CBI
Ministry of Foreign Affairs

Value Chain Analysis Report

- **PART 1**

- **Fresh Fruit and Vegetables**
- **Processed Fruits and Vegetables**

Kyiv, Ukraine 2015

Preface

The call for research to identify value chains, where Ukraine could contribute into integral value chains of European economy, which was announced by the CBI upon the request of the Government of the Netherlands in September 2015, was very timely and important. So far in Ukraine there have been no other comprehensive studies on value chains undertaken apart from some projects that were executed by the experts of the Ukrainian Industry Expertise.

The study below represents the joint work of the consortium of Ukrainian experts from the Ukrainian Industry Expertise and the Investments and Trade Facilitation Center, who have been awarded the contract by the CBI in an open competition. The team of experts was led by the Director of the Ukrainian Industry Expertise Volodymyr Vlasiuk.

This research becomes even more valuable given the fact that since January 2016 UA-EU DC FTA provisions will be entering into force, thus changing radically market rules for Ukrainian producers both on domestic and international level. That required proper account of this changing regulatory environment, which was reflected in the study below.

The study concentrated mostly on small and medium enterprice sector (SMEs), because one of the biggest problems of modern export activity of Ukraine is significant underrepresentation of SMEs in general structure of companies who export.

The study also gave particular attention to opportunities for Ukrainian business/producers to enter into European value chains, which have been released with sudden cut-offs of Ukraine's export activity eastwards.

Distinctive feature of modern Ukrainian business climate is that business operates in imperfect competition environment and is over-regulated. This particular element received substantial attention in the research especially with regard to stakeholders' activities, underrepresented role of BSOs and rigid policy of governmental regulatory bodies.

The main objective of the research was to identify the most promising export products and value chains with significant export potential and to provide with a better understanding on Ukraine's top export products to Europe (following the DCFTA implementation).

Contents

1. FRESH FRUIT AND VEGETABLES VALUE CHAIN ANALYSIS 7

1.1 Introduction 7

1.2 Management summary 12

1.3 Export Market Analysis 15

1.3.1 Segmentation of EU/EFTA markets and product groups 15
1.3.2 Trade flows and competitor analysis 17

1.4 Mapping the value chain 38

1.5 Bottlenecks along the value chain 42

1.5.1 Market opportunities 42
1.5.2 Key bottlenecks, risks and opportunities along the value chain 43
1.5.3 Main constraints in the value chain 49

1.6 Context information 49

1.6.1 Number of enterprises active in the chain and percentage of which is actively exporting 49
1.6.2 Value addition at each step of the value chain 50
1.6.3 Currently exported volumes and amounts 50
1.6.4 Trends in supply and demand 59
1.6.5 Social Responsibility risk level in the chain 60

1.7 Recommendations for intervention 61

1.7.1 Potential improvement of export and social responsibility 61
1.7.2 Recommendation towards CBI 62
1.7.3 Risk analysis 63

2 PROCESSED FRUIT AND VEGETABLES VALUE CHAIN ANALYSIS 64

2.1 Introduction 64

2.2 Management summary 67

2.3 Export Market Analysis 69

2.3.1 Segmentation of EU/EFTA markets and product groups 69
2.3.2 Trade flows and competitor analysis 74

2.4 Mapping the value chain 93

2.5 Bottlenecks along the value chain 97

2.5.1 Market opportunities 97
2.5.2 Key bottlenecks, risks and opportunities along the value chain 97
2.5.3 Main constraints in the value chain 101

2.6 Context information 102

2.6.1 Number of enterprises active in the chain and percentage of which is actively exporting 102
2.6.2 Value addition at each step of the value chain 103

