. Agriculture processing indicators (2014)

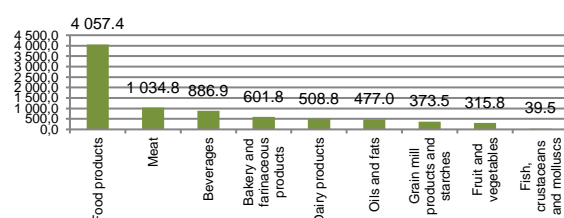
Enterprises that sell goods and/or services in manufacture sector		Food sector	Beverages sector
	In other EU, EFTA or EU-candidate countries	59	15
	In any other country than EU countries, EFTA or EU-candidate countries	31	12
Total turnover of innovative enterprises in agri-food sector (1000€)		2 247 416	740 175
Innovative enterprises in agri-food sector (%)		28.4%	36.9%

Figure 1.7. Enterprises in agri-food sector (2014)



Total number of enterprises in manufacturing sector: 30 374

Figure 1.8. Aggregate turnover of business enterprises (2014)



Aggregate turnover of business enterprises in manufacturing sector: 28 042

Figure 1.9. Average food and beverage consumption mix (2010, %)

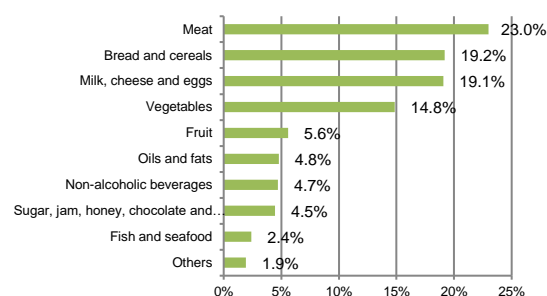
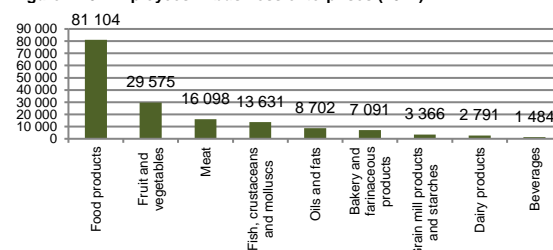
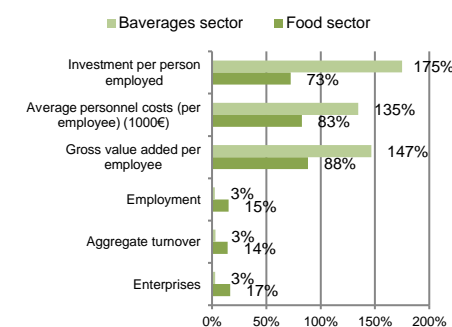


Figure 1.10. Employees in business enterprises (2014)



Employees in total manufacturing sector: 536 216

Figure 1.11. Manufacture of food products and beverages indicators compared to total manufacture (2014, %)



RESEARCH AND DEVELOPMENT

Table 1.7. Research and Development indicators (2014)

	m€	€ per inhab.
Business Expenditures on Research and Development of enterprises in food and beverages sectors	NA	NA
Researchers in business enterprises	6 384	
Researchers in food and beverages enterprises	22	
Agriculture in public R&D spending (% GBAORD)	16.65%	

Table 1.8. Top 3 areas of patent applications to the European Patent Office and European Union trademark registrations (2012, 2015)

Patent applications	
Biological and chemical science	0.75
Agriculture	0.33
Oils & Fats	0.25
Trademark registrations	
Food	151
Pharmaceutical and veterinary preparations	70
Beverages	57

Figure 1.12. Enterprises engaging in innovation activities (%)

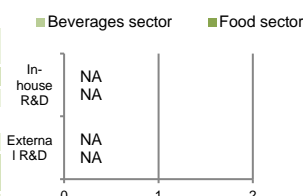


Figure 1.13. Enterprises engaging in cooperation (%)

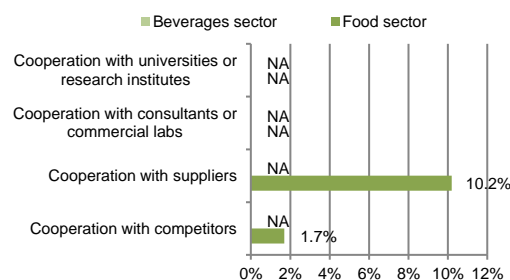


Table 1.9. Barriers to innovations (2014, % of enterprises)

Barrier	No compelling reason to innovate	Lack of good ideas	Lack of internal finance	Too much market competition	Difficulties in obtaining government grants or subsidies
Food sector	82.4%	8.9%	7.4%	6.2%	5.9%
Beverages sector	NA	10.9%	11.9%	13.9%	11.9%

2. CROATIA

ECONOMY

Table 2.1. Macroeconomic indicators (2015)

Population (1st Jan.)	2016	2030 (forecast)	Total popul. change 2015
	4 190 669	3 954 893	-34 647
GDP at current prices	Total (m€)		Per capita (€)
	43 846.9		10 400
Export (m€)	21 912.4		
Export/GDP (%)	50%		
Import (m€)	20 706.2		
Import/GDP (%)	47%		
Length of motorways and express-roads (2013, km)	3 489		

AGRICULTURE

Table 2.2. Farm indicators (2015)

Gross value added of the agricultural industry	m€	% (2014)
	1 077.66	4.3%
Output of the agricultural industry (basic and producer prices, m€)	2 283.08	
Share of total utilised agricultural area occupied by organic farming (%)	4.9%	
Landuse (ha)	5 659 400	
Utilised agricultural area (2013)	ha	%
	1 571 200	28%
Total number of farms (2013)	157 440	
Average area of a farm (2013, ha)	Aver.	Natural Legal
	11.0	7.7 177.9
Number of tractors used in 2000-2009	4 242	

Figure 2.1. Landuse for agriculture (2013, %)

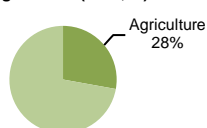


Figure 2.2. Types of farms (2013, %)

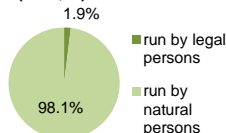


Table 2.3. Employment in agriculture

Agriculture in total employment (2014, %)	9.5%
Employment on farms (2013, annual working unit)	175 050

Figure 2.3. Standard output (SO) of farms (2013, €)

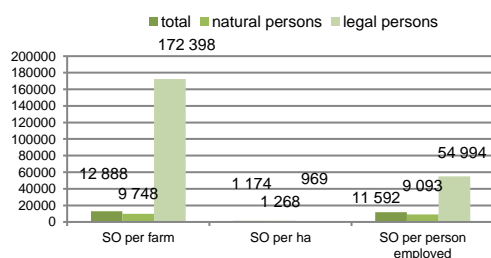


Table 2.4. Top types of plant and animal production compared with EU-28 production (2015)

Plant production	1000t	% of EU-28
Maize	1 709.15	2.9%
Wheat and spelt	762.98	0.5%*
Sugar beet	756.51	0.74%
Animal production		
Milk	513.41	0.34%
Meat of pigs	73	0.32%
Meat of poultry	63.4	0.51%*

Top 3 plant production area (1000 ha): maize (263.97), rape, turnip rape, sunflower seeds and soya (145.34), wheat and spelt (142.68).

Top 3 % of EU-28 plant and animal production: soya (8.05%), maize (2.9%), sunflower seed (1.19%) and fish production (1.08%; 2014), meat of cattle (0.56%*), meat of poultry (0.51%*).

* incomplete data

CONTACT DATA

Table 2.5. Environmental impacts of agri-food sector

Greenhouse Gas Emissions (CO2 equivalent) by agriculture (2015, % all sectors)	14%
Total waste generated (2014, t)	204 708
Share of waste recovered (2014, %)	53%
Water withdrawal by agriculture (2009, %)	1.7%
Total water withdrawal per capita (2009, m3/yr/cap)	143
Pesticides use (2000-2009, kg/ha)	NA
Nitrogen, phosphate and potash fertilizers use (2009, kg/ha)	226.4

Figure 2.4. Expenditure on environmental protection by food and beverage sectors (2014)

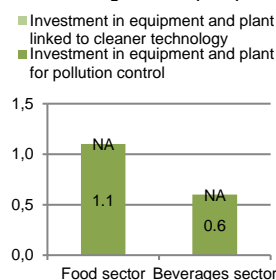


Figure 2.5. Emissions from agriculture in all emissions (2015, %)

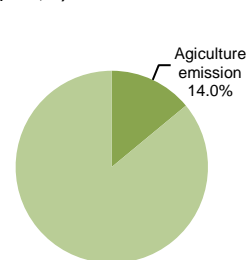
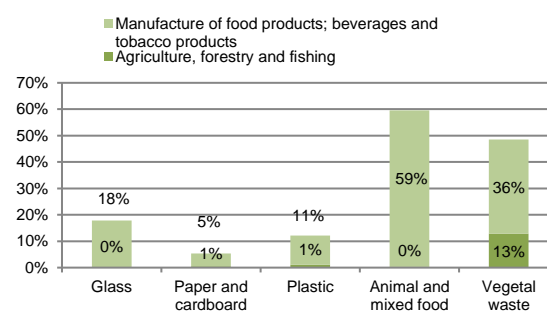


Figure 2.6. Generation of waste by agri-food sector (2014, % of total)

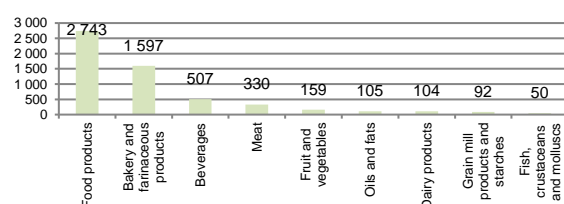


AGRICULTURAL PROCESSING

Table 2.6. Agriculture processing indicators (2014)

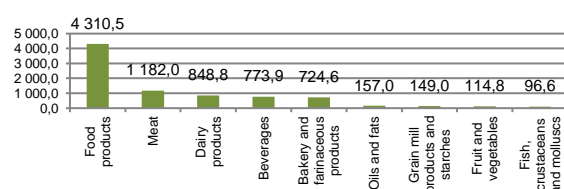
Enterprises that sell goods and/or services in manufacture sector		Food sector	Beverages sector
In other EU, EFTA or EU-candidate countries	19	NA	
In any other country than EU countries, EFTA or EU-candidate countries	18	NA	
Total turnover of innovative enterprises in agri-food sector (1000€)		3 066 965	789 160
Innovative enterprises in agri-food sector (%)		43%	42.1%

Figure 2.7. Enterprises in agri-food sector (2014)



Total number of enterprises in manufacturing sector: 20 087

Figure 2.8. Aggregate turnover of business enterprises (2014)



Aggregate turnover of business enterprises in manufacturing sector: 16 562.3

Figure 2.9. Average food and beverage consumption mix (2010, %)

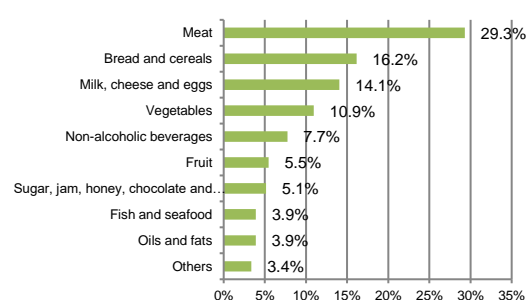
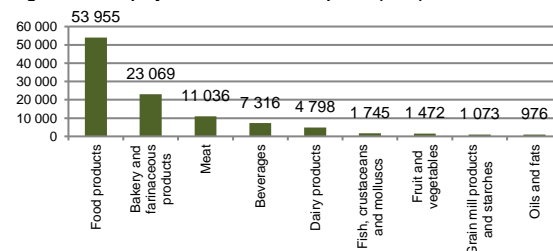
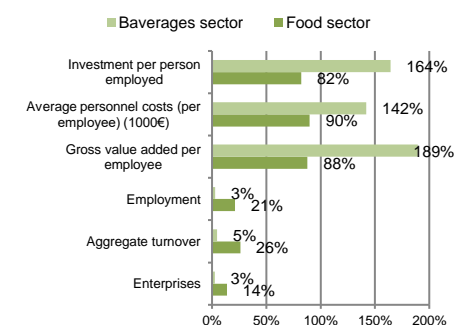


Figure 2.10. Employees in business enterprises (2014)



Employees in total manufacturing sector: 254 850

Figure 2.11. Manufacture of food products and beverages indicators compared to total manufacture (2014, %)



RESEARCH AND DEVELOPMENT

Table 2.7. Research and Development indicators (2014)

	m€	€ per inhab.
Business Expenditures on Research and Development of enterprises in food and beverages sectors	5.666	1.3
Researchers in business enterprises	3 115	
Researchers in food and beverages enterprises	208	
Agriculture in public R&D spending (% GBAORD)	2.11%	

Table 2.8. Top 3 areas of patent applications to the European Patent Office and European Union trademark registrations (2012, 2015)

Patent applications	
Fertilisers	0.8
Agriculture	0.2
NA	NA
Trademark registrations	
Food	22
Pharmaceutical and veterinary preparations	10
Household or kitchen utensils and containers	8

Figure 2.12. Enterprises engaging in innovation activities (%)

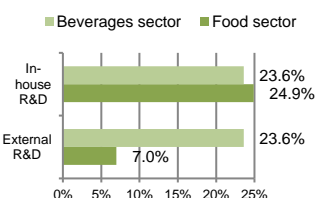


Figure 2.13. Enterprises engaging in cooperation (%)

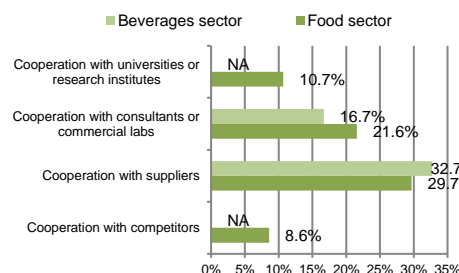


Table 2.9. Barriers to innovations (2014, % of enterprises)

Barrier	No compelling reason to innovate	Difficulties in obtaining government grants or subsidies	Lack of internal finance	Lack of credit or private equity	Low market demand
Food sector	66.1%	23.4%	22.5%	22.2%	14.7%
Beverages sector	75.8%	NA	NA	NA	23.6%

3. CYPRUS

ECONOMY

Table 3.1. Macroeconomic indicators (2015)

Population (1st Jan.)	2016	2030 (forecast)	Total popul. change 2015
	848 319	919 997	1 311
GDP at current prices	Total (m€)		Per capita (€)
	17 637.2		20 800
Export (m€)	10 797.1		
Export/GDP (%)	61%		
Import (m€)	10 738.1		
Import/GDP (%)	61%		
Length of motorways and express-roads (2013, km)	257		

CONTACT DATA

AGRICULTURE

Table 3.2. Farm indicators (2015)

Table 3.2: Farm indicators (2013)			
Gross value added of the agricultural industry	m€	% (2014)	
	274.74	2.3%	
Output of the agricultural industry (basic and producer prices, m€)	693.44		
Share of total utilised agricultural area occupied by organic farming (%)	3.7%		
Landuse (ha)	925 100		
Utilised agricultural area (2013)	ha	%	
	109 330	12%	
Total number of farms (2013)	35 380		
Average area of a farm (2013, ha)	Aver.	Natural	Legal
	3.5	3.1	31.2
Number of tractors used in 2000-2009	14 309		

Figure 3.1. Landuse for agriculture (2013, %)

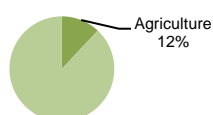


Figure 3.2. Types of farms (2013, %)

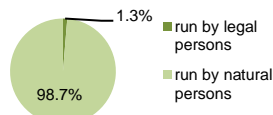


Table 3.3. Employment in agriculture

Agriculture in total employment (2014, %)	3.6%
Employment on farms (2013, annual working unit)	16 550

Figure 3.3. Standard output (SO) of farms (2013, €)

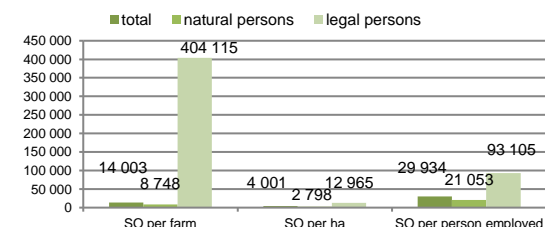


Table 3.4. Top types of plant and animal production compared with EU-28 production (2015)

Plant production	1000t	% of EU-28
Citrus fruits	116.96	1.54%*
Fresh vegetables and strawberries	102.57	0.20%*
Potatoes	95.92	0.18%
Animal production		
Milk	172.68	0.11%
Meat of pigs	43.4	0.19%
Meat of poultry	23.78	0.19%*

Top 3 plant production area (1000 ha): barley (20.56), wheat and spelt (11.97), olives (10.01).

Top 3 % of EU-28 plant and animal production: citrus fruits (1.54%*), fresh vegetables and strawberries (0.20%*), potatoes (0.18%) and fish production (1.22%*), meat of sheep and goats (0.7%*), production of cheese (0.24%*).

* incomplete data

Table 3.5. Environmental impacts of agri-food sector

Greenhouse Gas Emissions (CO2 equivalent) by agriculture (2015, % all sectors)	7.2%
Total waste generated (2014, t)	78 703
Share of waste recovered (2014, %)	57%
Water withdrawal by agriculture (2009, %)	86.4%
Total water withdrawal per capita (2009, m3/yr/cap)	167
Pesticides use (2000-2009, kg/ha)	8.5
Nitrogen, phosphate and potash fertilizers use (2009, kg/ha)	126.7

Figure 3.4. Expenditure on environmental protection by food and beverage sectors (2014)

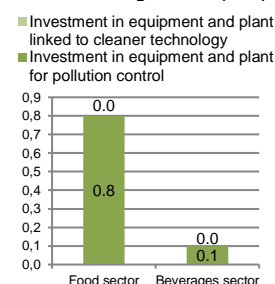


Figure 3.5. Emissions from agriculture in all emissions (2015, %)

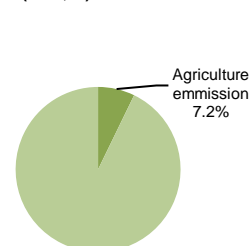
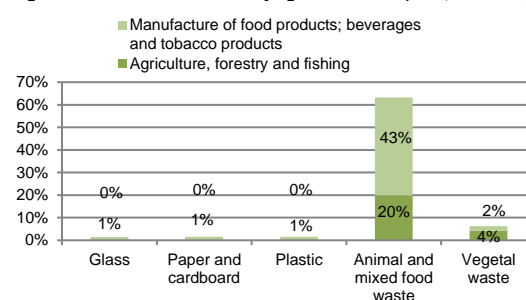


Figure 3.6. Generation of waste by agri-food sector (2014, % of total)

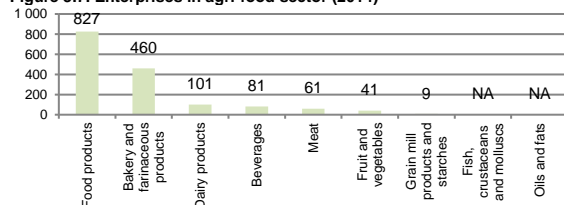


AGRICULTURAL PROCESSING

Table 3.6. Agriculture processing indicators (2014)

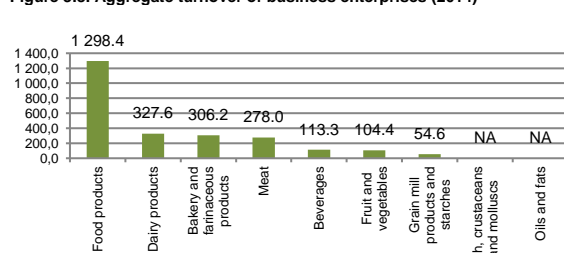
Enterprises that sell goods and/or services in manufacture sector		Food sector	Beverages sector
	In other EU, EFTA or EU-candidate countries	4	0
Total turnover of innovative enterprises in agri-food sector (1000€)	In any other country than EU countries, EFTA or EU-candidate countries	2	0
		544 469	1 046 694
Innovative enterprises in agri-food sector (%)		43.3%	89%

Figure 3.7. Enterprises in agri-food sector (2014)



Total number of enterprises in manufacturing sector: 5 076

Figure 3.8. Aggregate turnover of business enterprises (2014)



Aggregate turnover of business enterprises in manufacturing sector: 2 784.2

Figure 3.9. Average food and beverage consumption mix (2010, %)

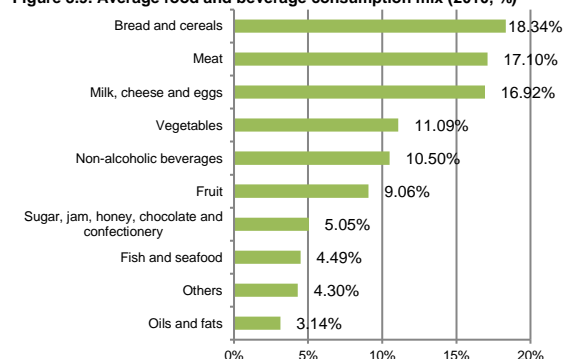
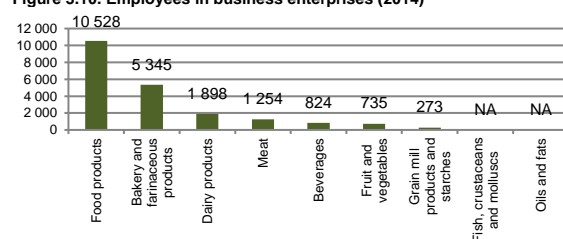
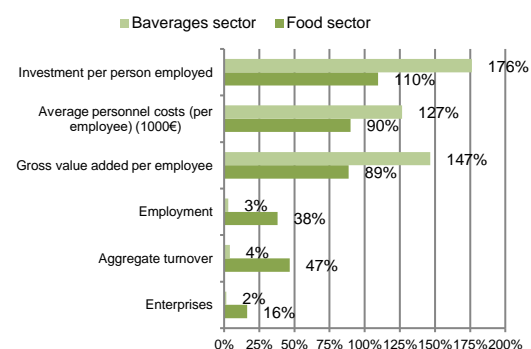


Figure 3.10. Employees in business enterprises (2014)



Employees in total manufacturing sector: 27 680

Figure 3.11. Manufacture of food products and beverages indicators compared to total manufacture (2014, %)



RESEARCH AND DEVELOPMENT

Table 3.7. Research and Development indicators (2014)

Business Expenditures on Research and Development of enterprises in food and beverages sectors	m€	€ per inhab.
	0.157	0.2
Researchers in business enterprises	415	
Researchers in food and beverages enterprises	10	
Agriculture in public R&D spending (% GBAORD)	9.71%	

Table 3.8. Top 3 areas of patent applications to the European Patent Office and European Union trademark registrations (2012, 2015)

Patent applications			Beverages sector		Food sector	
NA	NA	n-house R&D	0.0%	27.60%	%	
NA	NA					
NA	NA					
Trademark registrations				Beverages sector		Food sector
Pharmaceutical and veterinary preparations	74	External R&D	9.40%	43.4%	%	
Food	68					
Beverages	31					

Figure 3.12. Enterprises engaging in innovation activities (%)

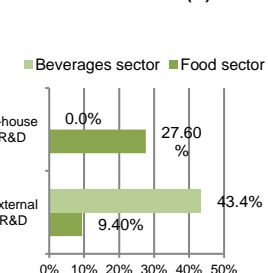


Figure 3.13. Enterprises engaging in cooperation (%)

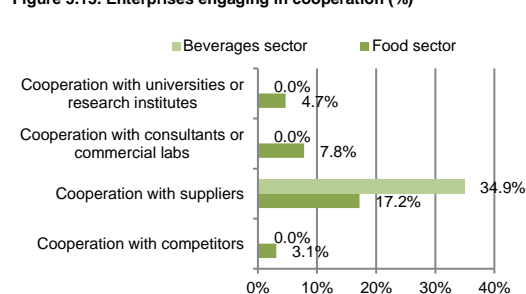


Table 3.9. Barriers to innovations (2014, % of enterprises)

Barrier	No compelling reason to innovate	Lack of internal finance	Lack of credit or private equity	Difficulties in obtaining government grants or subsidies	Too much market competition
Food sector	59.2%	15.9%	14.9%	13.4%	10.7%
Beverages sector	100%	0%	0%	0%	0%

4. CZECH REPUBLIC

ECONOMY

Table 4.1. Macroeconomic indicators (2015)

Population (1st Jan.)	2016	2030 (forecast)	Total popul. change 2015
	10 553 843	10 691 890	15 568
GDP at current prices	Total (m€)		Per capita (€)
	166 964.1		15 800
Export (m€)	138 505.5		
Export/GDP (%)	83%		
Import (m€)	128 270.4		
Import/GDP (%)	77%		
Length of motorways and express-roads (2013, km)	3 408		

AGRICULTURE

Table 4.2. Farm indicators (2015)

Gross value added of the agricultural industry	m€	% (2014)
	1 372.93	2.7%
Output of the agricultural industry (basic and producer prices, m€)	4 639.93	
Share of total utilised agricultural area occupied by organic farming (%)	13.7%	
Landuse (ha)	7 886 800	
Utilised agricultural area (2013)	ha	%
	3 491 470	44%
Total number of farms (2013)	26 250	
Average area of a farm (2013, ha)	Aver. Natural Legal	
	193.4 47.0 1 372.0	
Number of tractors used in 2000-2009	83 813	

Figure 4.1. Landuse for agriculture (2013, %)

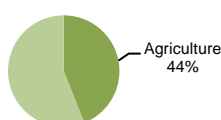


Figure 4.2. Types of farms (2013, %)

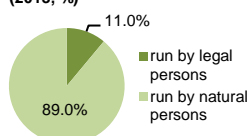


Table 4.3. Employment in agriculture

Agriculture in total employment (2014, %)	3.3%
Employment on farms (2013, annual working unit)	105 080

Figure 4.3. Standard output (SO) of farms (2013, €)

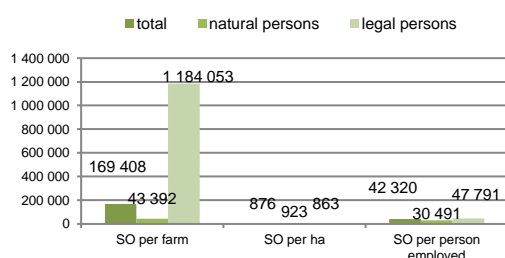


Table 4.4. Top types of plant and animal production compared with EU-28 production (2015)

Plant production	1000t	% of EU-28
Wheat and spelt	5 274.27	3.4%*
Sugar beet	3 421.04	3.36%
Barley	1 991.42	3.22%
Animal production		
Milk	2 481.55	1.64%
Meat of pigs	227.74	0.99%
Meat of poultry	151.41	1.21%*

Top 3 plant production area (1000 ha): wheat and spelt (829.82), rape, turnip rape, sunflower seeds and soya (393.94), barley (365.95).