2.6.3 Currently exported volumes and amounts 103
2.6.4 Trends in supply and demand 111
2.6.5 Social Responsibility risk level in the chain 113
2.7 Recommendations for intervention 114
2.7.1 Potential improvement of export and social responsibility 114
2.7.2 Recommendation towards CBI 115
2.7.3 Risk analysis 116
3. APPAREL VALUE CHAIN ANALYSIS 117
3.1 Introduction 117
3.2 Management summary 120
3.3 Export Market Analysis 122
3.3.1 Segmentation of EU/EFTA markets and product groups 122
3.3.2 Trade flows and competitor analysis 124
3.4 Mapping the value chain 133
3.5 Bottlenecks along the value chain 135
3.5.1 Market opportunities 135
3.5.2 Key bottlenecks, Social Resposibility risks and opportunities along the value chain 135
3.5.3 Main constraints in the value chain 137
3.6 Context information 141
3.6.1 Number of enterprises active in the chain and percentage of which is actively exporting 141
3.6.2 Value addition at each step of the value chain 141
3.6.3 Currently exported volumes and amounts 141
3.6.4 Trends in supply and demand 147
3.6.5 Social Responsibility risk level in the chain 148
3.7 Recommendations for intervention 150
3.7.1 Potential improvement of export and social responsibility 150
3.7.2 Recommendation towards CBI 150
3.7.3 Risk analysis 151
4 FOOTWEAR VALUE CHAIN ANALYSIS 153
4.1 Introduction 153
4.2 Management summary 155
4.3 Export Market Analysis 158
4.3.1 Segmentation of EU/EFTA markets and product groups 158
4.3.2 Trade flows and competitor analysis 159
4.4 Mapping the value chain 168
4.5 Bottlenecks along the value chain 172
4.5.1 Market opportunities 172
4.5.2 Key bottlenecks, risks and opportunities along the value chain 173

4.5.3 Main constraints in the value chain 179
4.6 Context information 179
4.6.1 Number of enterprises active in the chain and percentage of which is actively exporting 179
4.6.2 Value addition at each step of the value chain 179
4.6.3. Currently exported volumes and amounts 180
4.6.3 Trends in supply and demand 187
4.6.4 Social Responsibility risk level in the chain 188
4.7 Recommendations for intervention 189
4.7.1 Potential improvement of export and social responsibility 189
4.7.2 Recommendation towards CBI 190
4.7.3 Risk analysis 192
5. AIR OR VACUUM PUMPS, COMPRESSORS & VENTILATION SYSTEMS VALUE CHAIN ANALYSIS 195
5.1 Introduction 195
5.2 Management summary 195
5.3 Export Market Analysis 199
5.3.1 Segmentation of EU/EFTA markets and product groups 199
5.3.2 Trade flows 204
5.3.3 Trends in demand and supply, key market players 213
5.4 Mapping the value chain 214
5.5 Bottlenecks along the value chain 225
5.5.1 Market opportunities 225
5.5.2 Key bottlenecks, risks and opportunities along the value chain 225
5.5.3 Main constraints in the value chain 227
5.6 Context information 231
5.6.1 Number of enterprises active in the chain and percentage of which is actively exporting 231
5.6.2 Value addition at each step of the value chain 231
5.6.3 Currently exported volumes and amounts 232
5.6.4 Social Responsibility risk level in the chain 236
5.7 Recommendations for intervention 237
5.7.1 Potential improvement of export and social responsibility 237
5.7.2 Recommendation towards CBI 237
5.7.3 Recommendation towards CBI 239
6 REGULATORY AND INSTITUTIONAL FRAMEWORK 240
6.1 Export of Ukrainian Products to the EU: Regulatory Framework of Discovered Problems 240
6.2 Export of Ukrainian Products to the EU: Institutional Framework 255
APPENDIXES 264

1. FRESH FRUIT AND VEGETABLES VALUE CHAIN ANALYSIS

1.1 Introduction

After the decline in 90-s the harvest of vegetables in 2003 has reached the level of 1990 and during the following years it always exceeded this level. In the period from 2003 to 2012 the production of vegetables increased annually by 6% in average. In 2012-2014 annual vegetables production was about 10 million tons (9.6 million tons in 2014). Annually the domestic market consumes 2.2 million tons of vegetables.

A different situation is observed in the production of potato. The production drop was not so significant, has exceeded the 1990 year level already in 2000, during the last years was characterized by stable increase and is now on the level of 19 up to 20 million tons per year (23.7 million tons in 2014). At the demand of 6.5-7 million tons the production of commercial potatoes is only about 2.7 million tons per year which means significant potential of the market. About a half of production volume is grown by specialized agricultural enterprises. The number of professional potato producers is constantly increasing.

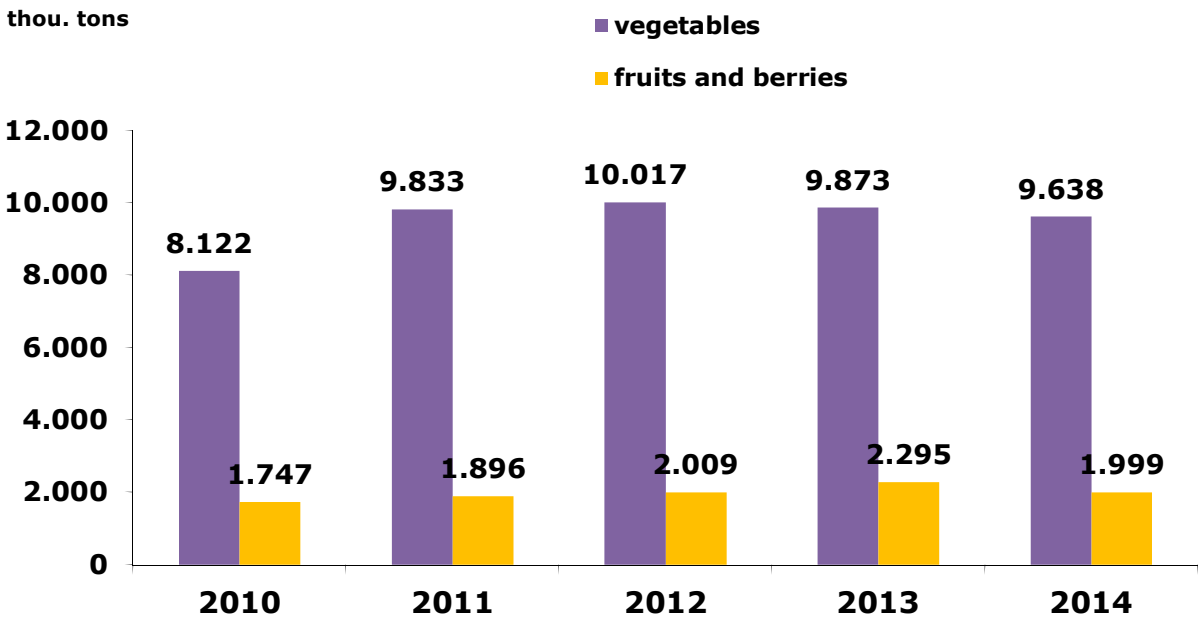


Figure 1.1 – Ukraine's production of fresh fruits and vegetables in 2010-2014

Source: State Statistic Service of Ukraine

Many vegetables produced in Ukraine are used as fodder, 10% of the vegetables are lost because of lack of storage capacities.
Fruit and berries crops fell down from around 3 million tons in 1990 to 766 thousand tons in 1999 and since then could rich only 2.3 million tons in 2013, with risings and falls in between. In 2014 there was a sufficient decrease of production (-13%) because of Crimea occupation. In the period from 2006 to 2014 the production of fruits and berries increased annually by 7.7% in average.
The main vegetables producing in Ukraine are tomatoes (2 148 thous. tons or 20.8% of vegetables production volune in 2014), cabbages (1 877 thous. tons or 18.2%) and

onions (1 109 thous. tons or 10.7%) which together accounted for almost 50% of total vegetables production.

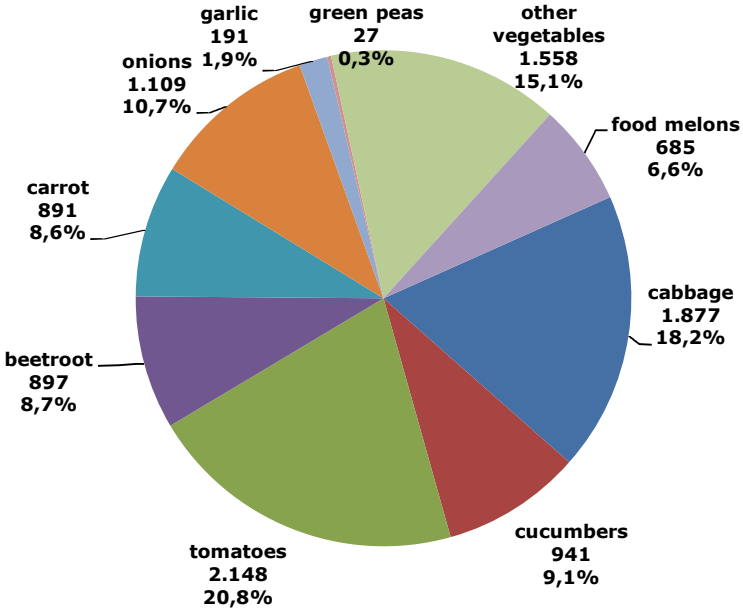


Figure 1.2 – Ukraine's fresh vegetables production by product groups in 2014, thous. tons

Source: State Statistic Service of Ukraine

The main fruits producing in Ukraine are apples and pears, accounting for more than 95% of total fruit production. About 5% of production accounted for stone fruits and berries.