Top 3 % of EU-28 plant and animal production: rape and turnip rape seeds (5.79%), wheat and spelt (3.43%*), sugar beet (3.36%) and fish production (4.51%*), milk (1.64%), butter (1.41%*).

* incomplete data

CONTACT DATA

Table 4.5. Environmental impacts of agri-food sector

Greenhouse Gas Emissions (CO2 equivalent) by agriculture (2015, % all sectors)	7.0%
Total waste generated (2014, t)	1 019 805
Share of waste recovered (2014, %)	79%
Water withdrawal by agriculture (2007, %)	1.8%
Total water withdrawal per capita (2007, m3/yr/cap)	165
Pesticides use (2000-2009, kg/ha)	1.2
Nitrogen, phosphate and potash fertilizers use (2009, kg/ha)	86.5

Figure 4.4. Expenditure on environmental protection by food and beverage sectors (2014)

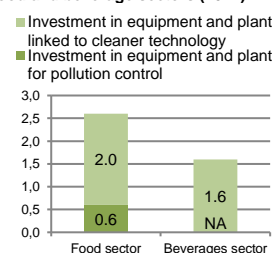


Figure 4.5. Emissions from agriculture in all emissions (2015, %)

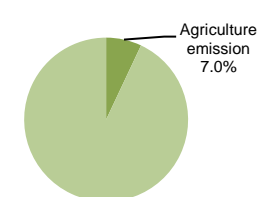
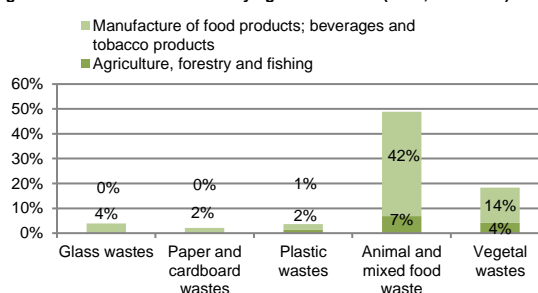


Figure 4.6. Generation of waste by agri-food sector (2014, % of total)

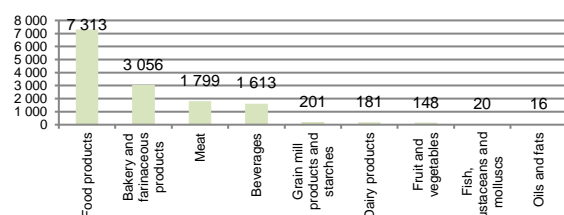


AGRICULTURAL PROCESSING

Table 4.6. Agriculture processing indicators (2014)

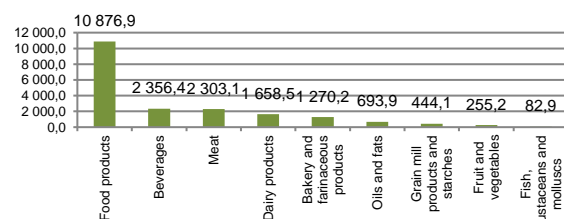
Enterprises that sell goods and/or services in manufacture sector		Food sector	Beverages sector
In other EU, EFTA or EU-candidate countries		62	NA
In any other country than EU countries, EFTA or EU-candidate countries		18	NA
Total turnover of innovative enterprises in agri-food sector (1000€)		7 518 095	NA
Innovative enterprises in agri-food sector (%)		46.3%	NA

Figure 4.7. Enterprises in agri-food sector (2014)



Total number of enterprises in manufacturing sector: 170 041

Figure 4.8. Aggregate turnover of business enterprises (2014)



Aggregate turnover of business enterprises in manufacturing sector: 149 681.8

Figure 4.9. Average food and beverage consumption mix (2010, %)

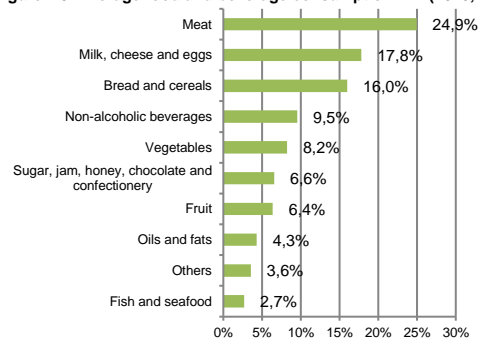
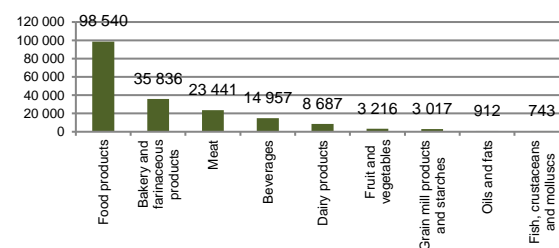
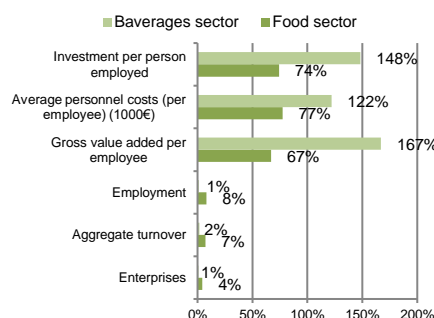


Figure 4.10. Employees in business enterprises (2014)



Employees in total manufacturing sector: 1 230 099

Figure 4.11. Manufacture of food products and beverages indicators compared to total manufacture (2014, %)



RESEARCH AND DEVELOPMENT

Table 4.7. Research and Development indicators (2014)

	m€	€ per inhab.
Business Expenditures on Research and Development of enterprises in food and beverages sectors	8.298	0.8
Researchers in business enterprises	49 332	
Researchers in food and beverages enterprises	487	
Agriculture in public R&D spending (% GBAORD)	4.11%	

Table 4.8. Top 3 areas of patent applications to the European Patent Office and European Union trademark registrations (2012, 2015)

Patent applications	
Agriculture	6.75
Furniture; domestic articles or appliances	1.38
Biological and chemical science	1.34
Trademark registrations	
Food	170
Beverages	85
Pharmaceutical and veterinary preparations	85

Figure 4.12. Enterprises engaging in innovation activities (%)

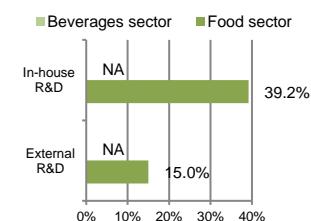


Figure 4.13. Enterprises engaging in cooperation (%)

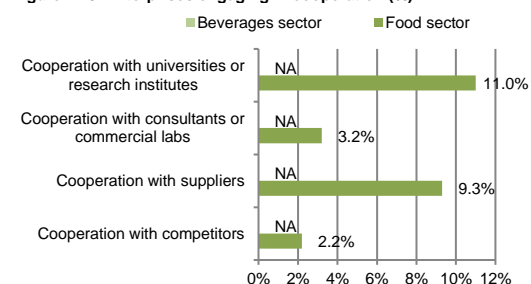


Table 4.9. Barriers to innovations (2014, % of enterprises)

Barrier	No compelling reason to innovate	Lack of good ideas	Lack of internal finance	Too much market competition	Difficulties in obtaining government grants or subsidies
Food sector	80.0%	16.2%	13.8%	8.1%	5.5%
Beverages sector	NA	NA	NA	NA	NA

5. ESTONIA

ECONOMY

Table 5.1. Macroeconomic indicators (2015)

Population (1st Jan.)	2016	2030 (forecast)	Total popul. change 2015
	1 315 944	1 306 181	1 074
GDP at current prices	Total (m€)	Per capita (€)	
	20 251.7	15 400	
Export (m€)	16 056.7		
Export/GDP (%)	79.3%		
Import (m€)	15 216.6		
Import/GDP (%)	75.1%		
Length of motorways and express-roads (2013, km)	1 135		

AGRICULTURE

Table 5.2. Farm indicators (2015)

Gross value added of the agricultural industry	m€	% (2014)
	277.13	3.5%
Output of the agricultural industry (basic and producer prices, m€)	935.1	
Share of total utilised agricultural area occupied by organic farming (%)	15.7%	
Landuse (ha)	4 522 700	
Utilised agricultural area (2013)	ha	%
	957 510	21.2%
Total number of farms (2013)	19 190	
Average area of a farm (2013, ha)	Aver.	Natural Legal
	64.1	37.5 258.1
Number of tractors used in 2000-2009	33 744	

Figure 5.1. Landuse for agriculture (2013, %)

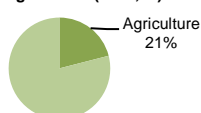


Figure 5.2. Types of farms (2013, %)

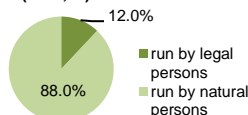


Table 5.3. Employment in agriculture

Agriculture in total employment (2014, %)	3.7%
Employment on farms (2013, annual working unit)	22 060

Figure 5.3. Standard output (SO) of farms (2013, €)

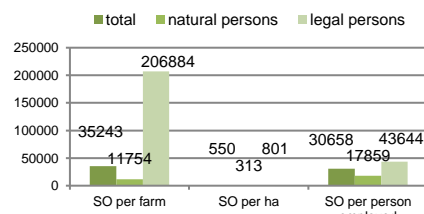


Table 5.4. Top types of plant and animal production compared with EU-28 production (2015)

Plant production	1000t	% of EU-28
Wheat and spelt	812.6	0.53%*
Barley	556.6	0.90%
Rape and turnip rape seeds	196.3	0.9%
Animal production		
Milk	720.4	0.48%
Cheese	43.1	0.45%*
Meat of pigs	42.41	0.19%

Top 3 plant production area (1000 ha): wheat and spelt (169.70), barley (131.40), rape, turnip rape, sunflower seeds and soya (70.80).

Top 3 % of EU-28 plant and animal production: dry pulses and protein crops (1.68%), rye (1.26%), barley (0.90%) and milk (0.48%), cheese (0.45%), butter (0.24%).

* incomplete data

CONTACT DATA

Table 5.5. Environmental impacts of agri-food sector

Greenhouse Gas Emissions (CO2 equivalent) by agriculture (2015, % all sectors)	6.4%
Total waste generated (2014, t)	227 808
Share of waste recovered (2014, %)	82.0%
Water withdrawal by agriculture (2007, %)	0.4%
Total water withdrawal per capita (2007, m3/yr/cap)	1 337
Pesticides use (2000-2009, kg/ha)	0.6
Nitrogen, phosphate and potash fertilizers use (2009, kg/ha)	68.5

Figure 5.4. Expenditure on environmental protection by food and beverage sectors (2014)

- Investment in equipment and plant linked to cleaner technology
- Investment in equipment and plant for pollution control



Figure 5.5. Emissions from agriculture in all emissions (2015, %)

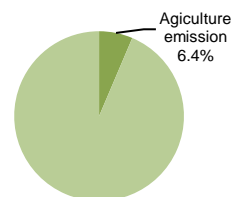
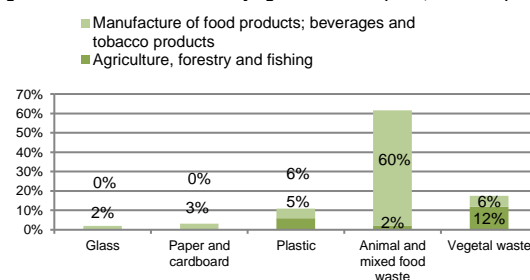


Figure 5.6. Generation of waste by agri-food sector (2014, % of total)

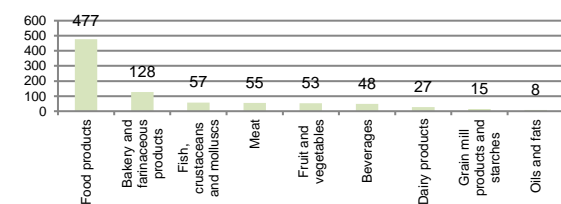


AGRICULTURAL PROCESSING

Table 5.6. Agriculture processing indicators (2014)

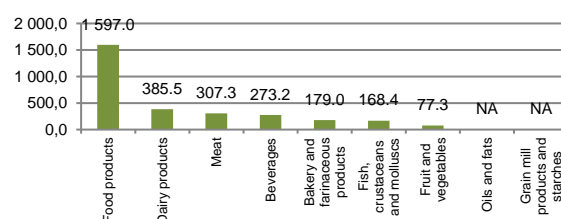
Enterprises that sell goods and/or services in manufacture sector		Food sector	Beverages sector
In other EU, EFTA or EU-candidate countries		19	2
In any other country than EU countries, EFTA or EU-candidate countries		7	2
Total turnover of innovative enterprises in agri-food sector (1000€)		900 074	238 511
Innovative enterprises in agri-food sector (%)		41.9%	40.0%

Figure 5.7. Enterprises in agri-food sector (2014)



Total number of enterprises in manufacturing sector: 6 613

Figure 5.8. Aggregate turnover of business enterprises (2014)



Aggregate turnover of business enterprises in manufacturing sector: 11 606.8

Figure 5.9. Average food and beverage consumption mix (2010, %)

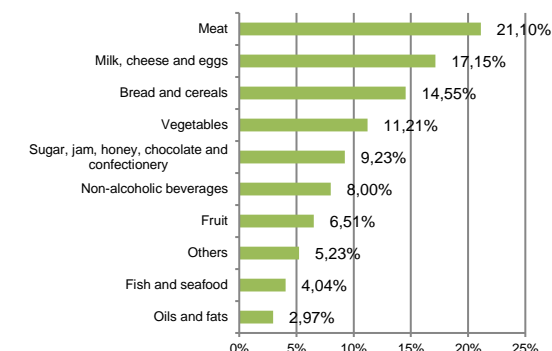
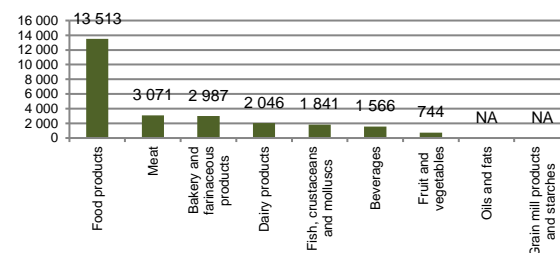
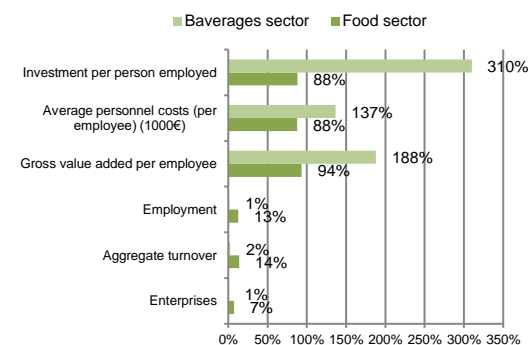


Figure 5.10. Employees in business enterprises (2014)



Employees in total manufacturing sector: 107 870

Figure 5.11. Manufacture of food products and beverages indicators compared to total manufacture (2014, %)



RESEARCH AND DEVELOPMENT

Table 5.7. Research and Development indicators (2014)

Business Expenditures on Research and Development of enterprises in food and beverages sectors	m€	€ per inhab.
Business Expenditures on Research and Development of enterprises in food and beverages sectors	3.141	2.4
Researchers in business enterprises	2 930	
Researchers in food and beverages enterprises	66	
Agriculture in public R&D spending (% GBAORD)	6.45%	

Table 5.8. Top 3 areas of patent applications to the European Patent Office and European Union trademark registrations (2012, 2015)

Patent applications	
Biological and chemical science	1.75
NA	NA
NA	NA
Trademark registrations	
Food	58
Beverages	32
Transport	20

Figure 5.12. Enterprises engaging in innovation activities (%)

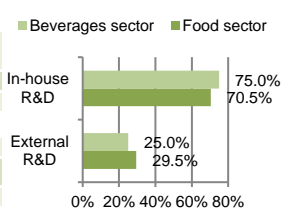


Figure 5.13. Enterprises engaging in cooperation (%)

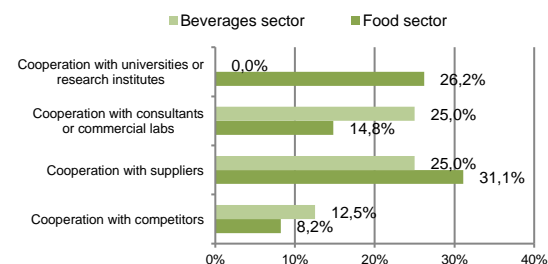


Table 5.9. Barriers to innovations (2014, % of enterprises)

Barrier	No compelling reason to innovate	Lack of internal finance	Lack of good ideas	Difficulties in obtaining government grants or subsidies	Little market competition
Food sector	71%	11%	7%	8%	16%
Beverages sector	50%	25%	25%	8.3%	0

6. GREECE

ECONOMY

Table 6.1. Macroeconomic indicators (2015)

Population (1st Jan.)	2016	2030 (forecast)	Total popul. change 2015
	10 783 748	9 944 658	-74 270
GDP at current prices	Total (m€)	Per capita (€)	
	175 697.4	16 200	
Export (m€)	56 073.8		
Export/GDP (%)	31.9%		
Import (m€)	55 821.3		
Import/GDP (%)	31.8%		
Length of motorways and express-roads (2013, km)	NA		

CONTACT DATA

AGRICULTURE

Table 6.2. Farm indicators (2015)

Gross value added of the agricultural industry	m€	% (2014)
	5543.01	3.8%
Output of the agricultural industry (basic and producer prices, m€)	10 665.31	
Share of total utilised agricultural area occupied by organic farming (%)	8.4%	
Landuse (ha)	13 204 900	
Utilised agricultural area (2013)	ha	%
	4 856 780	37%
Total number of farms (2013)	709 500	
Average area of a farm (2013, ha)	Aver.	Natural Legal
	7.1	5.0 1891.0
Number of tractors used in 2000-2009	259 613	

Figure 6.1. Landuse for agriculture (2013, %)

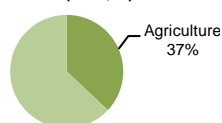


Figure 6.2. Types of farms (2013, %)

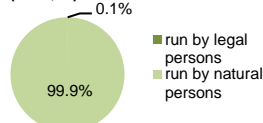


Table 6.3. Employment in agriculture

Agriculture in total employment (2014, %)	12.3%
Employment on farms (2013, annual working unit)	463 860

Figure 6.3. Standard output (SO) of farms (2013, €)

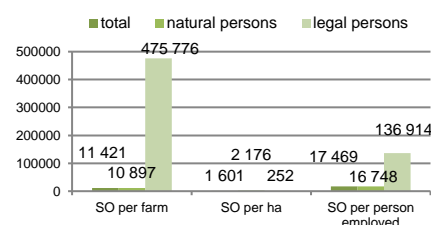


Table 6.4. Top types of plant and animal production compared with EU-28 production (2015)

Plant production	1000t	% of EU-28
Fresh vegetables and strawberries	2 997.72	5.88%*
Fruits, berries and nuts	1631.68	8.11%*
Maize	1 542.30	2.62%
Animal production		
Milk	602.6	0.40%
Meat of poultry	189.63	1.51%*
Cheese	188.3	1.98%*

Top 3 plant production area (1000 ha): olives (969.91), wheat and spelt (487.09), barley (154.11).

Top 3 % of EU-28 plant and animal production: citrus fruits (14.58%), olives (10.09%*), rice (8.53%) and meat of sheep and goats (10.04%*), fish production (8.22%, 2014), cheese (1.98%*).

* incomplete data

Table 6.5. Environmental impacts of agri-food sector

Greenhouse Gas Emissions (CO2 equivalent) by agriculture (2015, % all sectors)	8.9%
Total waste generated (2014, t)	749 300
Share of waste recovered (2014, %)	53%
Water withdrawal by agriculture (2007, %)	89.3%
Total water withdrawal per capita (2007, m3/yr/cap)	841
Pesticides use (2000-2009, kg/ha)	2.5
Nitrogen, phosphate and potash fertilizers use (2009, kg/ha)	56.3

Figure 6.4. Expenditure on environmental protection by food and beverage sectors (2014)

- Investment in equipment and plant linked to cleaner technology
- Investment in equipment and plant for pollution control

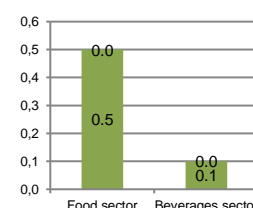


Figure 6.5. Emissions from agriculture in all emissions (2015, %)

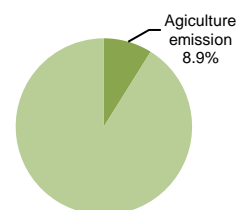
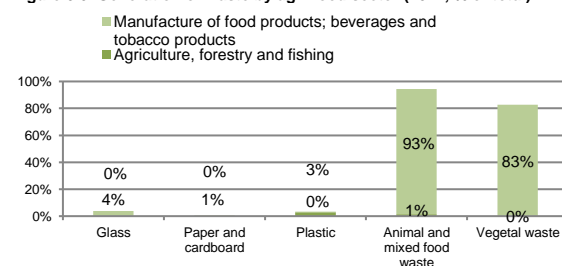


Figure 6.6. Generation of waste by agri-food sector (2014, % of total)

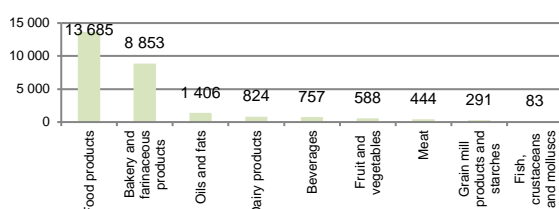


AGRICULTURAL PROCESSING

Table 6.6. Agriculture processing indicators (2014)

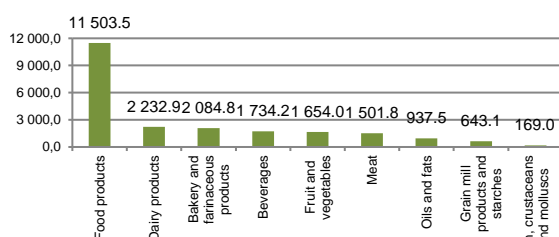
Enterprises that sell goods and/or services in manufacture sector		Food sector	Beverages sector
In other EU, EFTA or EU-candidate countries		89	NA
In any other country than EU countries, EFTA or EU-candidate countries		45	NA
Total turnover of innovative enterprises in agri-food sector (1000€)		7 207 272	1 147 809
Innovative enterprises in agri-food sector (%)		54.7%	68.0%

Figure 6.7. Enterprises in agri-food sector (2014)



Total number of enterprises in manufacturing sector: 58 211

Figure 6.8. Aggregate turnover of business enterprises (2014)



Aggregate turnover of business enterprises in manufacturing sector: 57 221.4

Figure 6.9. Average food and beverage consumption mix (2010, %)

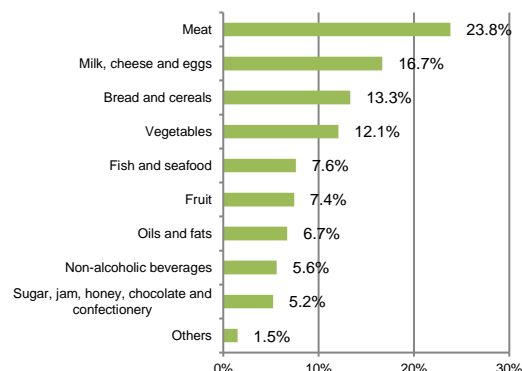
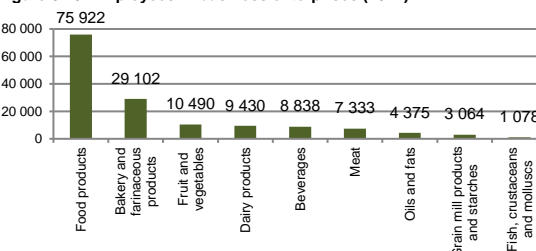
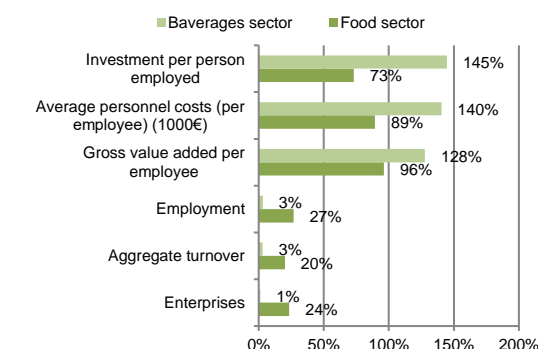


Figure 6.10. Employees in business enterprises (2014)



Employees in total manufacturing sector: 283 215

Figure 6.11. Manufacture of food products and beverages indicators compared to total manufacture (2014, %)



RESEARCH AND DEVELOPMENT

Table 6.7. Research and Development indicators (2014)

Business Expenditures on Research and Development of enterprises in food and beverages sectors	m€	€ per inhab.
	30.19	2.7
Researchers in business enterprises	10 428	
Researchers in food and beverages enterprises	477	
Agriculture in public R&D spending (% GBAORD)	3.79%	

Table 6.8. Top 3 areas of patent applications to the European Patent Office and European Union trademark registrations (2012, 2015)

Patent applications	
Agriculture	3.39
Furniture; domestic articles or appliances	1.5
Biological and chemical science	1.38
Trademark registrations	
Food	237
Pharmaceutical and veterinary preparations	71
Agriculture	54

Figure 6.12. Enterprises engaging in innovation activities (%)

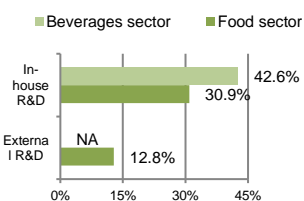


Figure 6.13. Enterprises engaging in cooperation (%)

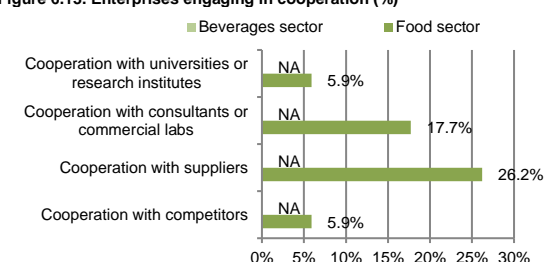


Table 6.9. Barriers to innovations (2014, % of enterprises)

Barrier	No compelling reason to innovate	Lack of internal finance	Low market demand	Lack of credit or private equity	Difficulties in obtaining government grants or subsidies
Food sector	69.0%	27.2%	24.7%	21.5%	18.4%
Beverages sector	NA	NA	NA	NA	NA

7. HUNGARY

ECONOMY

Table 7.1. Macroeconomic indicators (2015)

Population (1st Jan.)	2016	2030 (forecast)	Total popul. change 2015
	9 830 485	9 665 170	-25 086
GDP at current prices	Total (m€)	Per capita (€)	
	109 674.2	11 100	
Export (m€)	99 503.8		
Export/GDP (%)	91%		
Import (m€)	89 731.3		
Import/GDP (%)	82%		
Length of motorways and express-roads (2013, km)	4 119		

AGRICULTURE

Table 7.2. Farm indicators (2015)

Gross value added of the agricultural industry	m€	% (2014)
	3 253.94	4.5%
Output of the agricultural industry (basic and producer prices, m€)	8 025.45	
Share of total utilised agricultural area occupied by organic farming (%)	2.4%	
Landuse (ha)	9 301 100	
Utilised agricultural area (2013)	ha	%
	4 656 520	50%
Total number of farms (2013)	491 330	
Average area of a farm (2013, ha)	Aver.	Natural Legal
	14.3	5.9 476.6
Number of tractors used in 2000-2009	120 477	

Figure 7.1. Landuse for agriculture (2013, %)

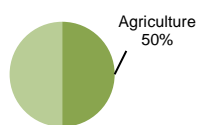


Figure 7.2. Types of farms (2013, %)

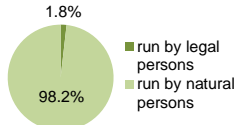


Table 7.3. Employment in agriculture

Agriculture in total employment (2014, %)	6.7%
Employment on farms (2013, annual working unit)	433 700

Figure 7.3. Standard output (SO) of farms (2013, €)

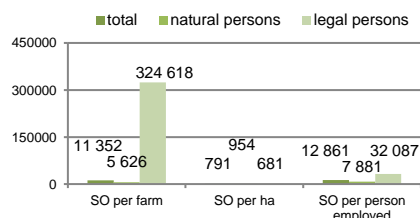


Table 7.4. Top types of plant and animal production compared with EU-28 production (2015)

Plant production	1000t	% of EU-28
Maize	6 632.78	11.26%
Wheat and spelt	5 331.43	3.47%*
Fresh vegetables and strawberries	1 606.41	3.15%*
Animal production		
Milk	1 536.06	1.01%
Meat of poultry	478.71	3.82%*
Meat of pigs	409.3	1.79%

Top 3 plant production area are (1000 ha): maize (1 146.13), wheat and spelt (1 029.32), sunflower seeds (611.64).

Top 3 % of EU-28 plant and animal production: sunflower seed (19.69%), maize (11.26%), soya (5.98%) and fish production (3.87%), meat of poultry (3.82%), meat of pigs (1.79%).

* incomplete data

CONTACT DATA

Table 7.5. Environmental impacts of agri-food sector

Greenhouse Gas Emissions (CO2 equivalent) by agriculture (2015, % all sectors)	12.4%
Total waste generated (2014, t)	1 012 087
Share of waste recovered (2014, %)	60%
Water withdrawal by agriculture (2005, %)	5.6%
Total water withdrawal per capita (2005, m3/yr/cap)	557
Pesticides use (2000-2009, kg/ha)	1.9
Nitrogen, phosphate and potash fertilizers use (2009, kg/ha)	72.7

Figure 7.4. Expenditure on environmental protection by food and beverage sectors (2014)

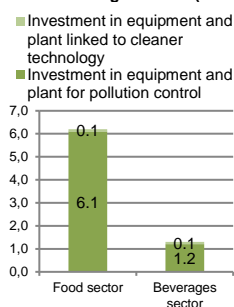


Figure 7.5. Emissions from agriculture in all emissions (2015, %)

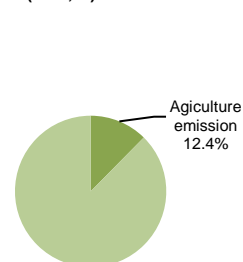
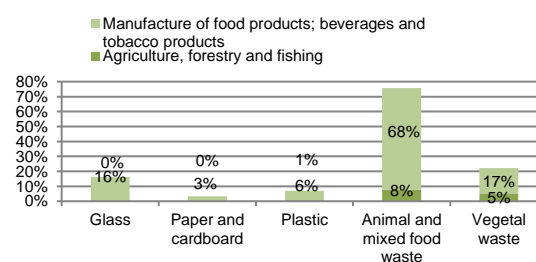


Figure 7.6. Generation of waste by agri-food sector (2014, % of total)

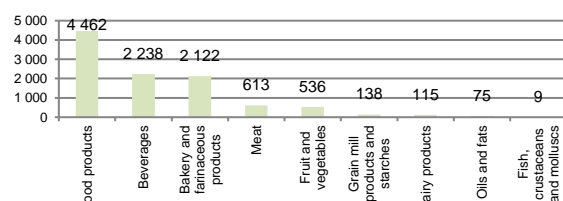


AGRICULTURAL PROCESSING

Table 7.6. Agriculture processing indicators (2014)

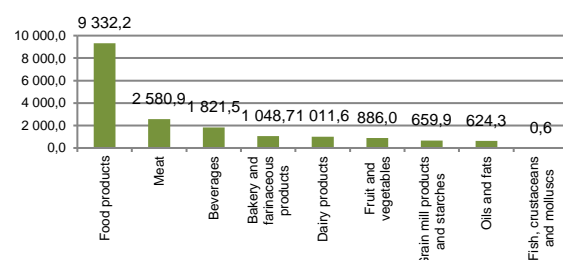
Enterprises that sell goods and/or services in manufacture sector		Food sector	Beverages sector
In other EU, EFTA or EU-candidate countries		51	9
In any other country than EU countries, EFTA or EU-candidate countries		21	7
Total turnover of innovative enterprises in agri-food sector (1000€)		4 754 288	908 869
Innovative enterprises in agri-food sector (%)		23.2%	38.6%

Figure 7.7. Enterprises in agri-food sector (2014)



Total number of enterprises in manufacturing sector: 47 614

Figure 7.8. Aggregate turnover of business enterprises (2014)



Aggregate turnover of business enterprises in manufacturing sector: 98 615.8

Figure 7.9. Average food and beverage consumption mix (2010, %)

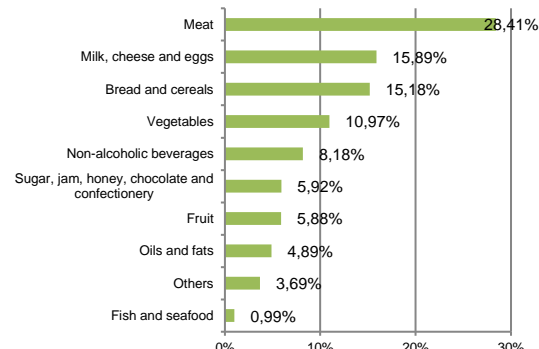
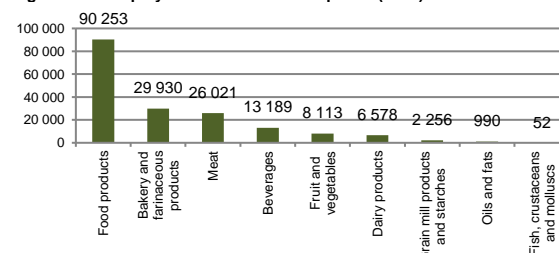
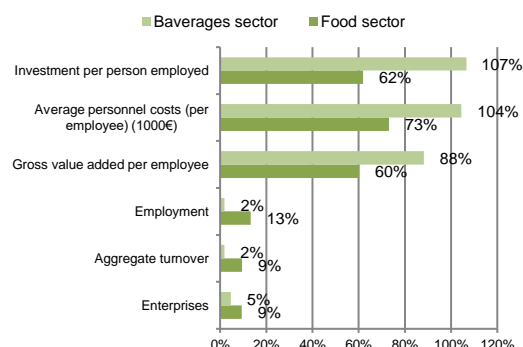


Figure 7.10. Employees in business enterprises (2014)



Employees in total manufacturing sector: 678 247

Figure 7.11. Manufacture of food products and beverages indicators compared to total manufacture (2014, %)



RESEARCH AND DEVELOPMENT

Table 7.7. Research and Development indicators (2014)

Business Expenditures on Research and Development of enterprises in food and beverages sectors	m€	€ per inhab.
Researches in business enterprises	25 359	NA
Researches in food and beverages enterprises	NA	NA
Agriculture in public R&D spending (% GBAORD)	5.42%	

Table 7.8. Top 3 areas of patent applications to the European Patent Office and European Union trademark registrations (2012, 2015)

Patent applications	
Agriculture	6.79
Furniture; domestic articles or appliances	4.33
Biological and chemical science	4.3
Trademark registrations	
Food	105
Pharmaceutical and veterinary preparations	68
Beverages	44

Figure 7.12. Enterprises engaging in innovation activities (%)

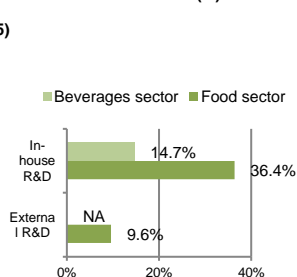


Figure 7.13. Enterprises engaging in cooperation (%)

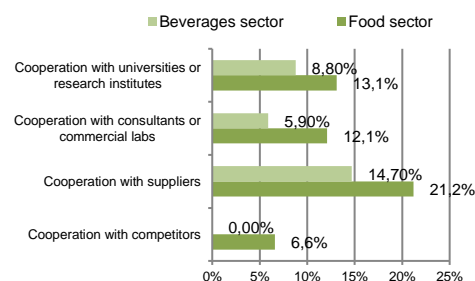


Table 7.9. Barriers to innovations (2014, % of enterprises)

Barrier	No compelling reason to innovate	Difficulties in obtaining government grants or subsidies	Lack of internal finance	Low market demand	Too much market competition
Food sector	87.5%	5.6%	8.2%	9.7%	4.1%
Beverages sector	76.6%	16%	12.8%	9.6%	13.8%

8. ITALY

ECONOMY

Table 8.1. Macroeconomic indicators (2015)

Population (1st Jan.)	2016	2030 (forecast)	Total popul. change 2015
	60 665 551	60 350 475	-130 061
GDP at current prices	Total (m€)	Per capita (€)	
	1 645 439.4	27 100	
Export (m€)	493 934.3		
Export/GDP (%)	30%		
Import (m€)	446 041.8		
Import/GDP (%)	27%		
Length of motorways and express-roads (2013, km)	6751*		

AGRICULTURE

Table 8.2. Farm indicators (2015)

Gross value added of the agricultural industry	m€	% (2014)
	32 238.88	2.2%
Output of the agricultural industry (basic and producer prices, m€)	55 203.93	
Share of total utilised agricultural area occupied by organic farming (%)	11.8%	
Landuse (ha)	30 207 300	
Utilised agricultural area (2013)	ha	%
	12 098 890	40%
Total number of farms (2013)	1 010 330	
Average area of a farm (2013, ha)	Aver.	Natural Legal
	15.8	13.1 196.4
Number of tractors used in 2000-2009	1 754 401	

Figure 8.1. Landuse for agriculture (2013, %)

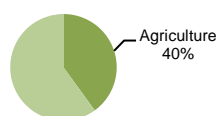


Figure 8.2. Types of farms (2013, %)

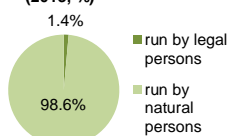


Table 8.3. Employment in agriculture

Agriculture in total employment (2014, %)	3.7%
Employment on farms (2013, annual working unit)	816 920

Figure 8.3. Standard output (SO) of farms (2013, €)

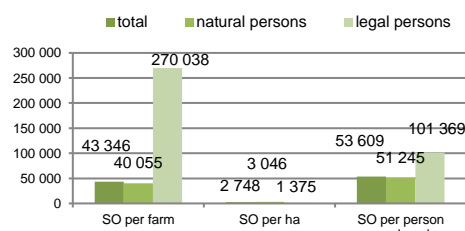


Table 8.4. Top types of plant and animal production compared with EU-28 production (2015)

Plant production	1000t	% of EU-28
Grapes	8 050.21	31.42%
Maize	7 069.65	12.00%
Olives	3 171.01	25.19%*
Animal production		
Meat of pigs	1 485.83	6.48%
Meat of poultry	1 294.96	10.34%*
Cheese	1206.67	12.68%*

Top 3 plant production area (1000 ha): olives (1 134.05), maize (727.37), grapes (678.98).

Top 3 % of EU-28 plant and animal production: rice (49.81%), soya (45.78%), grapes (31.42%) and cheese (12.68%), fish production (11.71%), meat of cattle (10.40%).

* incomplete data

CONTACT DATA

Table 8.5. Environmental impacts of agri-food sector

Greenhouse Gas Emissions (CO2 equivalent) by agriculture (2015, % all sectors)	7.7%
Total waste generated (2014, t)	11 962 324
Share of waste recovered (2014, %)	76%
Water withdrawal by agriculture (2000, %)	44.1%
Total water withdrawal per capita (2000, m3/yr/cap)	790
Pesticides use (2000-2009, kg/ha)	7.4
Nitrogen, phosphate and potash fertilizers use (2009, kg/ha)	84.6

Figure 8.4. Expenditure on environmental protection by food and beverage sectors (2014)

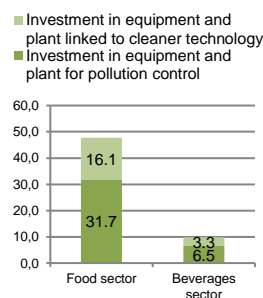


Figure 8.5. Emissions from agriculture in all emissions (2015, %)

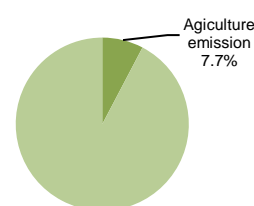
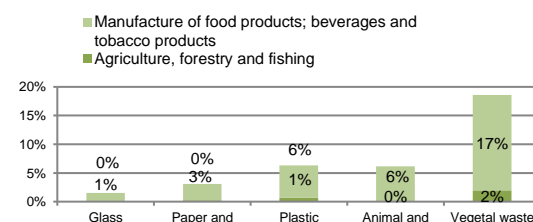


Figure 8.6. Generation of waste by agri-food sector (2014, % of total)

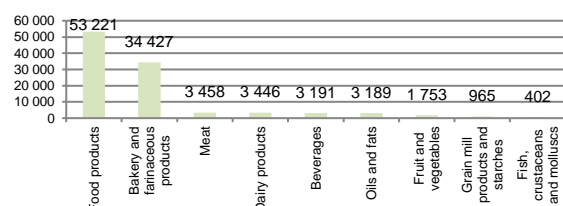


AGRICULTURAL PROCESSING

Table 8.6. Agriculture processing indicators (2014)

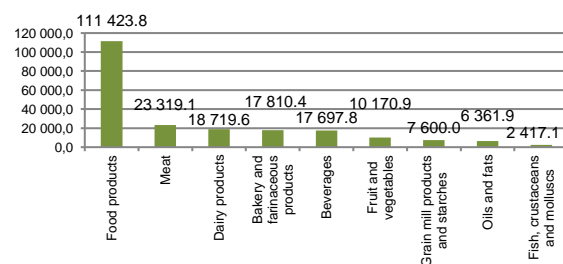
Enterprises that sell goods and/or services in manufacture sector		Food sector	Beverages sector
In other EU, EFTA or EU-candidate countries		377	73
In any other country than EU countries, EFTA or EU-candidate countries		234	73
Total turnover of innovative enterprises in agri-food sector (1000€)		76 187 775	16 507 234
Innovative enterprises in agri-food sector (%)		56.7%	73%

Figure 8.7. Enterprises in agri-food sector (2014)



Total number of enterprises in manufacturing sector: 396 422

Figure 8.8. Aggregate turnover of business enterprises (2014)



Aggregate turnover of business enterprises in manufacturing sector: 867 514.5

Figure 8.9. Average food and beverage consumption mix (2010, %)

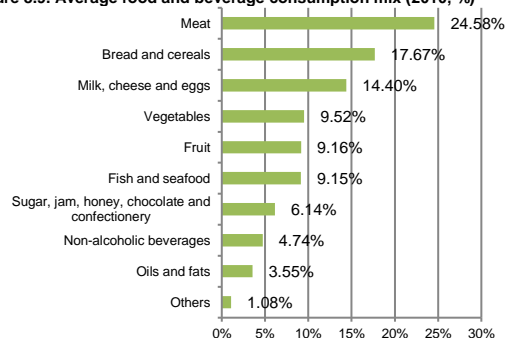
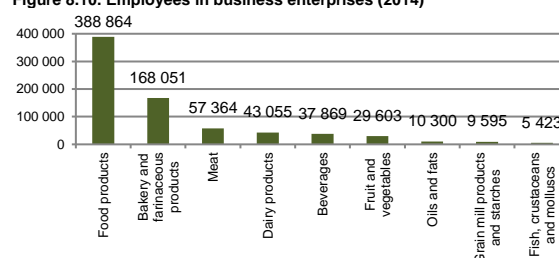
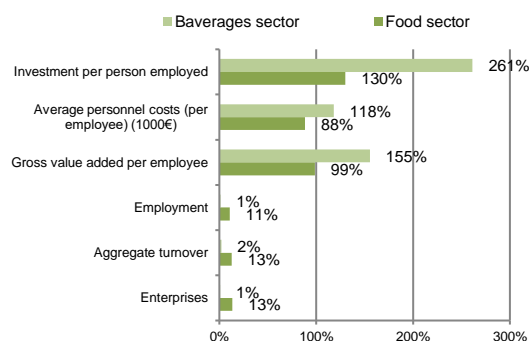


Figure 8.10. Employees in business enterprises (2014)



Employees in total manufacturing sector: 3 654 887

Figure 8.11. Manufacture of food products and beverages indicators compared to total manufacture (2014, %)



RESEARCH AND DEVELOPMENT

Table 8.7. Research and Development indicators (2014)

	m€	€ per inhab.
Business Expenditures on Research and Development of enterprises in food and beverages sectors	199.805	3.3
Researchers in business enterprises	176 527	
Researchers in food and beverages enterprises	4 638	
Agriculture in public R&D spending (% GBAORD)	3.18%	

Table 8.8. Top 3 areas of patent applications to the European Patent Office and European Union trademark registrations (2012, 2015)

Patent applications	
Furniture; domestic articles or appliances	180.91
Agriculture	78.3
Biological and chemical science	54.93
Trademark registrations	
Food	1 898
Pharmaceutical and veterinary preparations	697
Beverages	497

Figure 8.12. Enterprises engaging in innovation activities (%)

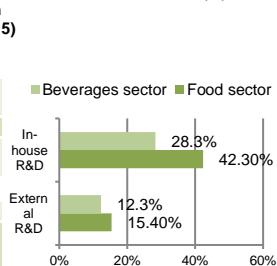


Figure 8.13. Enterprises engaging in cooperation (%)

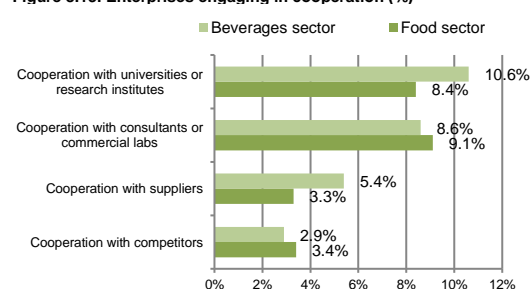


Table 8.9. Barriers to innovations (2014, % of enterprises)

Barrier	No compelling reason to innovate	Lack of internal finance	Difficulties in obtaining government grants or subsidies	Lack of credit or private equity	Low market demand
Food sector	75.3%	15%	17.1%	11.1%	18%
Beverages sector	69.6%	29.9%	13.6%	19%	9.8%

9. LATVIA

ECONOMY

Table 9.1. Macroeconomic indicators (2015)

Population (1st Jan.)	2016	2030 (forecast)	Total popul. change 2015
	1 968 957	1 743 960	-17 139
GDP at current prices	Total (m€)	Per capita (€)	
	24 368.3	12 300	
Export (m€)	14 360.7		
Export/GDP (%)	59%		
Import (m€)	14 636.3		
Import/GDP (%)	60%		
Length of motorways and express-roads (2013, km)	202		

AGRICULTURE

Table 9.2. Farm indicators (2015)

Gross value added of the agricultural industry	m€	% (2014)
	366.18	3.3%
Output of the agricultural industry (basic and producer prices, m€)	1 402.08	
Share of total utilised agricultural area occupied by organic farming (%)	12.3%	
Landuse (ha)	6 457 300	
Utilised agricultural area (2013)	ha	%
	1 877 720	29%
Total number of farms (2013)	254 410	
Average area of a farm (2013, ha)	Aver.	Natural Legal
	37.4	31.9 435.1
Number of tractors used in 2000-2009	59 562	

Figure 9.1. Landuse for agriculture (2013, %)

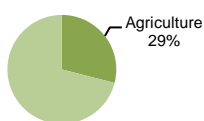


Figure 9.2. Types of farms (2013, %)

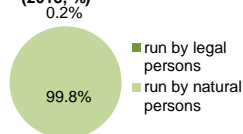


Table 9.3. Employment in agriculture

Agriculture in total employment (2014, %)	7.4%
Employment on farms (2013, annual working unit)	82 090

Figure 9.3. Standard output (SO) of farms (2013, €)

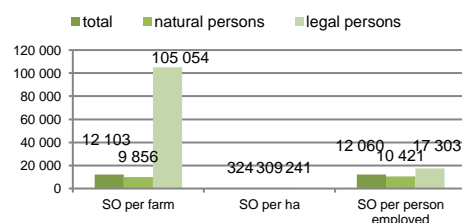


Table 9.4. Top types of plant and animal production compared with EU-28 production (2015)

Plant production	1000t	% of EU-28
Wheat and spelt	2 250,10	1.46%*
Barley	385,10	0.62%
Rape and turnip rape seeds	293.20	1.35%
Animal production		
Milk	807,66	0.53%
Cheese	38.38	0.40%*
Meat of poultry	29.52	0.24%*

Top 3 plant production area (1000 ha): wheat and spelt (447.30), barley (99.30), rape, turnip rape, sunflower seeds and soya (88.00).