Among other fruits, the most producing are cherries (18.3 thous. tons or 28.4% of stone fruits and berries production volune in 2014), plums (16.3 thous. tons or 25.3%) and merries and strawberries (both 6.7 thous. tons or 10.4%) which together accounted for almost 75% of total stone fruits and berries production.

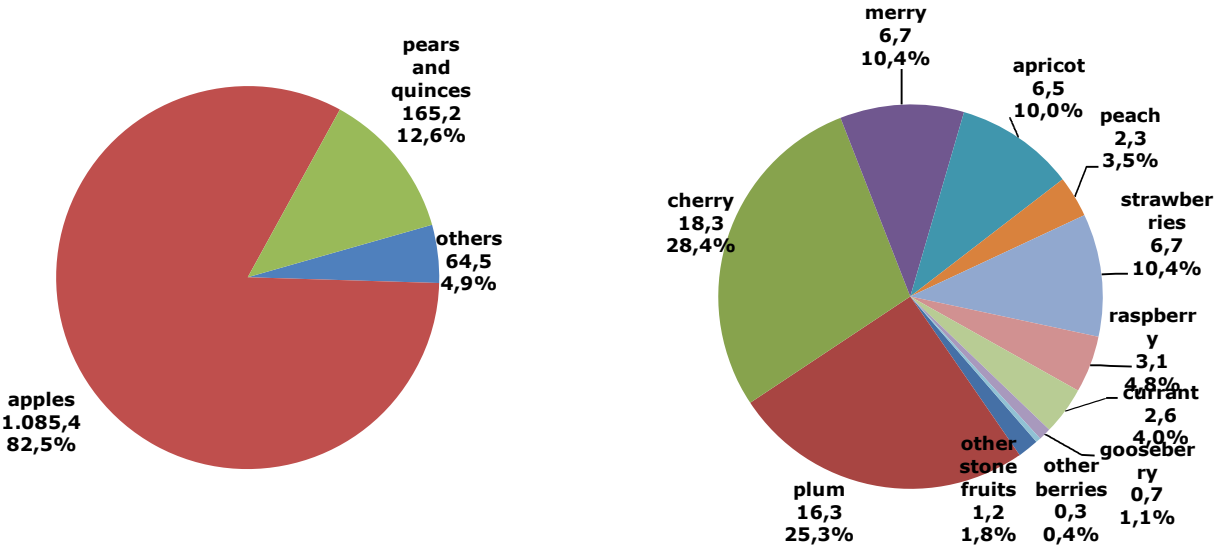


Figure 1.3 – Ukrainian fresh fruits production by product groups in 2014, thous. tons

Source: State Statistic Service of Ukraine

For the sector analysis, data is only available at the aggregate level of "Non-perennial crops", mostly (more than 90%) comprised by fruit producers. Detailed data on vegetable sector is not available.

In the fruit-producing sector there are 1 064 registered companies in Ukraine, and most of them are small or medium-sized (Table).

Over the last 5 years in terms of national currency, Ukrainian fruit sector has been constantly recording turnover growth to 4 276 million UAH (1 999 thous. tons of which 62% are apples and other pome fruits) in 2014, (the total increase was +136%). However, if in Euro terms the turnover decreased by 37% (272 million EUR) due to the devaluation of the hryvnia.

The sector contribution to the GDP during 2012 – 2014 was about 0.2% (value added of the sector was 227 mln. EUR in 2014).