Top 3 % of EU-28 plant and animal production: rye (3.68%), oats (2.11%), dry pulses and protein crops (2.03%*) and milk (0.53%), cheese (0.4%), butter (0.33%*).

* incomplete data

CONTACT DATA

Table 9.5. Environmental impacts of agri-food sector

Greenhouse Gas Emissions (CO2 equivalent) by agriculture (2015, % all sectors)	17.5%
Total waste generated (2014, t)	221 614
Share of waste recovered (2014, %)	58%
Water withdrawal by agriculture (2000, %)	11.6%
Total water withdrawal per capita (2000, m3/yr/cap)	176
Pesticides use (2000-2009, kg/ha)	0.6
Nitrogen, phosphate and potash fertilizers use (2009, kg/ha)	64.6

Figure 9.4. Expenditure on environmental protection by food and beverage sectors (2014)

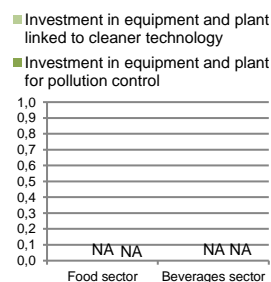


Figure 9.5. Emissions from agriculture in all emissions (2015, %)

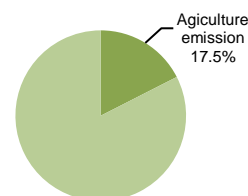
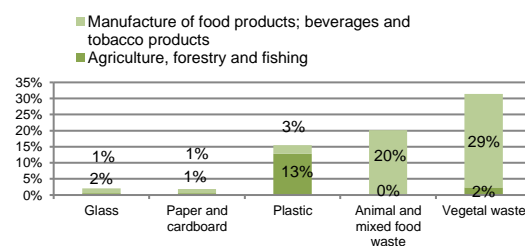


Figure 9.6. Generation of waste by agri-food sector (2014, % of total)

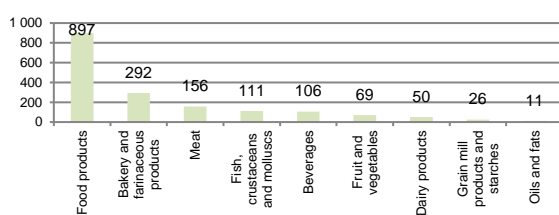


AGRICULTURAL PROCESSING

Table 9.6. Agriculture processing indicators (2014)

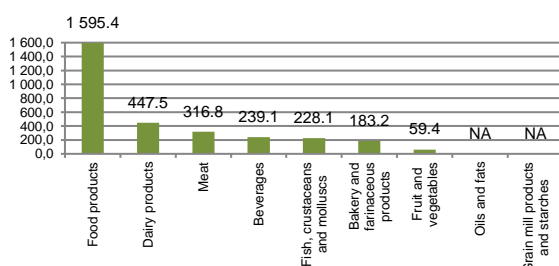
Enterprises that sell goods and/or services in manufacture sector		Food sector	Beverages sector
In other EU, EFTA or EU-candidate countries		5	1
In any other country than EU countries, EFTA or EU-candidate countries		4	1
Total turnover of innovative enterprises in agri-food sector (1000€)		942 977	188 934
Innovative enterprises in agri-food sector (%)		34.5%	17.6%

Figure 9.7. Enterprises in agri-food sector (2014)



Total number of enterprises in manufacturing sector: 9 806

Figure 9.8. Aggregate turnover of business enterprises (2014)



Aggregate turnover of business enterprises in manufacturing sector: 7 581.3

Figure 9.9. Average food and beverage consumption mix (2010, %)

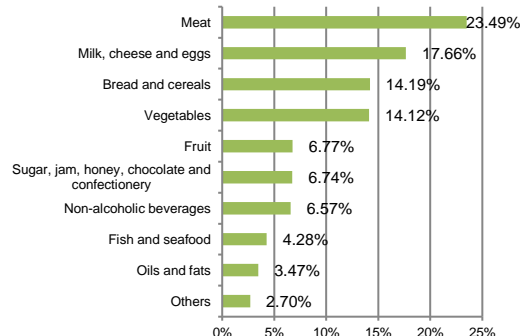
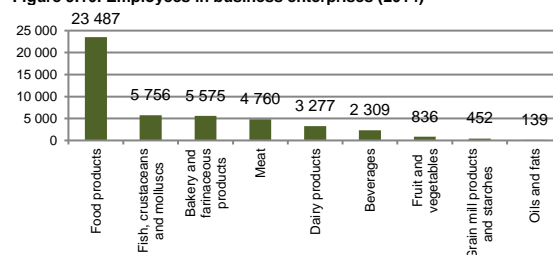
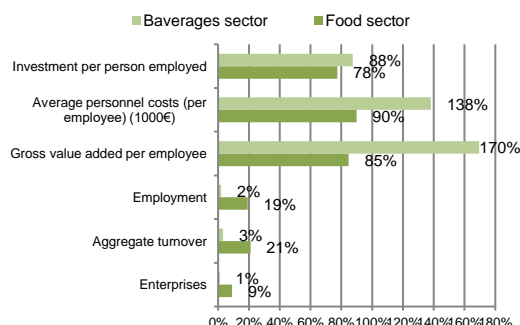


Figure 9.10. Employees in business enterprises (2014)



Employees in total manufacturing sector: 121 746

Figure 9.11. Manufacture of food products and beverages indicators compared to total manufacture (2014, %)



RESEARCH AND DEVELOPMENT

Table 9.7. Research and Development indicators (2014)

	m€	€ per inhab.
Business Expenditures on Research and Development of enterprises in food and beverages sectors	1	0.5
Researchers in business enterprises	2 341	
Researchers in food and beverages enterprises	63	
Agriculture in public R&D spending (% GBAORD)	18.06%	

Table 9.8. Top 3 areas of patent applications to the European Patent Office and European Union trademark registrations (2012, 2015)

Patent applications	
Food	1
Biological and chemical science	0.44
NA	NA
Trademark registrations	
Food	40
Pharmaceutical and veterinary preparations	11
Transport	11

Figure 9.12. Enterprises engaging in innovation activities (%)

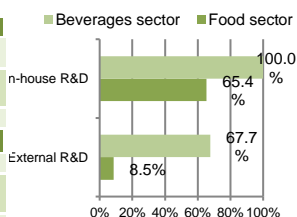


Figure 9.13. Enterprises engaging in cooperation (%)

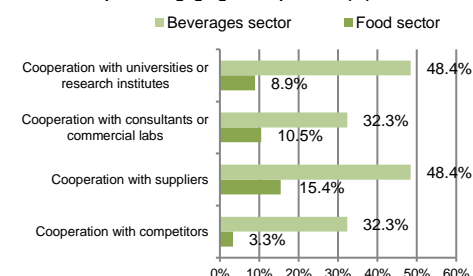


Table 9.9. Barriers to innovations (2014, % of enterprises)

Barrier	No compelling reason to innovate	Lack of good ideas	Low market demand	Little market competition	NA
Food sector	92.4%	26.8%	14.6%	12.2%	NA
Beverages sector	100%	3.4%	3.4%	3.4%	NA

10. LITHUANIA

ECONOMY

Table 10.1. Macroeconomic indicators (2015)

Population (1st Jan.)	2016	2030 (forecast)	Total popul. change 2015
	2 888 558	2 410 874	-32 704
GDP at current prices	Total (m€)	Per capita (€)	
	37 330.5	12 900	
Export (m€)	28 320		
Export/GDP (%)	76%		
Import (m€)	28 562.7		
Import/GDP (%)	77%		
Length of motorways and express-roads (2013, km)	1 948		

CONTACT DATA

AGRICULTURE

Table 10.2. Farm indicators (2015)

Gross value added of the agricultural industry	m€	% (2014)
	1 120.7	3.4%
Output of the agricultural industry (basic and producer prices, m€)	2 971.81	
Share of total utilised agricultural area occupied by organic farming (%)	7.1%	
Landuse (ha)	6 528 600	
Utilised agricultural area (2013)	ha	%
	2 861 250	44%
Total number of farms (2013)	171 800	
Average area of a farm (2013, ha)	Aver.	Natural Legal
	18.2	16.0 573.3
Number of tractors used in 2000-2009	117 580	

Figure 10.1. Landuse for agriculture (2013, %)

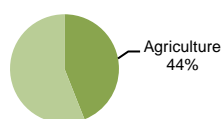


Figure 10.2. Types of farms (2013, %)

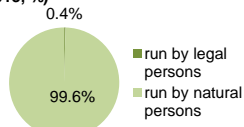


Table 10.3. Employment in agriculture

Agriculture in total employment (2014, %)	9.2%
Employment on farms (2013, annual working unit)	144 770

Figure 10.3. Standard output (SO) of farms (2013, €)

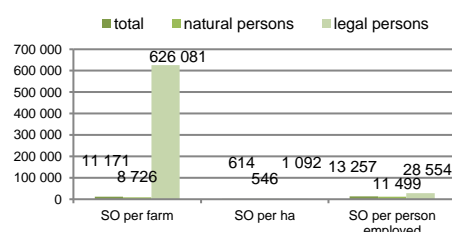


Table 10.4. Top types of plant and animal production compared with EU-28 production (2015)

Plant production	1000t	% of EU-28
Wheat and spelt	4380.33	2.85%*
Barley	811.52	1.31%
Sugar beet	619.48	0.61%
Animal production		
Milk	1438.03	0.95%
Cheese	100.96	1.06%*
Meat of poultry	95.79	0.76%*

Top 3 plant production area are (1000 ha): wheat and spelt (836.22), barley (202.40), rape, turnip rape, sunflower seeds and soya (166.15).

Top 3 % of EU-28 plant and animal production: dry pulses and protein crops (8.85%*), wheat and spelt (2.85%*), rye (2.48%*) and cheese (1.06%), milk (0.95%), fish production (0.91%*).

* incomplete data

Table 10.5. Environmental impacts of agri-food sector

Greenhouse Gas Emissions (CO2 equivalent) by agriculture (2015, % all sectors)	35.2%
Total waste generated (2014, t)	344 726
Share of waste recovered (2014, %)	58%
Water withdrawal by agriculture (2007, %)	3.4%
Total water withdrawal per capita (2007, m3/yr/cap)	704
Pesticides use (2000-2009, kg/ha)	1.1
Nitrogen, phosphate and potash fertilizers use (2009, kg/ha)	51.1

Figure 10.4. Expenditure on environmental protection by food and beverage sectors (2014)

Investment in equipment and plant linked to cleaner technology
Investment in equipment and plant for pollution control

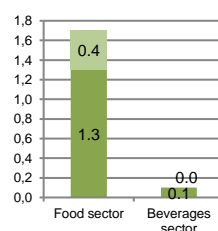


Figure 10.5. Emissions from agriculture in all emissions (2015, %)

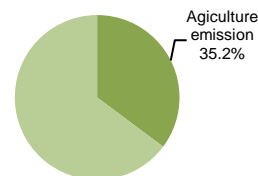
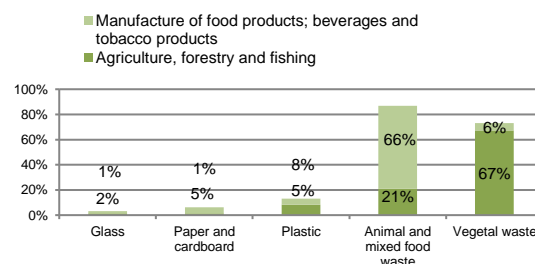


Figure 10.6. Generation of waste by agri-food sector (2014, % of total)

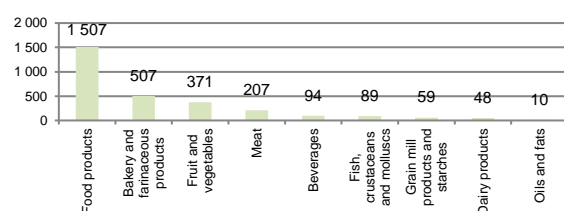


AGRICULTURAL PROCESSING

Table 10.6. Agriculture processing indicators (2014)

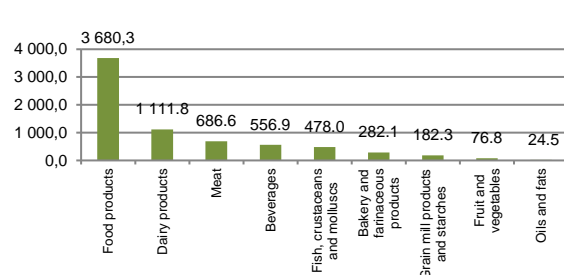
Enterprises that sell goods and/or services in manufacture sector		Food sector	Beverages sector
In other EU, EFTA or EU-candidate countries		NA	NA
In any other country than EU countries, EFTA or EU-candidate countries		NA	NA
Total turnover of innovative enterprises in agri-food sector (1000€)		NA	NA
Innovative enterprises in agri-food sector (%)		NA	NA

Figure 10.7. Enterprises in agri-food sector (2014)



Total number of enterprises in manufacturing sector: 17 975

Figure 10.8. Aggregate turnover of business enterprises (2014)



Aggregate turnover of business enterprises in manufacturing sector: 18 934.9

Figure 10.9. Average food and beverage consumption mix (2010, %)

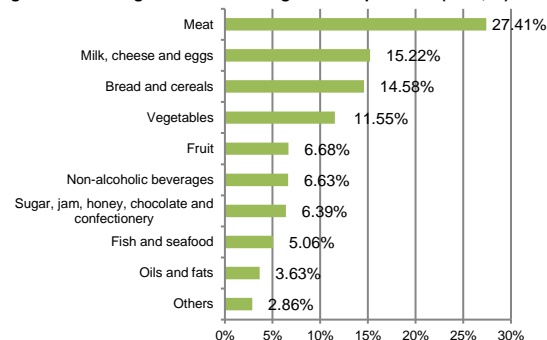
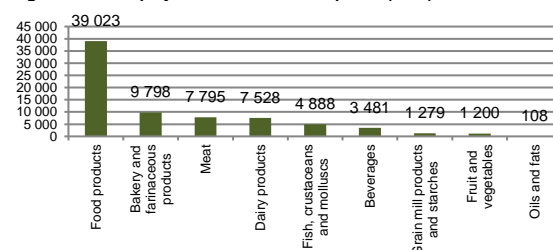
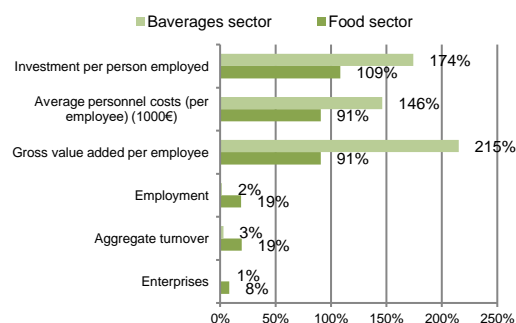


Figure 10.10. Employees in business enterprises (2014)



Employees in total manufacturing sector: 207 060

Figure 10.11. Manufacture of food products and beverages indicators compared to total manufacture (2014, %)



RESEARCH AND DEVELOPMENT

Table 10.7. Research and Development indicators (2014)

Business Expenditures on Research and Development of enterprises in food and beverages sectors	m€	€ per inhab.
	1.658	0.6
Researchers in business enterprises	5 642	
Researchers in food and beverages enterprises	94	
Agriculture in public R&D spending (% GBAORD)	5.7%	

Table 10.8. Top 3 areas of patent applications to the European Patent Office and European Union trademark registrations (2012, 2015)

Patent applications		
Biological and chemical science	6.62	
Agriculture	1	
Furniture; domestic articles or appliances	1	
Trademark registrations		
Food	63	
Beverages	24	
Pharmaceutical and veterinary preparations	18	

Figure 10.12. Enterprises engaging in innovation activities (%)

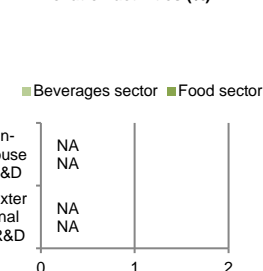


Figure 10.13. Enterprises engaging in cooperation (%)

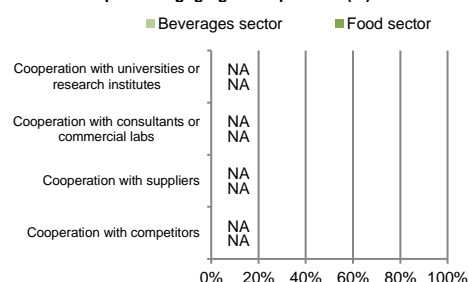


Table 10.9. Barriers to innovations (2014, % of enterprises)

Barrier	No compelling reason to innovate	Lack of good ideas	Lack of internal finance	Too much market competition	Difficulties in obtaining government grants or subsidies
Food sector	NA	NA	NA	NA	NA
Beverages sector	NA	NA	NA	NA	NA

11. MALTA

ECONOMY

Table 11.1. Macroeconomic indicators (2015)

Population (1st Jan.)	2016	2030 (forecast)	Total popul. change 2015
	434 403	488 632	5 059
GDP at current prices	Total (m€)		Per capita (€)
	9 250.3		21 400
Export (m€)	13 264.6		
Export/GDP (%)	143%		
Import (m€)	12 538.4		
Import/GDP (%)	136%		
Length of motorways and express-roads (2013, km)	NA		

AGRICULTURE

Table 11.2. Farm indicators (2015)

Gross value added of the agricultural industry	m€	% (2014)
	61.42	1.4
Output of the agricultural industry (basic and producer prices, m€)	128.07	
Share of total utilised agricultural area occupied by organic farming (%)	0.3%	
Landuse (ha)	31 540	
Utilised agricultural area (2013)	ha	%
	10 880	34%
Total number of farms (2013)	9 360	
Average area of a farm (2013, ha)	Aver.	Natural Legal
	1.3	1.2 5.8
Number of tractors used in 2000-2009	1 092	

Figure 11.1. Landuse for agriculture (2013, %)

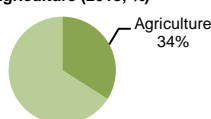


Figure 11.2. Types of farms (2013, %)

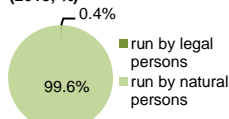


Table 11.3. Employment in agriculture

Agriculture in total employment (2014, %)	1.7%
Employment on farms (2013, annual working unit)	4 450

Figure 11.3. Standard output (SO) of farms (2013, €)

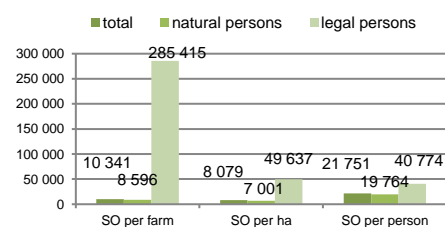


Table 11.4. Top types of plant and animal production compared with EU-28 production (2015)

Plant production	1000t	% of EU-28
Fresh vegetables and strawberries	61.42	0.12%*
Potatoes	8.02	0.01%
Grapes	5.11	0.02%
Animal production		
Milk	41.57	0.03%
Fish production	10.80	2.41%*
Meat of pigs	5.55	0.02%

Top 3 plant production area are (1000 ha): fresh vegetables and strawberries (2.00), potatoes (0.69), grapes (0.68).

Top 3 % of EU-28 plant and animal production: fresh vegetables and strawberries (0.12%), potatoes (0.02%), citrus fruits and grapes (0.02%*) and fish production (2.41%), meat of poultry (0.03%*), milk (0.03%).