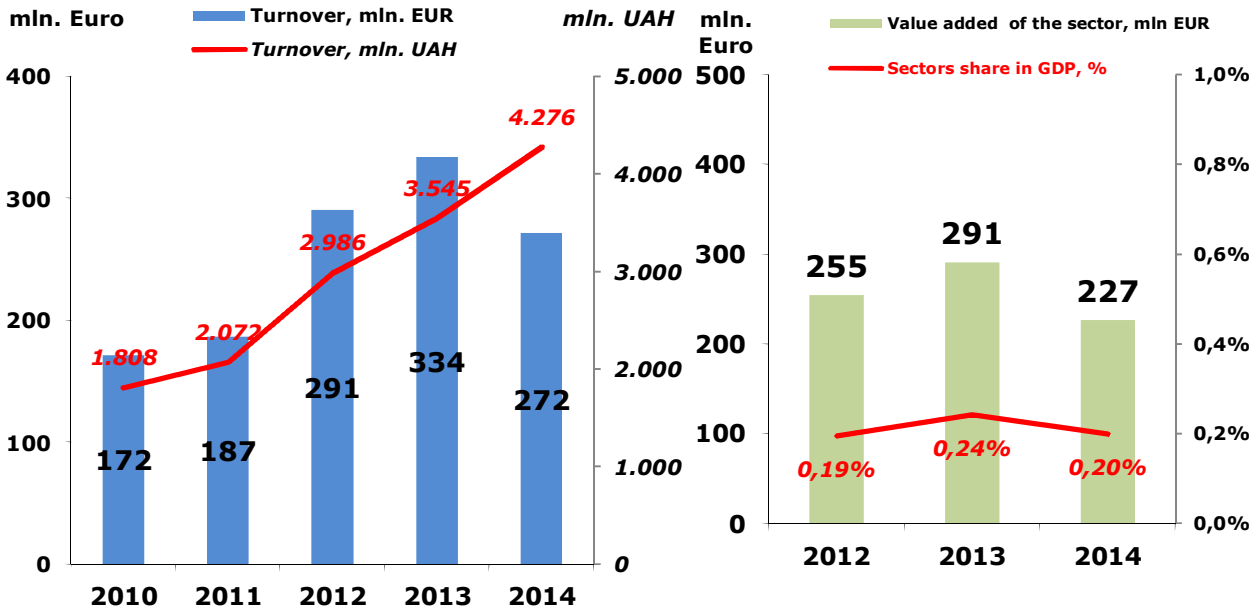


Figure 1.4- Turnover and value added of Ukraine's fresh fruits sector in 2010-2014

Table 1.1 – Basic indicators of activity of business entities of fresh fruits sector in 2010-2014*

Indicator	2010	2011	2012	2013	2014
Number of enterprises,	**518**	**870**	**1070**	**1192**	**1064**
Number of employees, thous. person	**31,5**	**32,7**	**28,9**	**26,3**	**17,1**
Turnover, mln. UAH	**1807,9**	**2071,7**	**2986,3**	**3545,4**	**4275,6**
Production value, mln. UAH	**n.a.**	**n.a.**	**3408,8**	**4237,7**	**5729,2**
Value added, mln. UAH	**n.a.**	**n.a.**	**2616,0**	**3086,4**	**3562,6**
Financial results of enterprises before taxation, mln. UAH					
Financial result (balance)	247	411,6	1272,5	1827	2305,1
in % to the total	67	68,6	68,7	70	69
Businesses earned a profit	482,2	601,6	1498,7	1967,4	2560,7

in % to the total	33	31,4	31,3	30	31
Companies made a losses	235,2	190	226,2	140,4	255,6
Net profit (loss) of enterprises, mln. UAH					
Financial result (balance)	241,3	399,8	1268,4	1825,7	2303,1
in % to the total	67	68,3	68,5	70	68,8
Businesses earned a profit	476,6	589,9	1494,1	1966,2	2558,9
in % to the total	33	31,7	31,5	30	31,2
Companies made a losses	235,3	190,1	225,7	140,5	255,8
Profitability of operational activity, %	**21,3**	**19**	**52,3**	**70,8**	**68,9**
Profitability of all activity, %	**8,6**	**12,1**	**34**	**64,9**	**62,5**

** - according to the type of activity "Production of perennial crops". Data on vegetables sector is not available*
Source: State Statistic Service of Ukraine

The assortment of grown fruit and vegetable products is very wide: grape, cherries, apples, plumps, apricots, peaches, strawberry, raspberry, blueberry, black currant, gherkins, cabbage, marrow, eggplants, pepper, tomatoes, bean, green peas etc., and last times, sweet corn and mushrooms.
Vegetable production is spread throughout Ukraine. The highest concentration of vegetable crops is typical for farms located around large cities. In horticulture sector different parts of Ukraine specializing in the cultivation of various fruits. Apples and pears are produced in forest-steppe zone (mainly Vinnytsia and Chernivtsi regions), while cherries, plums, apricots, cherries, peaches, nuts - in the central and southern regions.