* incomplete data

CONTACT DATA

Table 11.5. Environmental impacts of agri-food sector

Greenhouse Gas Emissions (CO2 equivalent) by agriculture (2015, % all sectors)	3.0%
Total waste generated (2014, t)	58 128
Share of waste recovered (2014, %)	41%
Water withdrawal by agriculture (2000, %)	35.3%
Total water withdrawal per capita (2000, m3/yr/cap)	134
Pesticides use (2000-2009, kg/ha)	13
Nitrogen, phosphate and potash fertilizers use (2009, kg/ha)	65.1

Figure 11.4. Expenditure on environmental protection by food and beverage sectors (2014)

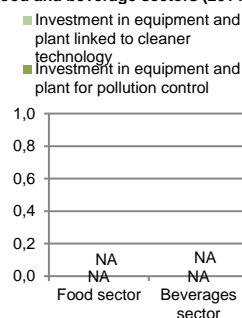


Figure 11.5. Emissions from agriculture in all emissions (2015, %)

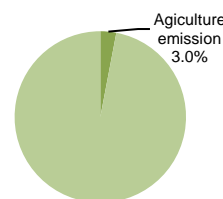
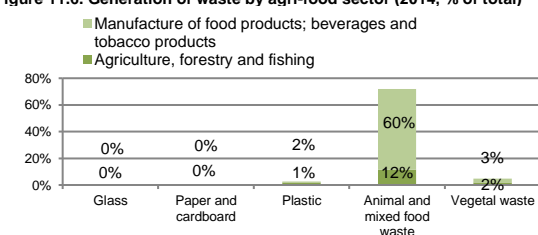


Figure 11.6. Generation of waste by agri-food sector (2014, % of total)

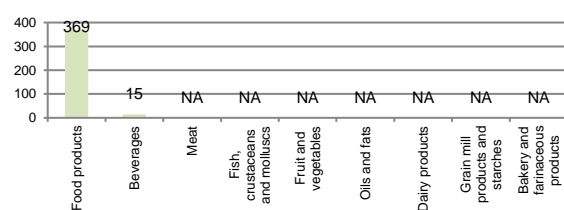


AGRICULTURAL PROCESSING

Table 11.6. Agriculture processing indicators (2014)

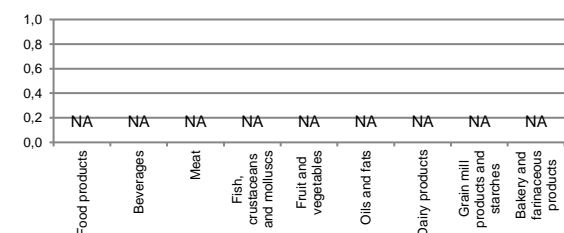
Enterprises that sell goods and/or services in manufacture sector		Food sector	Beverages sector
In other EU, EFTA or EU-candidate countries		2	NA
In any other country than EU countries, EFTA or EU-candidate countries		1	NA
Total turnover of innovative enterprises in agri-food sector (1000€)		NA	47.9
Innovative enterprises in agri-food sector (%)		NA	NA

Figure 11.7. Enterprises in agri-food sector (2014)



Total number of enterprises in manufacturing sector: NA

Figure 11.8. Aggregate turnover of business enterprises (2014)



Aggregate turnover of business enterprises in manufacturing sector: NA

Figure 11.9. Average food and beverage consumption mix (2010, %)

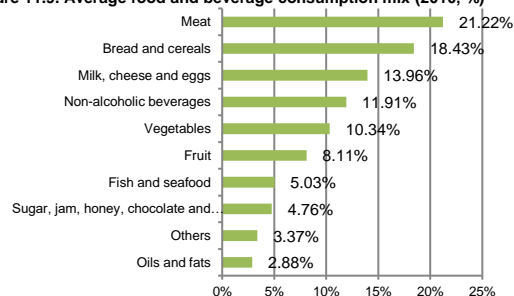
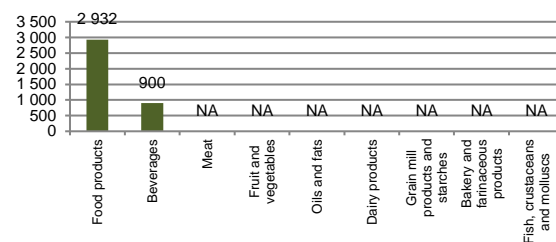


Figure 11.10. Employees in business enterprises (2014)



Employees in total manufacturing sector: NA

Figure 11.11. Manufacture of food products and beverages indicators compared to total manufacture (2014, %)



RESEARCH AND DEVELOPMENT

Table 11.7. Research and Development indicators (2014)

	m€	€ per inhab.
Business Expenditures on Research and Development of enterprises in food and beverages sectors	0.969	2.3
Researchers in business enterprises	1 077	
Researchers in food and beverages enterprises	34	
Agriculture in public R&D spending (% GBAORD)	2.44%	

Table 11.8. Top 3 areas of patent applications to the European Patent Office and European Union trademark registrations (2012, 2015)

Patent applications	
Furniture; domestic articles or appliances	1
NA	NA
NA	NA
Trademark registrations	
Food	27
Transport	16
Pharmaceutical and veterinary preparations	15

Figure 11.12. Enterprises engaging in innovation activities (%)

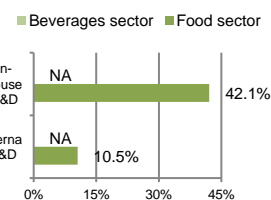


Figure 11.13. Enterprises engaging in cooperation (%)

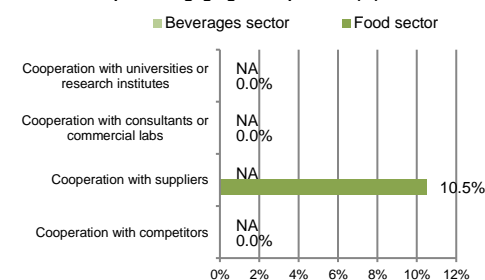


Table 11.9. Barriers to innovations (2014, % of enterprises)

Barrier	No compelling reason to innovate	Low market demand	Little market competition	Lack of good ideas	NA
Food sector	100%	12.0%	8.0%	4.0%	NA
Beverages sector	NA	NA	NA	NA	NA

12. POLAND

ECONOMY

Table 12.1. Macroeconomic indicators (2015)

Population (1st Jan.)	2016	2030 (forecast)	Total popul. change 2015
	37 967 209	37 213 790	-38 405
GDP at current prices	Total (m€)		Per capita (€)
	429 794.2		11 200
Export (m€)	212 966.9		
Export/GDP (%)	50%		
Import (m€)	199 659.2		
Import/GDP (%)	46%		
Length of motorways and express-roads (2013, km)	6 982		

AGRICULTURE

Table 12.2. Farm indicators (2015)

Gross value added of the agricultural industry	m€	% (2014)
	7 857.44	2.9%
Output of the agricultural industry (basic and producer prices, m€)	22 349.35	
Share of total utilised agricultural area occupied by organic farming (%)	4.0%	
Landuse (ha)	31 267 900	
Utilised agricultural area (2013)	ha	%
	14 409 870	46%
Total number of farms (2013)	1 429 010	
Average area of a farm (2013, ha)	Aver.	Natural Legal
	11.5	10.5 424.6
Number of tractors used in 2000-2009	1 577 290	

Figure 12.1. Landuse for agriculture (2013, %)

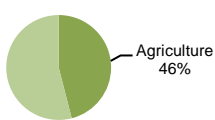


Figure 12.2. Types of farms (2013, %)

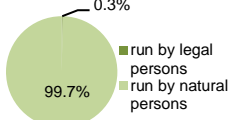


Table 12.3. Employment in agriculture

Agriculture in total employment (2014, %)	11.5%
Employment on farms (2013, annual working unit)	1 918 550

Figure 12.3. Standard output (SO) of farms (2013, €)

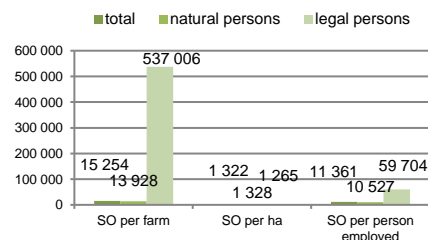


Table 12.4. Top types of plant and animal production compared with EU-28 production (2015)

Plant production	1000t	% of EU-28
Wheat and spelt	10 957.80	7.13%*
Sugar beet	9 364.50	9.19%
Potatoes	6 151.80	11.57%
Animal production		
Milk	10 874.28	7.17%
Meat of poultry	2 011.04	16.05%*
Meat of pigs	1 906.11	8.32%

Top 3 plant production area are (1000 ha): wheat and spelt (2395.50), rape, turnip rape, sunflower seeds and soya (954.60), barley (839.30).

Top 3 % of EU-28 plant and animal production: rye (46.36%*), fruits, berries and nuts (19.36%*), oats (16.06%) and meat of poultry (16.05%*), butter (9.00%*), meat of pigs (8.32%).

* incomplete data

CONTACT DATA

Table 12.5. Environmental impacts of agri-food sector

Greenhouse Gas Emissions (CO2 equivalent) by agriculture (2015, % all sectors)	8.8%
Total waste generated (2014, t)	4 845 959
Share of waste recovered (2014, %)	60%
Water withdrawal by agriculture (2009, %)	9.7%
Total water withdrawal per capita (2009, m3/yr/cap)	313
Pesticides use (2000-2009, kg/ha)	1.3
Nitrogen, phosphate and potash fertilizers use (2009, kg/ha)	137.4

Figure 12.4. Expenditure on environmental protection by food and beverage sectors (2014)

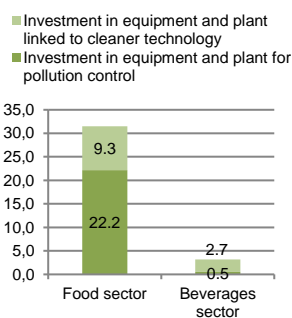


Figure 12.5. Emissions from agriculture in all emissions (2015, %)

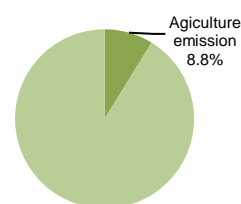
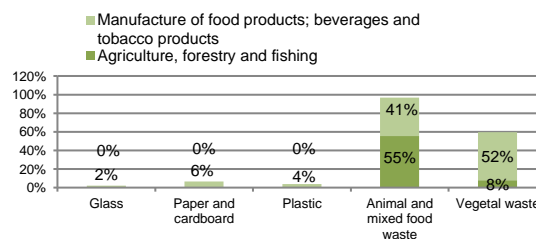


Figure 12.6. Generation of waste by agri-food sector (2014, % of total)

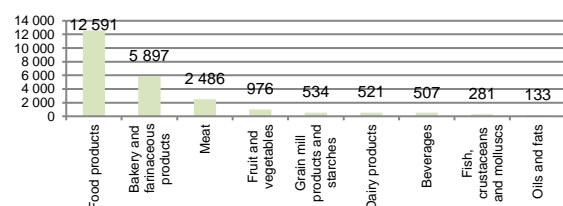


AGRICULTURAL PROCESSING

Table 12.6. Agriculture processing indicators (2014)

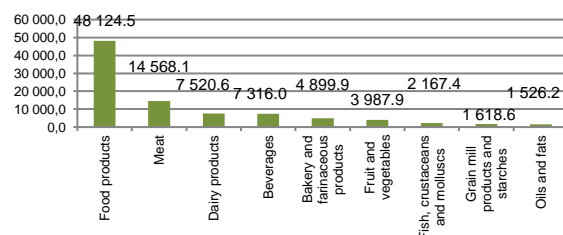
Enterprises that sell goods and/or services in manufacture sector		Food sector	Beverages sector
In other EU, EFTA or EU-candidate countries		114	14
In any other country than EU countries, EFTA or EU-candidate countries		82	7
Total turnover of innovative enterprises in agri-food sector (1000€)		23 004 477	4 901 281
Innovative enterprises in agri-food sector (%)		15.7%	43.6%

Figure 12.7. Enterprises in agri-food sector (2014)



Total number of enterprises in manufacturing sector: 180 639

Figure 12.8. Aggregate turnover of business enterprises (2014)



Aggregate turnover of business enterprises in manufacturing sector: 281 252.9

Figure 12.9. Average food and beverage consumption mix (2010, %)

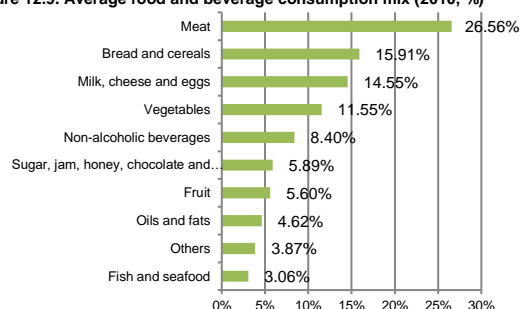
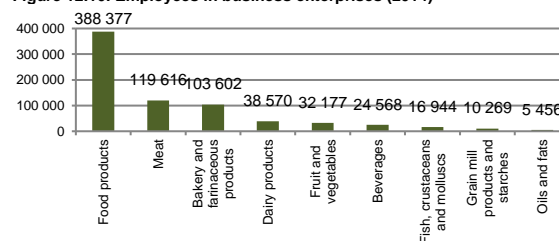
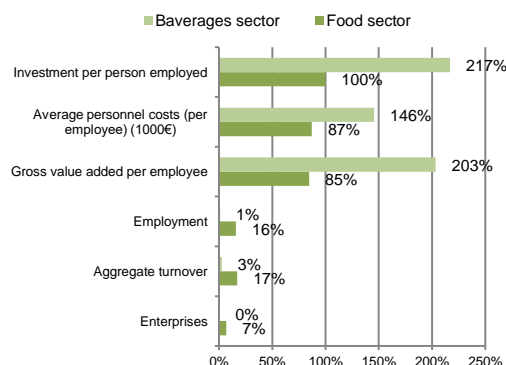


Figure 12.10. Employees in business enterprises (2014)



Employees in total manufacturing sector: 2 425 350

Figure 12.11. Manufacture of food products and beverages indicators compared to total manufacture (2014, %)



RESEARCH AND DEVELOPMENT

Table 12.7. Research and Development indicators (2014)

Business Expenditures on Research and Development of enterprises in food and beverages sectors	m€	€ per inhab.
Researchers in business enterprises	43 185	NA
Researchers in food and beverages enterprises	NA	NA
Agriculture in public R&D spending (% GBAORD)	3.12%	NA

Table 12.8. Top 3 areas of patent applications to the European Patent Office and European Union trademark registrations (2012, 2015)

Patent applications	
Biological and chemical science	10.86
Agriculture	10.8
Furniture; domestic articles or appliances	10.22
Trademark registrations	
Food	486
Pharmaceutical and veterinary preparations	381
Transport	217

Figure 12.12. Enterprises engaging in innovation activities (%)

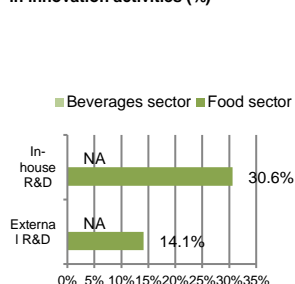


Figure 12.13. Enterprises engaging in cooperation (%)

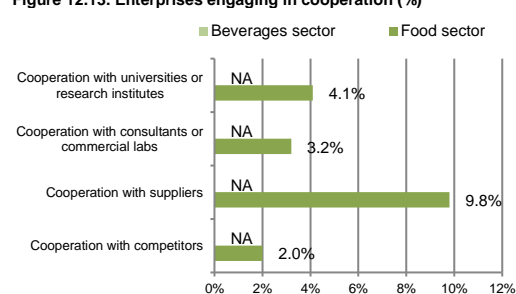


Table 12.9. Barriers to innovations (2014, % of enterprises)

Barrier	No compelling reason to innovate	Lack of internal finance	Uncertain market demand	Too much market competition	Lack of credit or private equity
Food sector	75.0%	25.1%	22.0%	21.4%	13.1%
Beverages sector	57.7%	30.9%	NA	NA	NA

13. PORTUGAL

ECONOMY

Table 13.1. Macroeconomic indicators (2015)

Population (1st Jan.)	2016	2030 (forecast)	Total popul. change 2015
	10 341 330	9 880 173	-33 492
GDP at current prices	Total (m€)		Per capita (€)
	179 539.9		17 300
Export (m€)	72 812.4		
Export/GDP (%)	41%		
Import (m€)	71 502.7		
Import/GDP (%)	40%		
Length of motorways and express-roads (2013, km)	5 276		

AGRICULTURE

Table 13.2. Farm indicators (2015)

Gross value added of the agricultural industry	m€	% (2014)
	2 633.51	2.3
Output of the agricultural industry (basic and producer prices, m€)	7 079.88	
Share of total utilised agricultural area occupied by organic farming (%)	6.5%	
Landuse (ha)	9 222 600	
Utilised agricultural area (2013)	ha	%
	3 641 590	39%
Total number of farms (2013)	264 420	
Average area of a farm (2013, ha)	Aver.	Natural Legal
	17.5	12.2 143.3
Number of tractors used in 2000-2009	176 394	

Figure 13.1. Landuse for agriculture (2013, %)

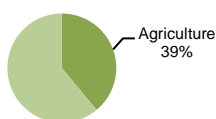


Figure 13.2. Types of farms (2013, %)

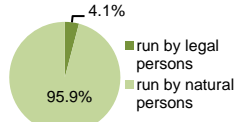


Table 13.3. Employment in agriculture

Agriculture in total employment (2014, %)	11.3%
Employment on farms (2013, annual working unit)	323 470

Figure 13.3. Standard output (SO) of farms (2013, €)

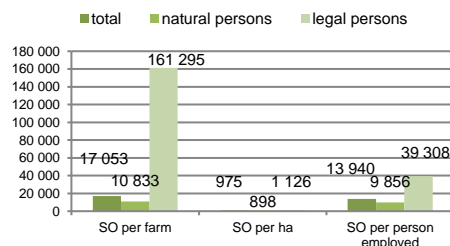


Table 13.4. Top types of plant and animal production compared with EU-28 production (2015)

Plant production	1000t	% of EU-28
Fresh vegetables and strawberries	2 224.36	4.36%*
Grapes	934.63	3.65%
Maize	827.54	1.40%
Animal production		
Milk	1 935.42	1.28%
Meat of pigs	377.46	1.65%
Meat of poultry	308.69	2.46%*

Top 3 plant production area are (1000 ha): olives (351.34), fruits, berries and nuts (186.11), grapes (178.96).

Top 3 % of EU-28 plant and animal production: rice (6.28%), olives (5.74%*), fresh vegetables and strawberries (4.36%*) and meat of poultry (2.46%*), meat of pigs (1.65%), butter (1.55%).

* incomplete data

CONTACT DATA

Table 13.5. Environmental impacts of agri-food sector

Greenhouse Gas Emissions (CO2 equivalent) by agriculture (2015, % all sectors)	13.3%
Total waste generated (2014, t)	1 575 304
Share of waste recovered (2014, %)	64%
Water withdrawal by agriculture (2002, %)	73%
Total water withdrawal per capita (2002, m3/yr/cap)	812
Pesticides use (2000-2009, kg/ha)	6.4
Nitrogen, phosphate and potash fertilizers use (2009, kg/ha)	83.7

Figure 13.4. Expenditure on environmental protection by food and beverage sectors (2014)

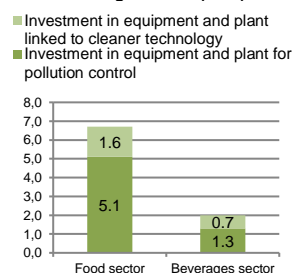


Figure 13.5. Emissions from agriculture in all emissions (2015, %)

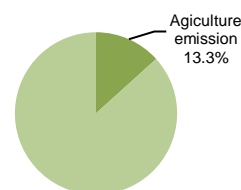
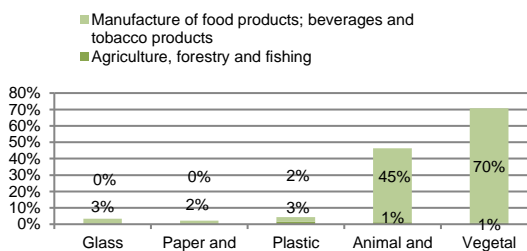


Figure 13.6. Generation of waste by agri-food sector (2014, % of total)

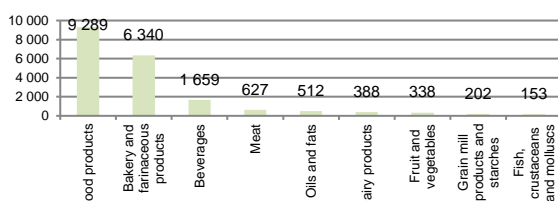


AGRICULTURAL PROCESSING

Table 13.6. Agriculture processing indicators (2014)

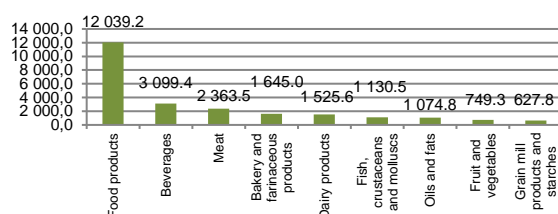
Enterprises that sell goods and/or services in manufacture sector		Food sector	Beverages sector
In other EU, EFTA or EU-candidate countries		79	25
In any other country than EU countries, EFTA or EU-candidate countries		60	22
Total turnover of innovative enterprises in agri-food sector (1000€)		8 356 641	2 397 456
Innovative enterprises in agri-food sector (%)		55.9%	67.1%

Figure 13.7. Enterprises in agri-food sector (2014)



Total number of enterprises in manufacturing sector: 66 201

Figure 13.8. Aggregate turnover of business enterprises (2014)



Aggregate turnover of business enterprises in manufacturing sector: 80 583.6

Figure 13.9. Average food and beverage consumption mix (2010, %)

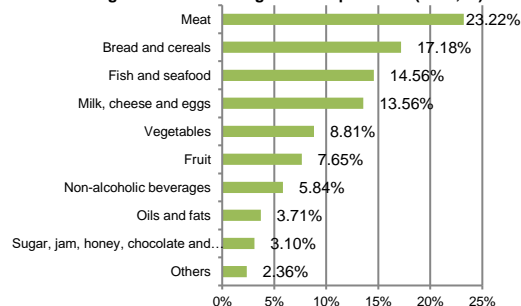
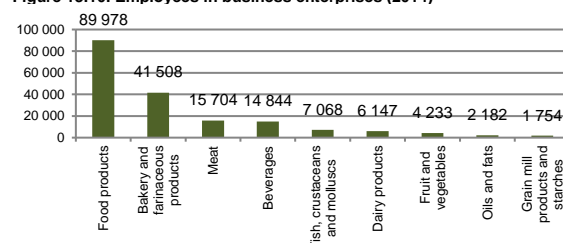
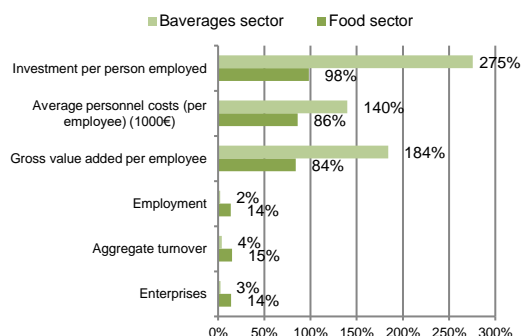


Figure 13.10. Employees in business enterprises (2014)



Employees in total manufacturing sector: 650 628

Figure 13.11. Manufacture of food products and beverages indicators compared to total manufacture (2014, %)



RESEARCH AND DEVELOPMENT

Table 13.7. Research and Development indicators (2014)

	m€	€ per inhab.
Business Expenditures on Research and Development of enterprises in food and beverages sectors	56.095	5.4
Researchers in business enterprises	35 609	
Researchers in food and beverages enterprises	1 339	
Agriculture in public R&D spending (% GBAORD)	3.55%	

Table 13.8. Top 3 areas of patent applications to the European Patent Office and European Union trademark registrations (2012, 2015)

Patent applications	
Agriculture	7.57
Furniture; domestic articles or appliances	4.5
Biological and chemical science	4.07
Trademark registrations	
Food	239
Transport	67
Pharmaceutical and veterinary preparations	56

Figure 13.12. Enterprises engaging in innovation activities (%)

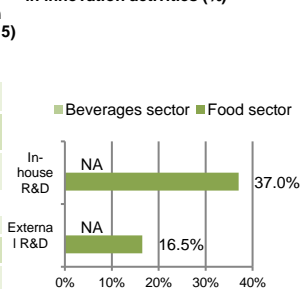


Figure 13.13. Enterprises engaging in cooperation (%)

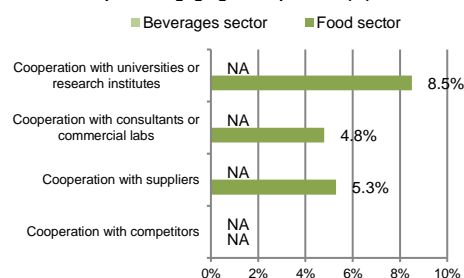


Table 13.9. Barriers to innovations (2014, % of enterprises)

Barrier	No compelling reason to innovate	Lack of internal finance	Lack of good ideas	Difficulties in obtaining government grants or subsidies	Lack of credit or private equity
Food sector	75.1%	18.0%	7.9%	12.5%	13.9%
Beverages sector	73.0%	14.5%	18.9%	12.1%	9.1%

14. ROMANIA

ECONOMY

Table 14.1. Macroeconomic indicators (2015)

Population (1st Jan.)	2016	2030 (forecast)	Total popul. change 2015
	19 760 314	18 023 954	-110 333
GDP at current prices	Total (m€)	Per capita (€)	
	159 963.7	8 100	
Export (m€)	65 759.4		
Export/GDP (%)	41%		
Import (m€)	66 743.0		
Import/GDP (%)	42%		
Length of motorways and express-roads (2013, km)	6 913		

CONTACT DATA

AGRICULTURE

Table 14.2. Farm indicators (2015)

Gross value added of the agricultural industry	m€	% (2014)
	6 488.19	5.3%
Output of the agricultural industry (basic and producer prices, m€)	15 465.33	
Share of total utilised agricultural area occupied by organic farming (%)	1.8%	
Landuse (ha)	23 839 070	
Utilised agricultural area (2013)	ha	%
	13 055 850	55%
Total number of farms (2013)	3 629 660	
Average area of a farm (2013, ha)	Aver.	Natural Legal
	4.0	2.2 246.4
Number of tractors used in 2000-2009	176 841	

Figure 14.1. Landuse for agriculture (2013, %)

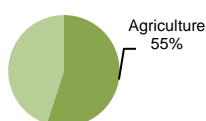


Figure 14.2. Types of farms (2013, %)

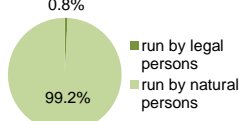


Table 14.3. Employment in agriculture

Agriculture in total employment (2014, %)	29.4%
Employment on farms (2013, annual working unit)	1 552 630

Figure 14.3. Standard output (SO) of farms (2013, €)

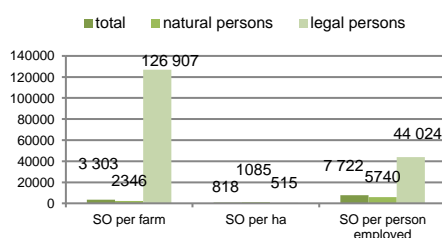


Table 14.4. Top types of plant and animal production compared with EU-28 production (2015)

Plant production	1000t	% of EU-28
Maize	8 984.74	1.69%
Wheat and spelt	7 962.42	5.18%*
Potatoes	2625.02	4.94%
Animal production		
Milk	919.3	0.61%
Meat of poultry	374.79	2.99%*
Meat of pigs	330.47	1.44%

Top 3 plant production area are (1000 ha): maize (2607.37), wheat and spelt (2106.59), sunflower seeds (1 011.52).