One should distinguish organic market development, as in EU consumers are more aware of environmental issues, i.e. they require organic, pesticide free, or ecologically responsible products. More and more companies are looking for organic suppliers.
Certified organic agricultural production with a focus on sales to other countries began in Ukraine in 1990 because of demand for organic products in the international market.
Unfortunately, there is no official government statistics on organic agricultural production. At present it is impossible to have a complete picture of the organic sector based on information from organizations that carry out certification of organic production. According to the one of the key NGOs in the organic sector, the Organic Federation of Ukraine, the agricultural land area occupied by organic production (December 2013) amounted to 393.400 hectares, the number of certified organic agricultural producers – 175.
Due to the fact that domestic organic market is still underdeveloped, most Ukrainian companies are focused on organic exports. Main export-oriented organic agricultural products in Ukraine - are crops (cereals, oil, beans) and wild plants (berries, mushrooms, nuts, herbs), which are mainly for further processing and / or re-export. There is a high potential for increasing exports of organic products, as demand for Ukrainian organic products from international buyers from EU countries, Switzerland, USA and other countries is high and growing.
Ukrainian domestic market for organic produce is relatively young (counting begins with the development of the 2008). The main sales channel for organic products in Ukraine - a supermarket chain (e.g., Good Wine, Silpo, Auchan, Megamarket etc.). In addition, there are small specialized health food stores and online retailers. Today consumers have access to certified organic products produced in Ukraine: different kinds of vegetables,

seasonal fruits and berries, pumpkins, melons, watermelons, eggs, mushrooms, herbs, nuts, honey, cereals, flour, cereals, jams, syrups, juices, beverages, vegetable oils, spices, bakery, dairy and meat products.

Most organic operators (producers, processors, traders) in Ukraine are certified organic according to the requirements of EU legislation. In fact, the EU organic standard is used both for export and for the domestic market in Ukraine. At the beginning of December 2015, in Ukraine there is no organic operator, certified according to the requirements of the organic law of Ukraine, because it is not yet implemented. Depending on the target market, Ukrainian producers are certified according to some other standards, including: NOP, (USA), Bio Suisse (Switzerland), Bioland (Germany), Soil Association (UK), Naturland (Germany). There are 19 private international accredited certification bodies included in the official list of certification bodies for Ukraine, approved by the European Commission (Regulation (EC) 1235/2008). From this list only certification authority "Organic Standard" is a Ukrainian company, founded by Ukrainian organizations - the key participants of the organic sector in Ukraine; all other certification bodies are foreign, three of which have their offices in Ukraine (LLC "ETKO Ukraine" LLC "Control Union Ukraine" Foreign Enterprise "SGS Ukraine").

Main problems

- Lack of political will, adequate resources (including human), a systematic approach and state support in organic production and marketing organizations, state policy in organic agriculture and positive image of Ukraine;
- Unfavourable investment climate and the lack of access of SMEs to financial resources and adapted technologies that would develop organic agribusiness;
- Limited supply of organic products for domestic and foreign markets;
- Low awareness about organic products;
- Ukrainian non-harmonized legislation on organic products from the EU legal framework on organic production.