Top 3 % of EU-28 plant and animal production: sunflower seed (22.59%), maize (15.25%), soya (10.74%) and meat of poultry (2.99%*), meat of pigs (1.44%), meat of sheep and goats (1.21%*).

* incomplete data

Table 14.5. Environmental impacts of agri-food sector

Greenhouse Gas Emissions (CO2 equivalent) by agriculture (2015, % all sectors)	18.8%
Total waste generated (2014, t)	NA
Share of waste recovered (2014, %)	NA
Water withdrawal by agriculture (2009, %)	17%
Total water withdrawal per capita (2009, m3/yr/cap)	320
Pesticides use (2000-2009, kg/ha)	0.7
Nitrogen, phosphate and potash fertilizers use (2009, kg/ha)	46.1

Figure 14.4. Expenditure on environmental protection by food and beverage sectors (2014)

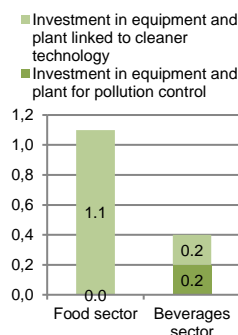


Figure 14.5. Emissions from agriculture in all emissions (2015, %)

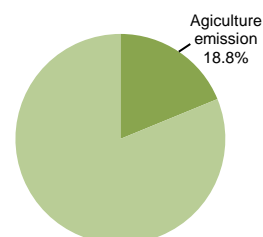
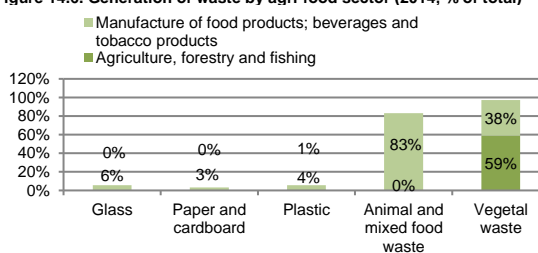


Figure 14.6. Generation of waste by agri-food sector (2014, % of total)

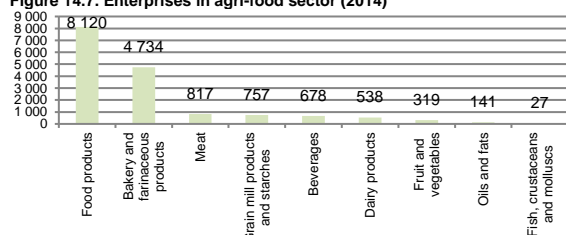


AGRICULTURAL PROCESSING

Table 14.6. Agriculture processing indicators (2014)

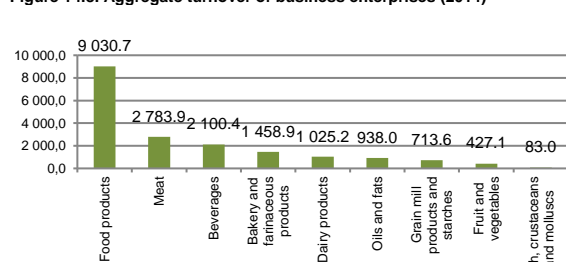
Enterprises that sell goods and/or services in manufacture sector		Food sector	Beverages sector
In other EU, EFTA or EU-candidate countries		NA	NA
In any other country than EU countries, EFTA or EU-candidate countries		NA	NA
Total turnover of innovative enterprises in agri-food sector (1000€)		2 733 771	734 419
Innovative enterprises in agri-food sector (%)		14.0	NA

Figure 14.7. Enterprises in agri-food sector (2014)



Total number of enterprises in manufacturing sector: 48 091

Figure 14.8. Aggregate turnover of business enterprises (2014)



Aggregate turnover of business enterprises in manufacturing sector: 68 894.1

Figure 14.9. Average food and beverage consumption mix (2010, %)

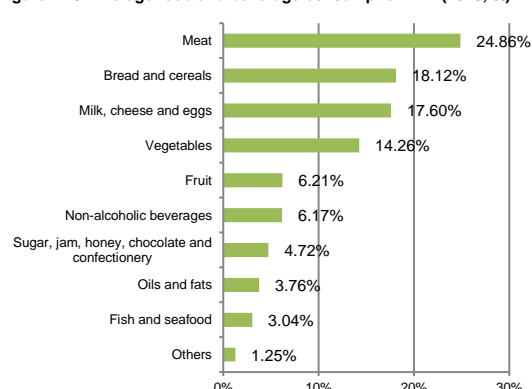
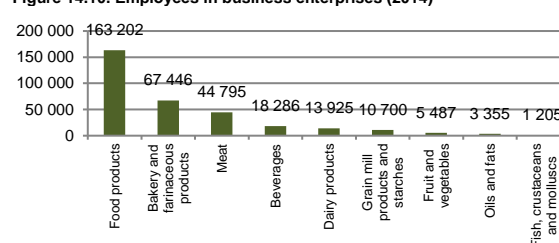
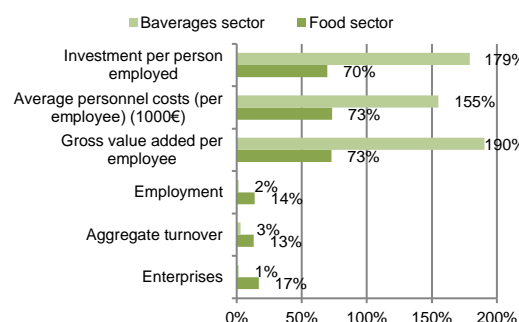


Figure 14.10. Employees in business enterprises (2014)



Employees in total manufacturing sector: 1 180 098

Figure 14.11. Manufacture of food products and beverages indicators compared to total manufacture (2014, %)



RESEARCH AND DEVELOPMENT

Table 14.7. Research and Development indicators (2014)

	m€	€ per inhab.
Business Expenditures on Research and Development of enterprises in food and beverages sectors	11.617	0.6
Researchers in business enterprises	11 681	
Researchers in food and beverages enterprises	110	
Agriculture in public R&D spending (% GBAORD)	5.08%	

Table 14.8. Top 3 areas of patent applications to the European Patent Office and European Union trademark registrations (2012, 2015)

Patent applications	
Agriculture	4.82
Biological and chemical science	1.67
Food	1.61
Trademark registrations	
Food	123
Transport	67
Pharmaceutical and veterinary preparations	43

Figure 14.12. Enterprises engaging in innovation activities (%)

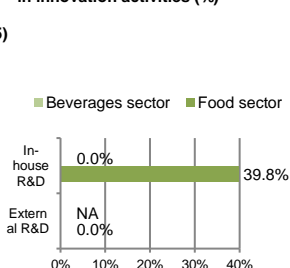


Figure 14.13. Enterprises engaging in cooperation (%)

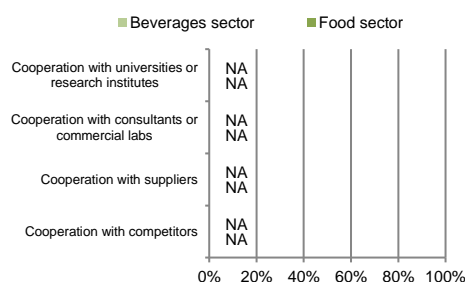


Table 14.9. Barriers to innovations (2014, % of enterprises)

Barrier	No compelling reason to innovate	Lack of good ideas	Lack of internal finance	Too much market competition	Difficulties in obtaining government grants or subsidies
Food sector	86.7%	7.5%	3.2%	2.7%	1.8%
Beverages sector	NA	NA	NA	NA	NA

15. SLOVAKIA

ECONOMY

Table 15.1. Macroeconomic indicators (2015)

Population (1st Jan.)	2016	2030 (forecast)	Total popul. change 2015
	5 426 252	5 464 199	4 903
GDP at current prices	Total (m€)		Per capita (€)
	78 685.6		14 500
Export (m€)	73 561.8		
Export/GDP (%)	93%		
Import (m€)	71 653.6		
Import/GDP (%)	91%		
Length of motorways and express-roads (2013, km)	1 948		

CONTACT DATA

AGRICULTURE

Table 15.2. Farm indicators (2015)

Gross value added of the agricultural industry	m€	% (2014)
	473.78	4.4%
Output of the agricultural industry (basic and producer prices, m€)	2 160.67	
Share of total utilised agricultural area occupied by organic farming (%)	9.6%	
Landuse (ha)	4 903 500	
Utilised agricultural area (2013)	ha	%
	1 901 610	39%
Total number of farms (2013)	23 570	
Average area of a farm (2013, ha)	Aver.	Natural Legal
	130.1	18.0 982.3
Number of tractors used in 2000-2009	21 372	

Figure 15.1. Landuse for agriculture (2013, %)

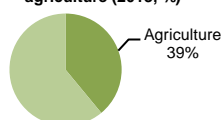


Figure 15.2. Types of farms (2013, %)

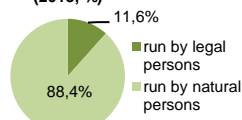


Table 15.3. Employment in agriculture

Agriculture in total employment (2014, %)	3.3%
Employment on farms (2013, annual working unit)	50 600

Figure 15.3. Standard output (SO) of farms (2013, €)

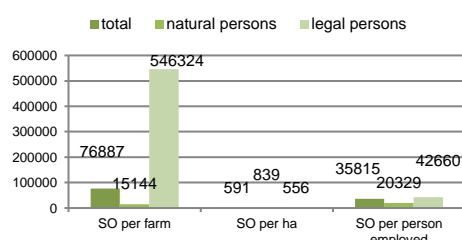


Table 15.4. Top types of plant and animal production compared with EU-28 production (2015)

Plant production	1000t	% of EU-28
Wheat and spelt	2 082.13	1.36%*
Sugar beet	1205.45	1.18%
Maize	929.23	1.58%
Animal production		
Milk	864.63	0.57%
Meat of pigs	45.24	0.20%
Cheese	35.76	0.38%*

Top 3 plant production area are (1000 ha): wheat and spelt (377.90), rape, turnip rape, sunflower seeds and soya (238.08), maize (191.44).

Top 3 % of EU-28 plant and animal production: soya (2.54%), sunflower seed (2.20%), maize (1.58%) and milk (0.57%), butter (0.43%*), cheese (0.38%*).

* incomplete data

Table 15.5. Environmental impacts of agri-food sector

Greenhouse Gas Emissions (CO2 equivalent) by agriculture (2015, % all sectors)	9.0%
Total waste generated (2014, t)	463 613
Share of waste recovered (2014, %)	68%
Water withdrawal by agriculture (2007, %)	3.2%
Total water withdrawal per capita (2007, m3/yr/cap)	127
Pesticides use (2000-2009, kg/ha)	1.1
Nitrogen, phosphate and potash fertilizers use (2009, kg/ha)	77

Figure 15.4. Expenditure on environmental protection by food and beverage sectors (2014)

Investment in equipment and plant linked to cleaner technology
Investment in equipment and plant for pollution control



Figure 15.5. Emissions from agriculture in all emissions (2015, %)

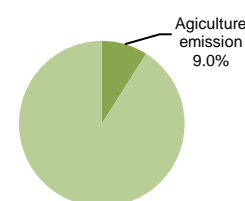
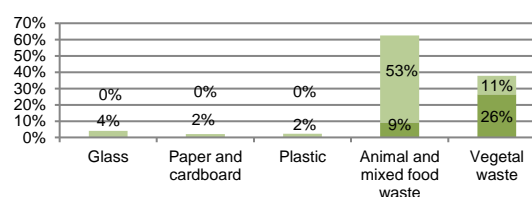


Figure 15.6. Generation of waste by agri-food sector (2014, % of total)

Manufacture of food products; beverages and tobacco products
Agriculture, forestry and fishing

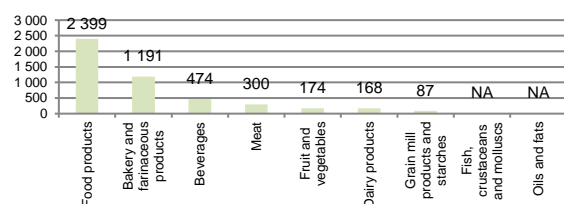


AGRICULTURAL PROCESSING

Table 15.6. Agriculture processing indicators (2014)

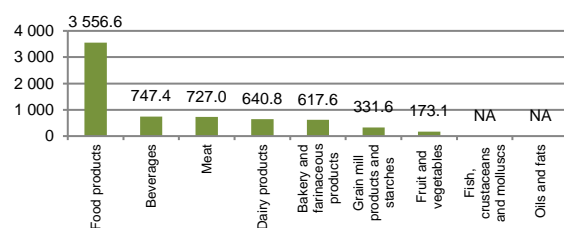
Enterprises that sell goods and/or services in manufacture sector		Food sector	Beverages sector
	In other EU, EFTA or EU-candidate countries	41	6
	In any other country than EU countries, EFTA or EU-candidate countries	15	3
Total turnover of innovative enterprises in agri-food sector (1000€)		1 794 416	608 554
Innovative enterprises in agri-food sector (%)		43.0%	50.8%

Figure 15.7. Enterprises in agri-food sector (2014)



Total number of enterprises in manufacturing sector: 64 975

Figure 15.8. Aggregate turnover of business enterprises (2014)



Aggregate turnover of business enterprises in manufacturing sector: 67 311.9

Figure 15.9. Average food and beverage consumption mix (2010, %)

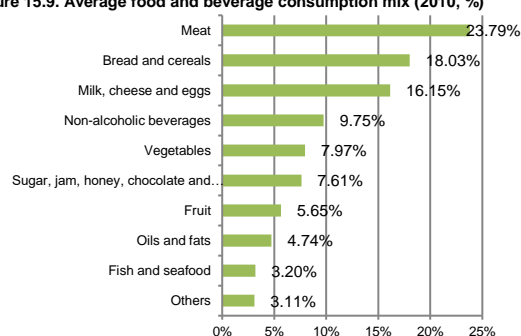
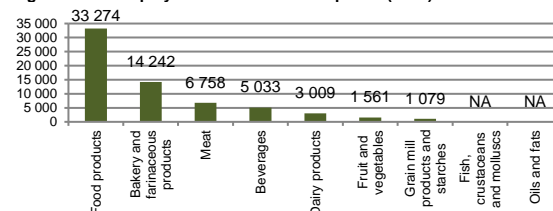
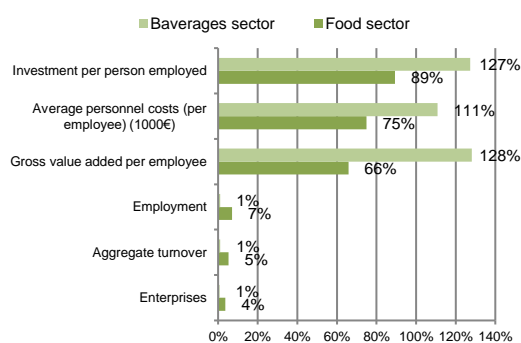


Figure 15.10. Employees in business enterprises (2014)



Employees in total manufacturing sector: 467 686

Figure 15.11. Manufacture of food products and beverages indicators compared to total manufacture (2014, %)



RESEARCH AND DEVELOPMENT

Table 15.7. Research and Development indicators (2014)

Business Expenditures on Research and Development of enterprises in food and beverages sectors	m€	€ per inhab.
	0.91	0.2
Researchers in business enterprises	5 397	
Researchers in food and beverages enterprises	30	
Agriculture in public R&D spending (% GBAORD)	3.36%	

Table 15.8. Top 3 areas of patent applications to the European Patent Office and European Union trademark registrations (2012, 2015)

Patent applications	
Furniture; domestic articles or appliances	1.33
Food	1
Biological and chemical science	0.07
Trademark registrations	
Food	49
Transport	31
Pharmaceutical and veterinary preparations	25

Figure 15.12. Enterprises engaging in innovation activities (%)

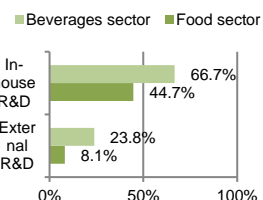


Figure 15.13. Enterprises engaging in cooperation (%)

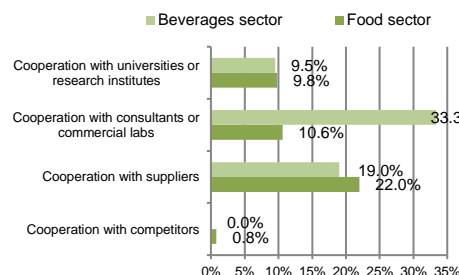


Table 15.9. Barriers to innovations (2014, % of enterprises)

Barrier	No compelling reason to innovate	Lack of internal finance	Difficulties in obtaining government grants or subsidies	Low market demand	Too much market competition
Food sector	57.8%	31.8%	24.2%	19.9%	17.1%
Beverages sector	36.7%	43.3%	16.7%	13.3%	13.3%

16. SLOVENIA

ECONOMY

Table 16.1. Macroeconomic indicators (2015)

Population (1st Jan.)	2016	2030 (forecast)	Total popul. change 2015
	2 064 188	2 080 145	1 314
GDP at current prices	Total (m€)		Per capita (€)
	38 570		18 700
Export (m€)	30 059.9		
Export/GDP (%)	78%		
Import (m€)	26 543.3		
Import/GDP (%)	69%		
Length of motorways and express-roads (2013, km)	1 499		

AGRICULTURE

Table 16.2. Farm indicators (2015)

Table 10.10. Farm characteristics (2014)			
Gross value added of the agricultural industry	m€		% (2014)
	525.4		2.9%
Output of the agricultural industry (basic and producer prices, m€)	1 263.63		
Share of total utilised agricultural area occupied by organic farming (%)	8.9%		
Landuse (ha)	2 027 300		
Utilised agricultural area (2013)	ha	%	
	485 760	24%	
Total number of farms (2013)	72 380		
Average area of a farm (2013, ha)	Aver.	Natural	Legal
	12.5	12.1	147.4
Number of tractors used in 2000-2009	103 756		

Figure 16.1. Landuse for agriculture (2013, %)

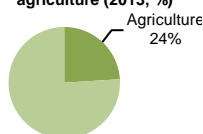


Figure 16.2. Types of farms (2013, %)

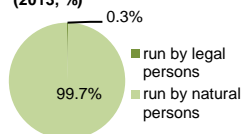


Table 16.3. Employment in agriculture

Agriculture in total employment (2014, %)	8.3%
Employment on farms (2013, annual working unit)	82 450

Figure 16.3. Standard output (SO) of farms (2013, €)

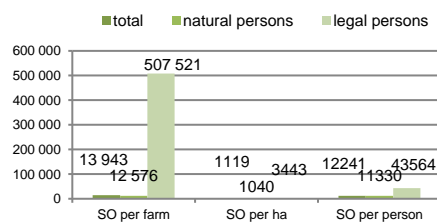


Table 16.4. Top types of plant and animal production compared with EU-28 production (2015)

Plant production	1000t	% of EU-28
Maize	338,71	0.58%
Wheat and spelt	157,06	0.10%*
Grapes	117.70	0.46%
Animal production		
Milk	553,68	0.37%
Meat of poultry	58,76	0.47%*
Meat of cattle	33.58	0.44%*

Top 3 plant production area are (1000 ha): maize (37.74), wheat and spelt (30.73), barley (20.11).

Top 3 % of EU-28 plant and animal production: maize (0.58%), fruits, berries and nuts (0.50%*), grapes (0.46%) and meat of poultry (0.47%*), meat of cattle (0.44%*), milk (0.37%).

* incomplete data

CONTACT DATA

Table 16.5. Environmental impacts of agri-food sector

Greenhouse Gas Emissions (CO2 equivalent) by agriculture (2015, % all sectors)	17.6%
Total waste generated (2014, t)	209 704
Share of waste recovered (2014, %)	88%
Water withdrawal by agriculture (2009, %)	0.2%
Total water withdrawal per capita (2009, m3/yr/cap)	464
Pesticides use (2000-2009, kg/ha)	5.7
Nitrogen, phosphate and potash fertilizers use (2009, kg/ha)	210.6

Figure 16.4. Expenditure on environmental protection by food and beverage sectors (2014)

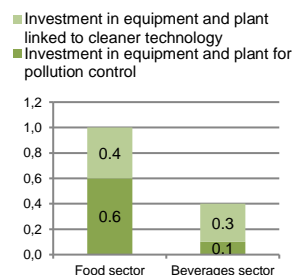


Figure 16.5. Emissions from agriculture in all emissions (2015, %)

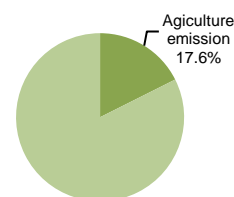
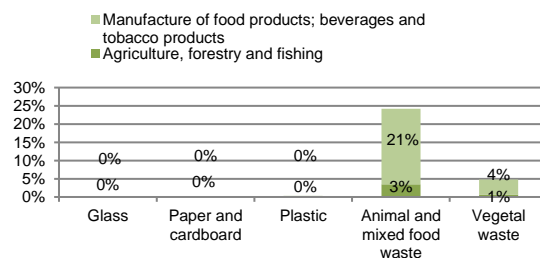


Figure 16.6. Generation of waste by agri-food sector (2014, % of total)

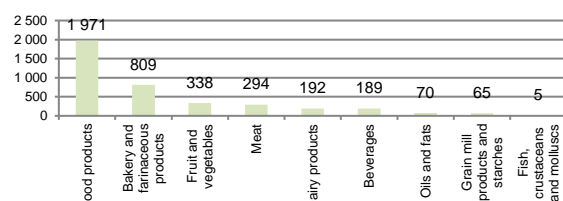


AGRICULTURAL PROCESSING

Table 16.6. Agriculture processing indicators (2014)

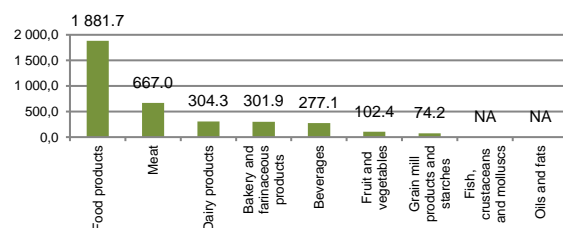
Enterprises that sell goods and/or services in manufacture sector		Food sector	Beverages sector
In other EU, EFTA or EU-candidate countries		18	NA
In any other country than EU countries, EFTA or EU-candidate countries		8	NA
Total turnover of innovative enterprises in agri-food sector (1000€)		NA	NA
Innovative enterprises in agri-food sector (%)		NA	NA

Figure 16.7. Enterprises in agri-food sector (2014)



Total number of enterprises in manufacturing sector: 18 561

Figure 16.8. Aggregate turnover of business enterprises (2014)



Aggregate turnover of business enterprises in manufacturing sector: 24 682.2

Figure 16.9. Average food and beverage consumption mix (2010, %)

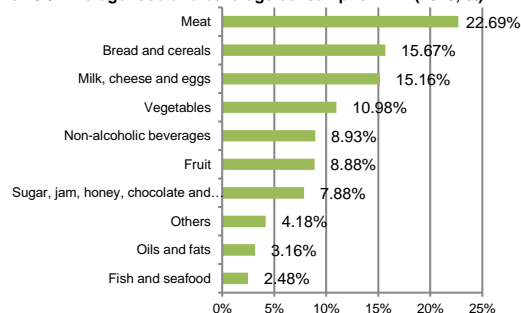
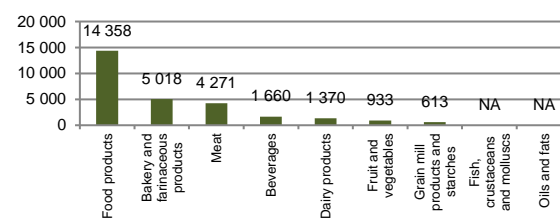
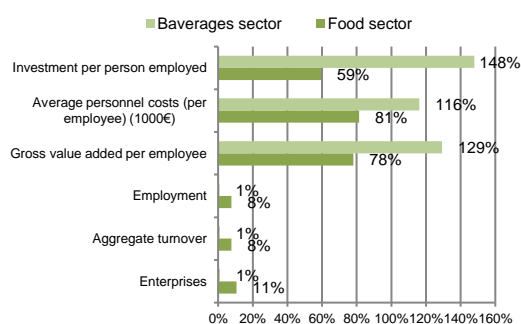