1.2 Management summary

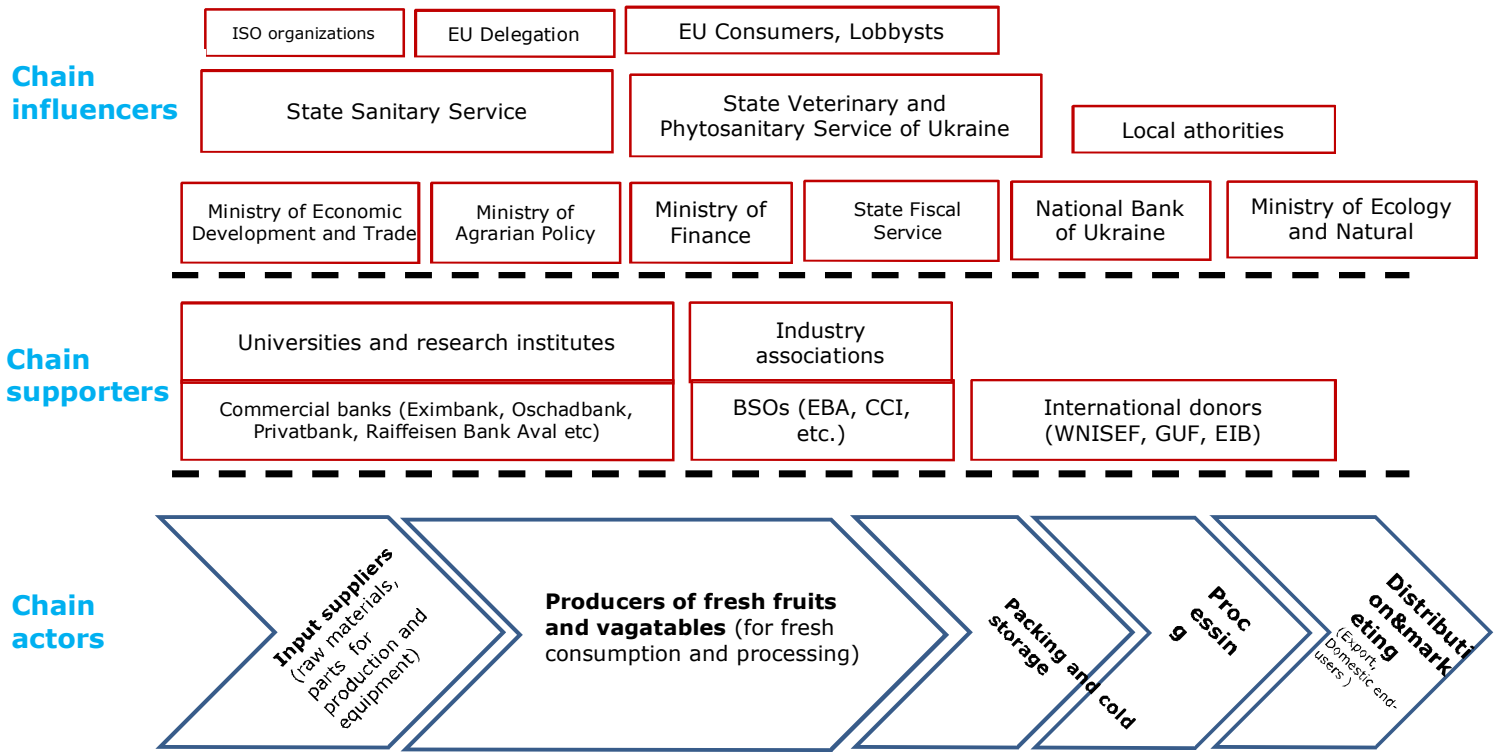
Objective

The principal objective of this value chain analysis (VCA) is to assess whether or not a CBI intervention in a fruit and vegetable sector in Ukraine will contribute significantly to export growth and, if so, identify and define the opportunities for these interventions.

Methodology

The VCA was conducted by a team of Ukrainian experts. About 20 interviews have been held with corporate representatives as well as industry experts.

Mapping the value chain



Bottlenecks along the value chain

Below is an overview of the main identified bottlenecks that currently hamper export growth to the EU/EFTA.

Observed constraints in value chain and how they prohibit export
Lack of knowledge on EU/EFTA market segments and market access requirements
Lack of (export) marketing skills
The lack of direct contacts between Ukrainian producers and European companies
Lack of necessary certifications to enter the EU market (Global GAP, ISO)
Lack of internal financial resources and limited access to long-term loans
Lack of storage facilities, especially with new equipment and technology level
Lack of refrigeration facilities in horticultural and vegetable farms
Fragmentation of producers and lack of cooperation between sector producers
Lack of state export promotion and low level of government support of producers in fresh fruit and vegetables sectors
Lack of a strong positive image and branding for Ukrainian fruit and vegetables sector
Weak branch associations which could take a lead in resolving the issues of sector and lobby the interests of manufacturers
Lack of awareness among stakeholders on CSR issues on the EU market (labour, safety, environmental and other social responsibilities)
Lack of bilateral cooperation agreement between Ukrainian phytosanitary authorities and relevant bodies of other states
Regulatory constraints resulting in more narrow range of allowed pesticides and high product costs
Deficit of quality planting material
No domestic competitive varieties of fruit and berry crops those are not inferior to foreign analogues (with flavouring properties, keeping quality etc.)
Inconsistency of fruits products to European quality standards
Climate and natural risks
The great level of labour inputs and the short after harvest period berry and stone fruit compared with apples are obstacles to berries production
Low level of production culture and pricing policy for organic products are the main obstacles to the organic production development
Unstable supply of fresh fruit and vegetable processing enterprises through lower prices (compared with the fresh fruits and berries for fresh consumption)
Lack of industrial capacities and raw materials base development for dried and frozen fruit and berries production

EU/EFTA market opportunities

In the segment of vegetable production in Ukraine almost hasn't a competitive advantage over European producers because the level of mechanization processes in Ukraine is much lower (with the exception of mushrooms, garlic, onion).