Figure 16.10. Employees in business enterprises (2014)



Employees in total manufacturing sector: 188 697

Figure 16.11. Manufacture of food products and beverages indicators compared to total manufacture (2014, %)



RESEARCH AND DEVELOPMENT

Table 16.7. Research and Development indicators (2014)

	m€	€ per inhab.
Business Expenditures on Research and Development of enterprises in food and beverages sectors	6.379	3.1
Researchers in business enterprises	12 661	
Researchers in food and beverages enterprises	239	
Agriculture in public R&D spending (% GBAORD)	4.19%	

Table 16.8. Top 3 areas of patent applications to the European Patent Office and European Union trademark registrations (2012, 2015)

Patent applications	
Furniture; domestic articles or appliances	7.08
Biological and chemical science	3.5
Agriculture	2.83
Trademark registrations	
Food	49
Transport	31
Pharmaceutical and veterinary preparations	25

Figure 16.12. Enterprises engaging in innovation activities (%)

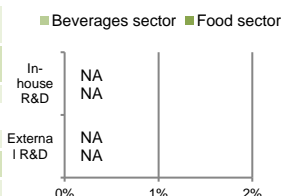


Figure 16.13. Enterprises engaging in cooperation (%)

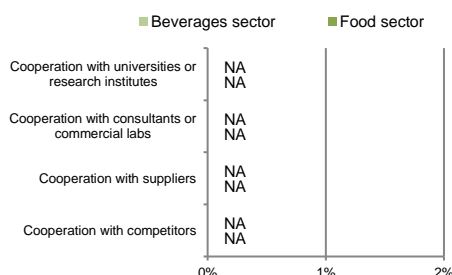


Table 16.9. Barriers to innovations (2014, % of enterprises)

Barrier	NA	NA	NA	NA	NA
Food sector	NA	NA	NA	NA	NA
Beverages sector	NA	NA	NA	NA	NA

17. SPAIN

ECONOMY

Table 17.1. Macroeconomic indicators (2015)

Population (1st Jan.)	2016	2030 (forecast)	Total popul. change 2015
	46 445 828	47 110 106	-3 737
GDP at current prices	Total (m€)	Per capita (€)	
	1 075 639	23 200	
Export (m€)	356 873		
Export/GDP (%)	33%		
Import (m€)	330 527		
Import/GDP (%)	31%		
Length of motorways and express-roads (2013, km)	14 981*		

* only motorways

AGRICULTURE

Table 17.2. Farm indicators (2015)

Gross value added of the agricultural industry	m€	% (2014)
	23 995.26	2.5%
Output of the agricultural industry (basic and producer prices, m€)	45 490.71	
Share of total utilised agricultural area occupied by organic farming (%)	8.2%	
Landuse (ha)	50 594 400	
Utilised agricultural area (2013)	ha	%
	23 300 220	46%
Total number of farms (2013)	965 000	
Average area of a farm (2013, ha)	Aver.	Natural Legal
	31.1	21.3 175.7
Number of tractors used in 2000-2009	1 038 726	

Figure 17.1. Landuse for agriculture (2013, %)

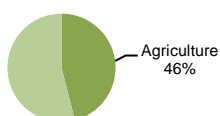


Figure 17.2. Types of farms (2013, %)

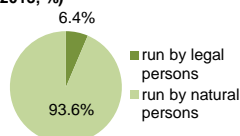


Table 17.3. Employment in agriculture

Agriculture in total employment (2014, %)	4.0%
Employment on farms (2013, annual working unit)	813 550

Figure 17.3. Standard output (SO) of farms (2013, €)

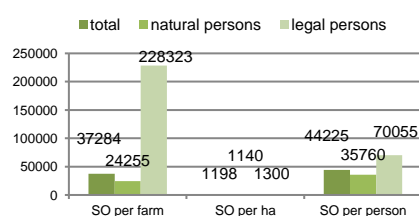


Table 17.4. Top types of plant and animal production compared with EU-28 production (2015)

Plant production	1000t	% of EU-28
Fresh vegetables and strawberries	14 520.6	28.49%*
Olives	7 344.82	58.36%*
Barley	6 705.11	10.83%
Animal production		
Milk	6 799.94	4.49%
Meat of pigs	3 854.66	16.82%
Meat of poultry	1 446.99	11.55%*

Top 3 plant production area are (1000 ha): barley (2 598.90), olives (2526.50), wheat and spelt (2176.35).

Top 3 % of EU-28 plant and animal production: citrus fruits (78.83%*), olives (58.36%*), rice (28.78%) and fish production (22.44%, 2014), meat of sheep and goats (16.34%), meat of pigs (16.82%).

* incomplete data

CONTACT DATA

Table 17.5. Environmental impacts of agri-food sector

Greenhouse Gas Emissions (CO2 equivalent) by agriculture (2015, % all sectors)	12.6%
Total waste generated (2014, t)	6 862 569
Share of waste recovered (2014, %)	75.0%
Water withdrawal by agriculture (2008, %)	60.5%
Total water withdrawal per capita (2008, m3/yr/cap)	705
Pesticides use (2000-2009, kg/ha)	1.9
Nitrogen, phosphate and potash fertilizers use (2009, kg/ha)	70.3

Figure 17.4. Expenditure on environmental protection by food and beverage sectors (2014)

■ Investment in equipment and plant linked to cleaner technology
■ Investment in equipment and plant for pollution control

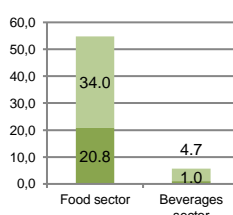


Figure 17.5. Emissions from agriculture in all emissions (2015, %)

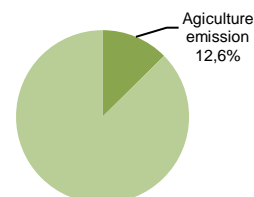
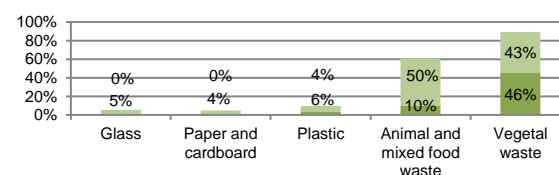


Figure 17.6. Generation of waste by agri-food sector (2014, % of total)

■ Manufacture of food products; beverages and tobacco products
■ Agriculture, forestry and fishing

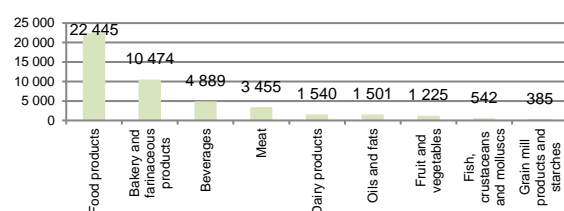


AGRICULTURAL PROCESSING

Table 17.6. Agriculture processing indicators (2014)

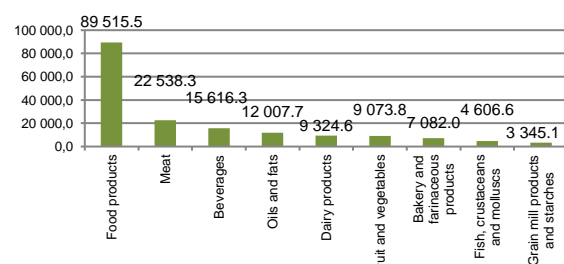
Enterprises that sell goods and/or services in manufacture sector		Food sector	Beverages sector
In other EU, EFTA or EU-candidate countries		335	NA
In any other country than EU countries, EFTA or EU-candidate countries		204	NA
Total turnover of innovative enterprises in agri-food sector (1000€)		57 640 401	NA
Innovative enterprises in agri-food sector (%)		37.7%	NA

Figure 17.7. Enterprises in agri-food sector (2014)



Total number of enterprises in manufacturing sector: 166 589

Figure 17.8. Aggregate turnover of business enterprises (2014)



Aggregate turnover of business enterprises in manufacturing sector: 455 944.5

Figure 17.9. Average food and beverage consumption mix (2010, %)

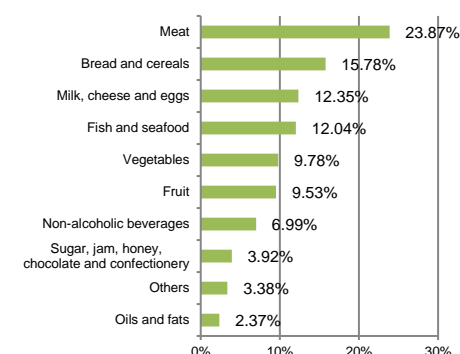
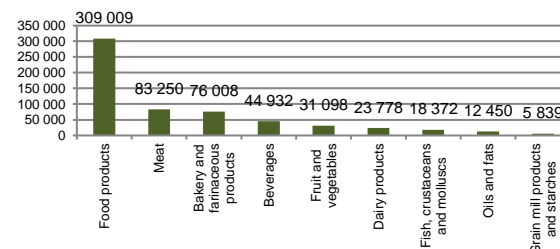
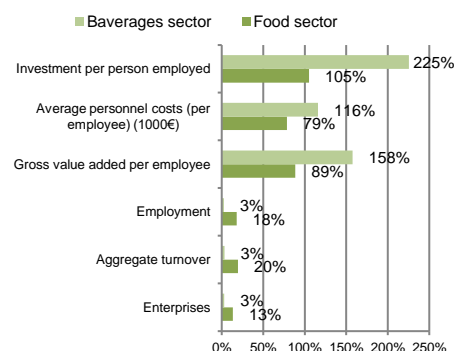


Figure 17.10. Employees in business enterprises (2014)



Employees in total manufacturing sector: 1 724 072

Figure 17.11. Manufacture of food products and beverages indicators compared to total manufacture (2014, %)



RESEARCH AND DEVELOPMENT

Table 17.7. Research and Development indicators (2014)

Business Expenditures on Research and Development of enterprises in food and beverages sectors	m€	€ per inhab.
Researches in business enterprises	127 570	NA
Researches in food and beverages enterprises	NA	NA
Agriculture in public R&D spending (% GBAORD)	6.34%	NA

Table 17.8. Top 3 areas of patent applications to the European Patent Office and European Union trademark registrations (2012, 2015)

Patent applications	
Biological and chemical science	45.52
Furniture; domestic articles or appliances	36.14
Agriculture	27.86
Trademark registrations	
Food	1 537
Transport	1083
Pharmaceutical and veterinary preparations	722

Figure 17.12. Enterprises engaging in innovation activities (%)

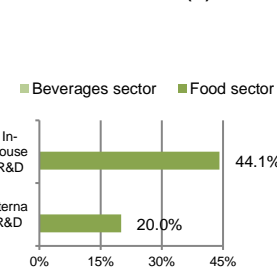


Figure 17.13. Enterprises engaging in cooperation (%)

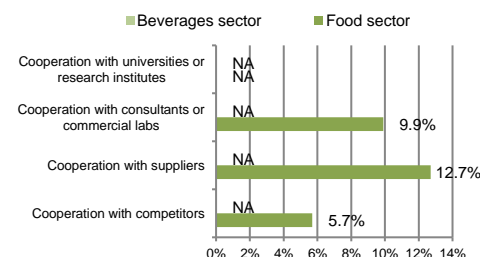


Table 17.9. Barriers to innovations (2014, % of enterprises)

Barrier	NA	NA	NA	NA	NA
Food sector	NA	NA	NA	NA	NA
Beverages sector	NA	NA	NA	NA	NA

18. ALBANIA

ECONOMY

Table 18.1. Macroeconomic indicators (2015)

Population (1st Jan.)	2016	2030 (forecast)	Total popul. change 2015
	2 886 026	NA	-6 277
GDP at current prices	Total (m€)		Per capita (€)
	10 267.2		3 600
Export (m€)	2 798.8		
Export/GDP (%)	27%		
Import (m€)	4 571.0		
Import/GDP (%)	45%		
Length of motorways and express-roads (2013, km)	NA		

AGRICULTURE

Table 18.2. Farm indicators (2015)

Gross value added of the agricultural industry	m€	% (2014)
	NA	NA
Output of the agricultural industry (basic and producer prices, m€)	NA	
Share of total utilised agricultural area occupied by organic farming (%)	NA	
Landuse (ha)	2 874 800	
Utilised agricultural area (2013)	ha	%
	1 201 000	43.8%
Total number of farms (2013)	NA	
Average area of a farm (2013, ha)	Aver.	Natural Legal
	NA	NA NA
Number of tractors used in 2000-2009	7 438	

Figure 18.1. Landuse for agriculture (2013, %)

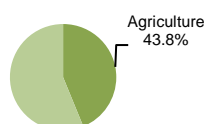


Table 18.3. Employment in agriculture

Agriculture in total employment (2011, %)	44.1%
Rural population (% of total, 2011)	46.6%

CONTACT DATA

Table 18.4. Top types of plant and animal production (2015)

Plant production	1000t
Fresh vegetables and strawberries	1030.0
Maize	380.0
Wheat and spelt	275.0
Animal production	
Milk	105.2
Cheese	13.5
Meat of cattle	8.7

Top 3 plant production area are (1000 ha): wheat and spelt (69.9), maize (54.6), olives (41.5).

Table 18.5. Environmental impacts of agri-food sector

Greenhouse Gas Emissions (CO2 equivalent) by agriculture (2015, % all sectors)	NA
Total waste generated (2014, t)	NA
Share of waste recovered (2014, %)	NA
Water withdrawal by agriculture (2009, %)	57.7%
Total water withdrawal per capita (2009, m3/yr/cap)	595
Pesticides use (2000-2009, kg/ha)	NA
Nitrogen, phosphate and potash fertilizers use (2009, kg/ha)	78.2

19. ARMENIA

ECONOMY

Table 19.1. Macroeconomic indicators (2015)

Population (1st Jan.)	2016	2030 (forecast)	Total popul. change 2015
	2 998 577	NA	NA
GDP at current prices	Total (mUSD)		Per capita (USD)
	10529.0		3489.1
Export (mUSD)	3 137.3		
Export/GDP (%)	30%		
Import (mUSD)	4 418.2		
Import/GDP (%)	42%		
Length of motorways and express-roads (2013, km)	NA		

CONTACT DATA

AGRICULTURE

Table 19.2. Farm indicators (2015)

Gross value added of the agricultural industry	m€	% (2014)	
Output of the agricultural industry (basic and producer prices, m€)	NA	NA	
Share of total utilised agricultural area occupied by organic farming (%)	0.04%		
Landuse (ha)	2 980 000		
Utilised agricultural area (2013)	ha	%	
Total number of farms (2013)	1 711 000	57%	
Average area of a farm (2013, ha)	NA		
Number of tractors used in 2000-2009	Aver.	Natural	Legal
	NA	NA	NA
	13 122		

Figure 19.1. Landuse for agriculture (2013, %)

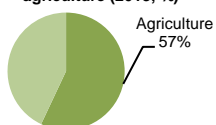


Table 19.3. Employment in agriculture

Agriculture in total employment (2011, %)	44.2%
Rural population (% of total, 2011)	35.9%

Table 19.5. Environmental impacts of agri-food sector

Greenhouse Gas Emissions (CO2 equivalent) by agriculture (2015, % all sectors)	NA
Total waste generated (2014, t)	NA
Share of waste recovered (2014, %)	NA
Water withdrawal by agriculture (2009, %)	65.8%
Total water withdrawal per capita (2009, m3/yr/cap)	920
Pesticides use (2000-2009, kg/ha)	0.4
Nitrogen, phosphate and potash fertilizers use (2009, kg/ha)	26.9

20. BOSNIA AND HERZEGOVINA

ECONOMY

Table 20.1. Macroeconomic indicators (2015)

Population (1st Jan.)	2015	2030 (forecast)	Total popul. change 2015
	3 810 416	NA	NA
GDP at current prices	Total (mUSD)		Per capita (USD)
	16 191.0		4 249.0
Export (mUSD)	NA		
Export/GDP (%)	NA		
Import (mUSD)	NA		
Import/GDP (%)	NA		
Length of motorways and express-roads (2013, km)	NA		

CONTACT DATA

AGRICULTURE

Table 20.2. Farm indicators (2015)

Gross value added of the agricultural industry	m€	% (2014)
	NA	NA
Output of the agricultural industry (basic and producer prices, m€)	NA	
Share of total utilised agricultural area occupied by organic farming (%)	0.02%	
Landuse (ha)	5 119 700	
Utilised agricultural area (2013)	ha	%
	2 151 000	42%
Total number of farms (2013)	NA	
Average area of a farm (2013, ha)	Aver.	Natural Legal
	NA	NA NA
Number of tractors used in 2000-2009	NA	

Table 20.3. Employment in agriculture

Agriculture in total employment (2011, %)	19.7%
Rural population (% of total, 2011)	51.8%

Table 20.4. Top types of plant and animal production (2015)

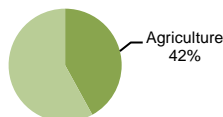
Plant production	1000t
Maize	785.84
Potatoes	351.22
Barley	63.19
Animal production	
Meat of poultry	48.7
Meat of cattle	22.85
Meat of pigs	8.3

Top 3 plant production area are (1000 ha): maize (192.87), potatoes (35.58), fresh vegetables and strawberries (29.02).

Table 20.5. Environmental impacts of agri-food sector

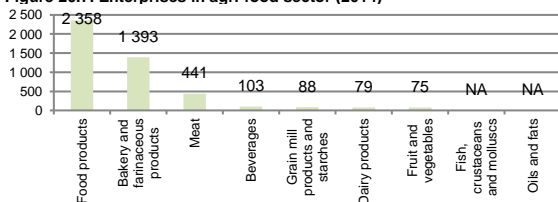
Greenhouse Gas Emissions (CO2 equivalent) by agriculture (2015, % all sectors)	NA
Total waste generated (2014, t)	NA
Share of waste recovered (2014, %)	NA
Water withdrawal by agriculture (2009, %)	NA
Total water withdrawal per capita (2009, m3/yr/cap)	90
Pesticides use (2000-2009, kg/ha)	NA
Nitrogen, phosphate and potash fertilizers use (2009, kg/ha)	29.2

Figure 20.1. Landuse for agriculture (2013, %)



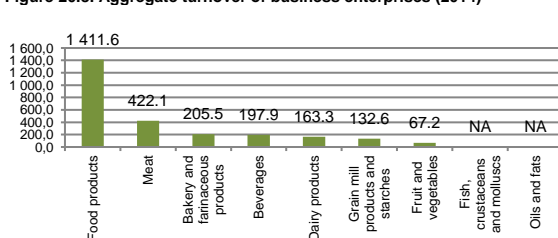
AGRICULTURAL PROCESSING

Figure 20.7. Enterprises in agri-food sector (2014)



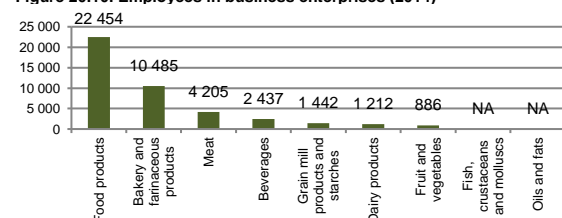
Total number of enterprises in manufacturing sector: 9 517

Figure 20.8. Aggregate turnover of business enterprises (2014)



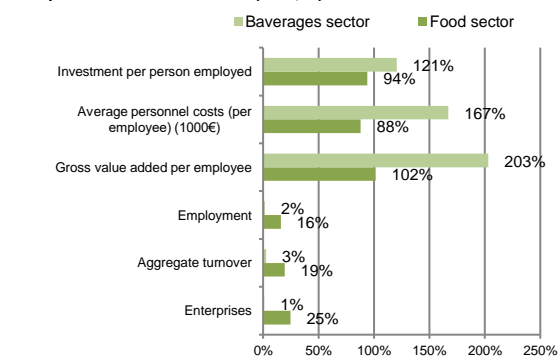
Aggregate turnover of business enterprises in manufacturing sector: 7 250.5

Figure 20.10. Employees in business enterprises (2014)



Employees in total manufacturing sector: 139 999

Figure 20.11. Manufacture of food products and beverages indicators compared to total manufacture (2014, %)



RESEARCH AND DEVELOPMENT

Table 20.7. Research and Development indicators (2014)

Business Expenditures on Research and Development of enterprises in food and beverages sectors	m€	€ per inhab.
	NA	NA

Researchers in business enterprises	373
Researchers in food and beverages enterprises	NA
Agriculture in public R&D spending (% GBAORD)	31.72%

21. FAROE ISLANDS

ECONOMY

Table 21.1. Macroeconomic indicators (2015)

Population (1st Jan.)	2016	2030 (forecast)	Total popul. change 2015
	49 117	NA	+ 123
GDP at current prices	Total (mUSD)		Per capita (USD)
	2613		53199.5
Export (m€)	NA		
Export/GDP (%)	NA		
Import (m€)	NA		
Import/GDP (%)	NA		
Length of motorways and express-roads (2013, km)	NA		

CONTACT DATA

22. FORMER YUGOSLAV REPUBLIC OF MACEDONIA

ECONOMY

Table 22.1. Macroeconomic indicators (2015)

Population (1st Jan.)	2016	2030 (forecast)	Total popul. change 2015
	2 071 278	NA	2 106
GDP at current prices	Total (m€)	Per capita (€)	
	9 060.7	NA	
Export (m€)	4 421.9		
Export/GDP (%)	49%		
Import (m€)	5 891.8		
Import/GDP (%)	65%		
Length of motorways and express-roads (2013, km)	NA		

CONTACT DATA

AGRICULTURE

Table 22.2. Farm indicators (2015)

Gross value added of the agricultural industry	m€	% (2014)
	NA	NA
Output of the agricultural industry (basic and producer prices, m€)	NA	
Share of total utilised agricultural area occupied by organic farming (%)	0.7%	
Landuse (ha)	2 571 300	
Utilised agricultural area (2013)	1 118 000	43%
Total number of farms (2013)	NA	
Average area of a farm (2013, ha)	Aver. NA	Natural Legal
	NA	NA NA
Number of tractors used in 2000-2009	53 606	

Figure 22.1. Landuse for agriculture (2013, %)

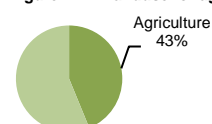


Table 22.3. Employment in agriculture

Agriculture in total employment (2011, %)	19.7%
Rural population (% of total, 2011)	40.7%

Table 22.4. Top types of plant and animal production (2015)

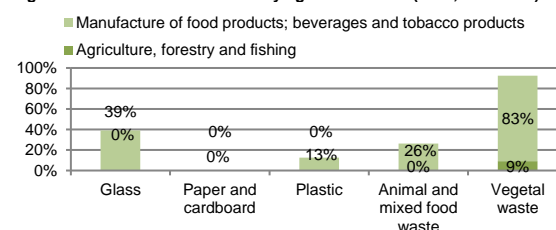
Plant production	1000t
Fresh vegetables and strawberries	849.43
Grapes	325.77
Fruits, berries and nuts	225.34

Top 3 plant production area are (1000 ha): wheat and spelt (73.06), barley (41.16), fresh vegetables and strawberries (37.08).

Table 22.5. Environmental impacts of agri-food sector

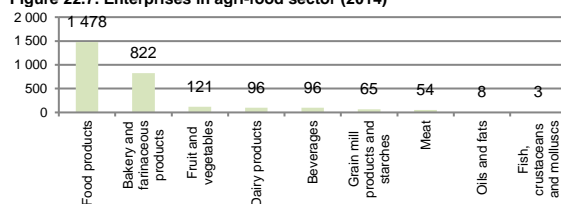
Greenhouse Gas Emissions (CO2 equivalent) by agriculture (2015, % all sectors)	NA
Total waste generated (2014, t)	NA
Share of waste recovered (2014, %)	NA
Water withdrawal by agriculture (2009, %)	12.3%
Total water withdrawal per capita (2009, m3/yr/cap)	502
Pesticides use (2000-2009, kg/ha)	0.2
Nitrogen, phosphate and potash fertilizers use (2009, kg/ha)	52.5

Figure 22.6. Generation of waste by agri-food sector (2014, % of total)



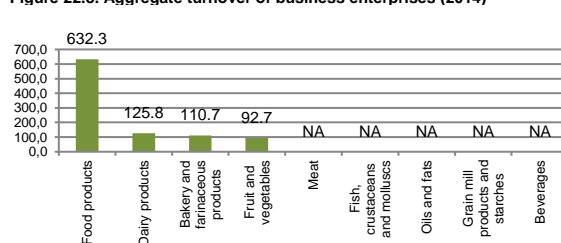
AGRICULTURAL PROCESSING

Figure 22.7. Enterprises in agri-food sector (2014)



Total number of enterprises in manufacturing sector: 7 085

Figure 22.8. Aggregate turnover of business enterprises (2014)



Aggregate turnover of business enterprises in manufacturing sector: 4 146.6

Figure 22.9. Average food and beverage consumption mix (2010, %)

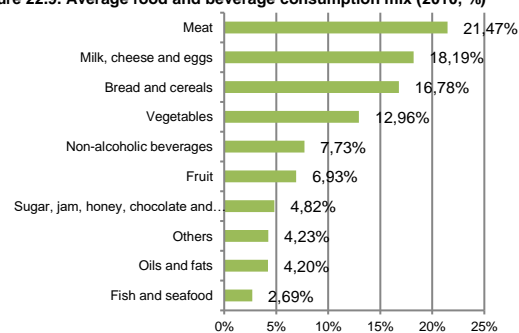
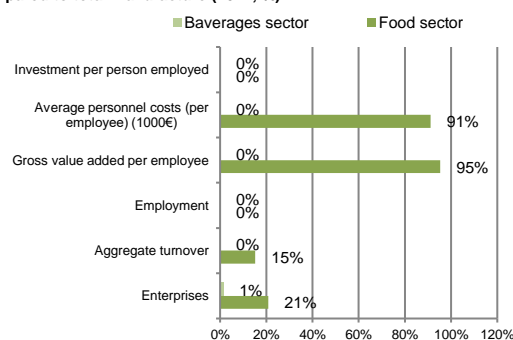


Figure 22.11. Manufacture of food products and beverages indicators compared to total manufacture (2014, %)



23. GEORGIA

ECONOMY

Table 23.1. Macroeconomic indicators (2015)

Population (1st Jan.)	2015	2030 (forecast)	Total popul. change 2015
	3 679 000	NA	NA
GDP at current prices	Total (mUSD)		Per capita (USD)
	13 965.0		3 796.0
Export (mUSD)	6 290.3		
Export/GDP (%)	45%		
Import (mUSD)	9 065.0		
Import/GDP (%)	65%		
Length of motorways and express-roads (2013, km)	NA		

CONTACT DATA

AGRICULTURE

Table 23.2. Farm indicators (2015)

Gross value added of the agricultural industry	m€	% (2014)
	NA	NA
Output of the agricultural industry (basic and producer prices, m€)	NA	
Share of total utilised agricultural area occupied by organic farming (%)	0.08%	
Landuse (ha)	6 970 000	
Utilised agricultural area (2013)	ha	%
	2 469 000	35%
Total number of farms (2013)	NA	
Average area of a farm (2013, ha)	Aver.	Natural Legal
	NA	NA NA
Number of tractors used in 2000-2009	17 199	

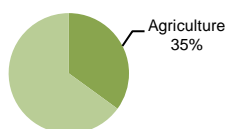
Table 23.3. Employment in agriculture

Agriculture in total employment (2011, %)	53.4%
Rural population (% of total, 2011)	47.2%

Table 23.5. Environmental impacts of agri-food sector

Greenhouse Gas Emissions (CO2 equivalent) by agriculture (2015, % all sectors)	NA
Total waste generated (2014, t)	NA
Share of waste recovered (2014, %)	NA
Water withdrawal by agriculture (2009, %)	58.2%
Total water withdrawal per capita (2009, m3/yr/cap)	411
Pesticides use (2000-2009, kg/ha)	NA
Nitrogen, phosphate and potash fertilizers use (2009, kg/ha)	33.2

Figure 23.1. Landuse for agriculture (2013, %)



24. MOLDOVA

ECONOMY

Table 24.1. Macroeconomic indicators (2015)

Population (1st Jan.)	2016	2030 (forecast)	Total popul. change 2015
	3 553 056	NA	-2 103
GDP at current prices	Total (mUSD)	Per capita (USD)	
	6 568.3	1 848.1	
Export (mUSD)	2 845.4		
Export/GDP (%)	43%		
Import (mUSD)	4 874.4		
Import/GDP (%)	74%		
Length of motorways and express-roads (2013, km)	NA		

CONTACT DATA

AGRICULTURE

Table 24.2. Farm indicators (2015)

Gross value added of the agricultural industry	m€	% (2014)
	NA	NA
Output of the agricultural industry (basic and producer prices, m€)	NA	
Share of total utilised agricultural area occupied by organic farming (%)	0.89%	
Landuse (ha)	3 384 300	
Utilised agricultural area (2013)	ha	%
	2 459 000	73%
Total number of farms (2013)	NA	
Average area of a farm (2013, ha)	Aver.	Natural Legal
	NA	NA NA
Number of tractors used in 2000-2009	35 984	

Figure 24.1. Landuse for agriculture (2013, %)

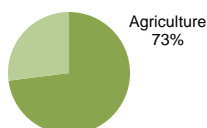


Table 24.3. Employment in agriculture

Agriculture in total employment (2011, %)	27.5%
Rural population (% of total, 2011)	52.3%

Top 3 plant production area are (1000 ha): cereals (134.90), including wheat and spelt (89.90), maize (41.50), fresh vegetables and strawberries (7.40).

Table 24.5. Environmental impacts of agri-food sector

Greenhouse Gas Emissions (CO2 equivalent) by agriculture (2015, % all sectors)	NA
Total waste generated (2014, t)	NA
Share of waste recovered (2014, %)	NA
Water withdrawal by agriculture (2009, %)	39.7%
Total water withdrawal per capita (2009, m3/yr/cap)	483
Pesticides use (2000-2009, kg/ha)	1.1
Nitrogen, phosphate and potash fertilizers use (2009, kg/ha)	8.1

25. MONTENEGRO

ECONOMY

Table 25.1. Macroeconomic indicators (2015)

Population (1st Jan.)	2016	2030 (forecast)	Total popul. change 2015
	622 218	NA	119
GDP at current prices	Total (m€)		Per capita (€)
	3 624.7	NA	
Export (m€)	1 539.2		
Export/GDP (%)	42%		
Import (m€)	2 213.6		
Import/GDP (%)	61%		
Length of motorways and express-roads (2013, km)	NA		

AGRICULTURE

Table 25.2. Farm indicators (2015)

Gross value added of the agricultural industry	m€	% (2014)
	NA	NA
Output of the agricultural industry (basic and producer prices, m€)	NA	
Share of total utilised agricultural area occupied by organic farming (%)	0.60%	
Landuse (ha)	1 381 200	
Utilised agricultural area (2013)	ha	%
	512 000	37%
Total number of farms (2013)	NA	
Average area of a farm (2013, ha)	Aver.	Natural Legal
	NA	NA NA
Number of tractors used in 2000-2009	NA	

Figure 25.1. Landuse for agriculture (2013, %)

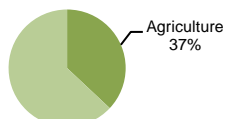


Table 25.3. Employment in agriculture

Agriculture in total employment (2011, %)	NA
Rural population (% of total, 2011)	36.7%

CONTACT DATA

Table 25.4. Top types of plant and animal production (2015)

Plant production	1000t
Fresh vegetables and strawberries	41.46
Potatoes	27.19
Grapes	23.09
Animal production	
Milk	23.4
Meat of cattle	4.12
Meat of sheep and goats	0.86

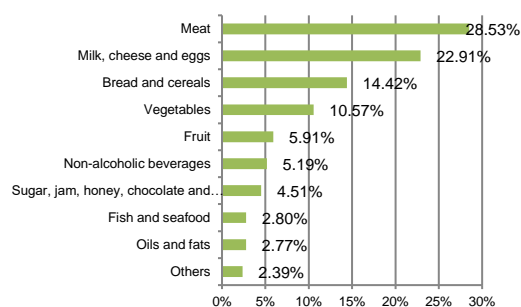
Top 3 plant production area are (1000 ha): grapes (2.63), cereals (2.30), including wheat and spelt (0.74), potatoes (1.63), fresh vegetables and strawberries (1.23)

Table 25.5. Environmental impacts of agri-food sector

Greenhouse Gas Emissions (CO2 equivalent) by agriculture (2015, % all sectors)	NA
Total waste generated (2014, t)	NA
Share of waste recovered (2014, %)	NA
Water withdrawal by agriculture (2009, %)	1.1%
Total water withdrawal per capita (2009, m3/yr/cap)	255
Pesticides use (2000-2009, kg/ha)	0
Nitrogen, phosphate and potash fertilizers use (2009, kg/ha)	10.4

AGRICULTURAL PROCESSING

Figure 25.9. Average food and beverage consumption mix (2010, %)



26. SERBIA

ECONOMY

Table 26.1. Macroeconomic indicators (2015)

Population (1st Jan.)	2016	2030 (forecast)	Total popul. change 2015
	7 076 372	NA	-38 021
GDP at current prices	Total (m€)	Per capita (€)	
	33491.0	4 700	
Export (m€)	15 631.5		
Export/GDP (%)	47%		
Import (m€)	18 897.8		
Import/GDP (%)	56%		
Length of motorways and express-roads (2013, km)	NA		

AGRICULTURE

Table 26.2. Farm indicators (2015)

Gross value added of the agricultural industry	m€	% (2014)
	NA	NA
Output of the agricultural industry (basic and producer prices, m€)	NA	
Share of total utilised agricultural area occupied by organic farming (%)	0.12%	
Landuse (ha)	8 890 000	
Utilised agricultural area (2013)	ha	%
	5 061 000	57%
Total number of farms (2013)	NA	
Average area of a farm (2013, ha)	Aver.	Natural Legal
	NA	NA NA
Number of tractors used in 2000-2009	5 844	

Figure 26.1. Landuse for agriculture (2013, %)

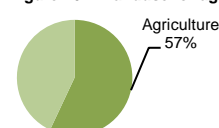


Table 26.3. Employment in agriculture

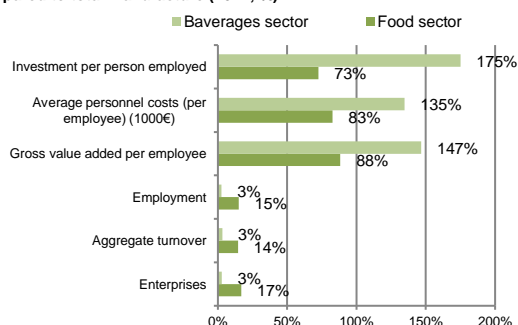
Agriculture in total employment (2011, %)	21.9%
Rural population (% of total, 2011)	43.6%

Table 26.4. Top types of plant and animal production (2015)

Plant production	1000t
Maize	5 454.8
Wheat and spelt	2 428.2
Sugar beet	2 183.19
Animal production	
Milk	861.81
Meat of pigs	167.24
Meat of poultry	58.58

AGRICULTURAL PROCESSING

Figure 26.11. Manufacture of food products and beverages indicators compared to total manufacture (2014, %)



RESEARCH AND DEVELOPMENT

Table 26.7. Research and Development indicators (2014)

Business Expenditures on Research and Development of enterprises in food and beverages sectors	m€	€ per inhab.
	NA	NA

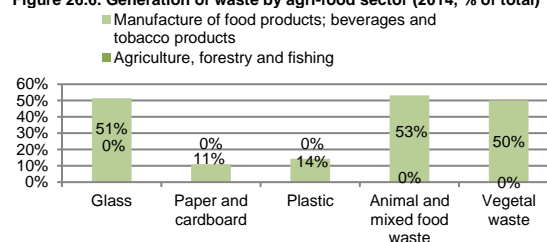
CONTACT DATA

Top 3 plant production area are: maize (1 010.23), wheat and spelt (589.92), rape, turnip rape, sunflower seeds and soya (363.26).

Table 26.5. Environmental impacts of agri-food sector

Greenhouse Gas Emissions (CO2 equivalent) by agriculture (2015, % all sectors)	NA
Total waste generated (2014, t)	NA
Share of waste recovered (2014, %)	NA
Water withdrawal by agriculture (2009, %)	1.9%
Total water withdrawal per capita (2009, m3/yr/cap)	418
Pesticides use (2000-2009, kg/ha)	NA
Nitrogen, phosphate and potash fertilizers use (2009, kg/ha)	129.6

Figure 26.6. Generation of waste by agri-food sector (2014, % of total)



27. TURKEY

ECONOMY

Table 27.1. Macroeconomic indicators (2015)

Population (1st Jan.)	2016	2030 (forecast)	Total popul. change 2015
	78 741 053	NA	1 045 149
GDP at current prices	Total (m€)	Per capita (€)	
	772 609.5	NA	
Export (m€)	180 258.5		
Export/GDP (%)	23%		
Import (m€)	200 552.0		
Import/GDP (%)	26%		
Length of motorways and express-roads (2013, km)	11 480		

AGRICULTURE

Table 27.2. Farm indicators (2015)

Gross value added of the agricultural industry	m€	% (2014)
	NA	7.5%
Share of total utilised agricultural area occupied by organic farming (%)	1.61%	
Landuse (ha)	78 356 200	
Utilised agricultural area (2013)	ha	%
	38 247 000	49%
Number of tractors used in 2000-2009	941 835	

Figure 27.1. Landuse for agriculture (2013, %)

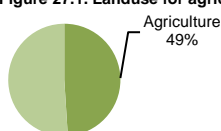


Table 27.3. Employment in agriculture

Agriculture in total employment (2011, %)	23.7%
Rural population (% of total, 2011)	28.5%

Table 27.4. Top types of plant and animal production (2015)

Plant production	1000t
Fresh vegetables and strawberries	29 928.00
Wheat and spelt	22 605.00
Sugar beet	16 023.00
Animal production	
Milk	8 934.2
Meat of poultry	1 962.1
Cheese	665.8

Top 3 plant production area are (1000 ha): wheat and spelt (7 869.00), barley (2 784.00), fruits, berries and nuts (1 660.00).

CONTACT DATA

Table 27.5. Environmental impacts of agri-food sector

Greenhouse Gas Emissions (CO2 equivalent) by agriculture (2015, % all sectors)	12.1%
Water withdrawal by agriculture (2009, %)	73.8%
Total water withdrawal per capita (2009, m3/yr/cap)	573
Pesticides use (2000-2009, kg/ha)	1.4
Nitrogen, phosphate and potash fertilizers use (2009, kg/ha)	84.8

Figure 27.5. Emissions from agriculture in all emissions (2015, %)

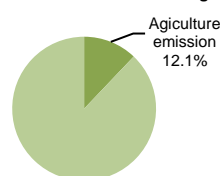
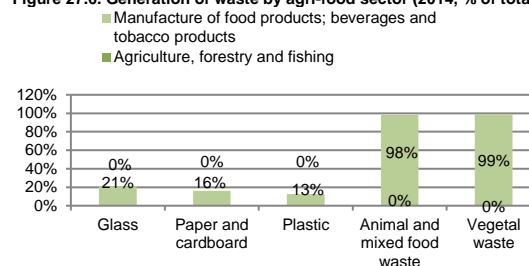
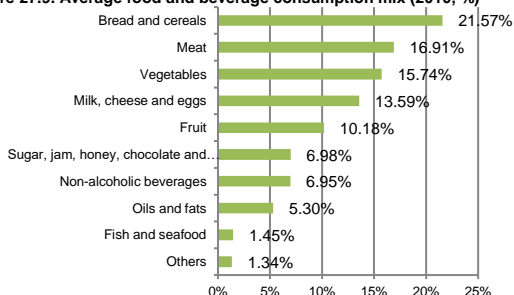


Figure 27.6. Generation of waste by agri-food sector (2014, % of total)



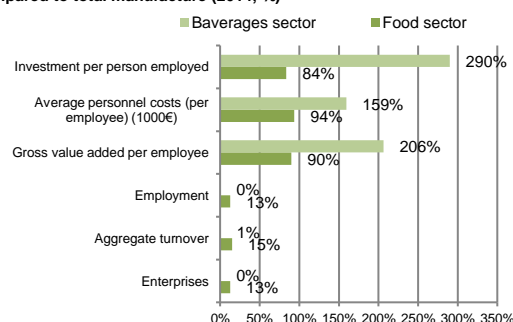
AGRICULTURAL PROCESSING

Figure 27.9. Average food and beverage consumption mix (2010, %)



Employees in total manufacturing sector: 3 628 324

Figure 27.11. Manufacture of food products and beverages indicators compared to total manufacture (2014, %)



RESEARCH AND DEVELOPMENT

Table 27.7. Research and Development indicators (2014)

Business Expenditures on Research and Development of enterprises in food and beverages sectors	m€	€ per inhab.
	45.177	0.6
Researchers in business enterprises	73 737	
Researchers in food and beverages enterprises	1 315	
Agriculture in public R&D spending (% GBAORD)	2.28%	

Table 27.8. Top 3 areas of patent applications to the European Patent Office and European Union trademark registrations (2012, 2015)

Patent applications	
Furniture; domestic articles or appliances	38.95
Food	7
Oils & Fats	1.13
Trademark registrations	
Food	132
Beverages	39
Pharmaceutical and veterinary preparations	32

28. UKRAINE

ECONOMY

Table 28.1. Macroeconomic indicators (2015)

Population (1st Jan.)	2015	2030 (forecast)	Total popul. change 2015
	45 198 200	NA	NA
GDP at current prices	Total (mUSD)		Per capita (USD)
	90 615.0		2 115
Export (mUSD)	47 816.7		
Export/GDP (%)	53%		
Import (mUSD)	49623.0		
Import/GDP (%)	55%		
Length of motorways and express-roads (2013, km)	NA		

CONTACT DATA

AGRICULTURE

Table 28.2. Farm indicators (2015)

Gross value added of the agricultural industry	m€	% (2014)
	NA	NA
Output of the agricultural industry (basic and producer prices, m€)	NA	
Share of total utilised agricultural area occupied by organic farming (%)	0.65%	
Landuse (ha)	60 370 000	
Utilised agricultural area (2013)	ha	%
	41 281 000	68%
Total number of farms (2013)	NA	
Average area of a farm (2013, ha)	Aver.	Natural Legal
	NA	NA NA
Number of tractors used in 2000-2009	333 529	

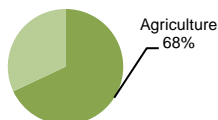
Table 28.3. Employment in agriculture

Agriculture in total employment (2011, %)	21%
Rural population (% of total, 2011)	31.1%

Table 28.5. Environmental impacts of agri-food sector

Greenhouse Gas Emissions (CO ₂ equivalent) by agriculture (2015, % all sectors)	NA
Total waste generated (2014, t)	NA
Share of waste recovered (2014, %)	NA
Water withdrawal by agriculture (2009, %)	51.2%
Total water withdrawal per capita (2009, m ³ /yr/cap)	801
Pesticides use (2000-2009, kg/ha)	1.1
Nitrogen, phosphate and potash fertilizers use (2009, kg/ha)	26.5

Figure 28.1. Landuse for agriculture (2013, %)



DATA SOURCES

TABLES

Table x.1. Macroeconomic indicators (2015). Source: Eurostat. Population change - Demographic balance and crude rates at national level [demo_gind] (2015, 2016); Area by NUTS 3 region [demo_r_d3area] (2015); Population on 1st January by age and sex [proj_15npms] (forecast 2030); Length of motorways and e-roads [road_if_motorwa] (2013)

Table x.2. Farm indicators (2015). Source: Eurostat. Gross value added of the agricultural industry - basic and producer prices [tag00056] (2015); Output of the agricultural industry - basic and producer prices [tag00102] (2015); Area under organic farming [tsdpc440] (2015); Area by NUTS 3 region [demo_r_d3area] (2015); Farm indicators by area, type of farm, standard output, legal entity and NUTS 2 regions [ef_m_farmleg] (2013); FAO: FAO Statistical Yearbook 2014. Europe and Central Asia food and agriculture FAO, Regional Office for Europe and Central Asia, Budapest (2014: 94)

Table x.3. Employment in agriculture. Source: Eurostat. Employment growth and activity branches - annual averages [lfsi_grt_a] (2014); Farm indicators by area, type of farm, standard output, legal entity and NUTS 2 regions [ef_m_farmleg] (2013)

Table x.4. Top types of plant and animal production compared with EU-28 production (2015). Source: Eurostat. Crop statistics by NUTS 2 regions (from 2000 onwards) [agr_r_acs] (2015)

Table x.5. Environmental impacts of agri-food sector. Source: European environment agency (EEA). Greenhouse gas emissions by source sector (source: EEA) [env_air_gge] (2015); Eurostat: Packaging waste by waste operations and waste flow [env_waspac] (2014); FAO: Table 24. Water withdrawal and pressure on renewable water resources. Table 25. Inputs. FAO Statistical Yearbook 2014. Europe and Central Asia food and agriculture FAO, Regional Office for Europe and Central Asia, Budapest (2014: 87, 94)

Table x.6. Agriculture processing indicators (2014). Source: Eurostat: General information about the enterprises [inn_cis7_gen] (2014)

Table x.7. Research and Development indicators (2014). Source: Eurostat. Business enterprise R&D expenditure (BERD) by economic activity (NACE Rev. 2) [rd_e_berdindr2] (2014); Total R&D personnel and researchers, in business enterprise sector by economic activity and sex (NACE Rev. 2) [rd_p_bempoccr2] (2014); Total GBAORD by NABS 2007 socio-economic objectives [gba_nabsfin07] (2014)

Table x.8. Top 3 areas of patent applications to the European Patent Office and European Union trademark registrations (2012, 2015). Source: Eurostat. Patent applications to the EPO by priority year by international patent classification (IPC) sections and classes [pat_ep_nipc] (2012); European Union trade mark (EUTM) registrations by class (Nice classification) [ipr_tr_cl] (2015)

Table x.9. Barriers to innovations (2014, % of enterprises). Source: Eurostat: Importance of the reasons to not innovate and of the barriers to innovation in the enterprises by NACE Rev. 2 activity and size class [inn_cis9_noin] (2014)

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Figure x.1. Landuse for agriculture (2013, %). Source: Eurostat. Area by NUTS 3 region [demo_r_d3area] (2013)

Figure x.2. Types of farms (2013, %). Source: Eurostat. Farm indicators by area, type of farm, standard output, legal entity and NUTS 2 regions [ef_m_farmleg] (2013)

Figure x.3. Standard output (SO) of farms (2013, €). Source: Eurostat. Farm indicators by area, type of farm, standard output, legal entity and NUTS 2 regions [ef_m_farmleg] (2013)

Figure x.4. Expenditure on environmental protection by food and beverage sectors (2014). Source: Eurostat. Environmental protection expenditure by environmental domains (NACE Rev. 2, B-E) [sbs_env_dom_r2] (2014)

Figure x.5. Emissions from agriculture in all emissions (2015, %). Source: European environment agency (EEA). Greenhouse gas emissions by source sector (source: EEA) [env_air_gge] (2015)

Figure x.6. Generation of waste by agri-food sector (2014, %). Source: Eurostat. Generation of waste by waste category, hazardoussness and NACE Rev. 2 activity [env_wasgen] (2014)

Figure x.7. Enterprises in agri-food sector (2014). Source: Eurostat. Annual enterprise statistics by size class for special aggregates of activities (NACE Rev. 2) [sbs_sc_sca_r2] (2014)

Figure x.8. Aggregate turnover of business enterprises (2014). Source: Eurostat. Annual enterprise statistics by size class for special aggregates of activities (NACE Rev. 2) [sbs_sc_sca_r2] (2014)

Figure x.9. Average food and beverage consumption mix (2010, %). Source: Eurostat. Mean consumption expenditure by detailed COICOP level (in PPS) [hbs_exp_t121] (2010)

Figure x.10. Employees in business enterprises (2014). Source: Eurostat. Annual enterprise statistics by size class for special aggregates of activities (NACE Rev. 2) [sbs_sc_sca_r2] (2014)

Figure x.11. Manufacture of food products and beverages indicators in total manufacture (2014, %). Source: Eurostat. Mean consumption expenditure by detailed COICOP level (in PPS) [hbs_exp_t121] (2014)

Figure x.12. Enterprises engaging in innovation activities (%). Source: Eurostat. Innovation activities and expenditures in the enterprises by NACE Rev. 2 activity and size class [inn_cis9_exp] (2014)

Figure x.13. Enterprises engaging in cooperation (%). Source: Eurostat. Types of co-operation of the enterprises by NACE Rev. 2 activity and size class [inn_cis9_coop] (2014)