Ukraine has competitive advantages in the most labour-intensive sector products, as stone fruits, berries, and melons. Production and export of berries is promising due to current trends on the EU fruit market. Consumers are more aware of environmental issues, i.e. they require organic, pesticide free, or ecologically responsible products. These products demonstrated high rates of external import growth: berries (CAGR in 2010-2014 - 26,2%), raspberries (20,9%), strawberries (6,9%).

Promising markets for Ukraine are also watermelons (11,3%) and other melons (7,2%).

Recommendations for intervention

- exposure and linkage to European opportunities and sourcing needs, e.g. through partnering with associations such as FRUCOM, European Fruit and Vegetables Trade Association (EUCOFEL) and similar ones in Europe.
- development, regularly update and provision of EU/EFTA market intelligence information;
- capacity building in areas of export marketing and CSR.
- assistance in certification procedures for Ukrainain producers.

1.3 Export Market Analysis

1.3.1 Segmentation of EU/EFTA markets and product groups

In the EU-28, the fruit and vegetables sector accounts for 17% of the total agricultural output value, of which 10% corresponds to vegetables and the remaining 7% to fruits. The importance of the sector is higher in most of the southern Member States, representing between one third and one quarter of their total agricultural output (on average for the period 2011-2013, more than 30% in Greece, Cyprus, Malta and Portugal, and between 25% and 30% in Spain, Italy and Romania).

Table 1.2 – Share of the fruit and vegetables sector in total agricultural output – EU-28, average 2011-2013

Country	Agricultural output - average 2011-2013						
	Total, mln. EUR	Fruit and vegetables		Fruits		Vegetables	
		mln. EUR	% of total	mln. EUR	% of total	mln. EUR	% of total
EU-28	370 407.1	62 634.6	16.9	24 373.0	6.6	38 261.6	10.3
Belgium	8 148.4	1 635.3	20.1	432.5	5.3	1 202.9	14.8
Bulgaria	3 601.6	269.0	7.5	138.4	3.8	130.6	3.6
Czech Republic	4 615.8	193.9	4.2	49.6	1.1	144.4	3.1
Denmark	10 767.7	360.8	3.4	46.8	0.4	314.0	2.9
Germany	51 187.8	3 241.2	6.3	514.2	1.0	2 727.0	5.3
Estonia	773.2	73.1	9.5	5.0	0.6	68.1	8.8
Ireland	6 707.0	340.5	5.1	44.1	0.7	296.5	4.4
Greece	9 366.6	3 595.8	38.4	1 882.7	20.1	1 713.1	18.3
Spain	40 294.5	12 004.3	29.8	6 568.6	16.3	5 435.7	13.5
France	67 988.3	7 925.2	11.7	3 057.0	4.5	4 868.2	7.2
Croatia	2 314.8	219.4	9.5	113.6	4.9	105.7	4.6
Italy	42 098.0	12 089.9	28.7	5 660.3	13.4	6 429.6	15.3
Cyprus	688.2	251.5	36.6	131.0	19.0	120.5	17.5
Latvia	763.5	77.6	10.2	4.3	0.6	73.3	9.6
Lithuania	2 444.3	154.2	6.3	8.9	0.4	145.3	5.9
Luxembourg	376.3	10.3	2.7	2.8	0.7	7.6	2.0
Hungary	6 991.5	934.3	13.4	358.7	5.1	575.6	8.2
Malta	120.2	42.6	35.5	6.7	5.6	35.9	29.9
Netherlands	22 970.5	3 898.8	17.0	628.8	2.7	3 270.0	14.2
Austria	6 451.8	540.4	8.4	202.8	3.1	337.7	5.2
Poland	21 582.3	4 060.8	18.8	1 276.3	5.9	2 784.4	12.9
Portugal	5 960.7	1 870.3	31.4	1 123.4	18.8	746.9	12.5
Romania	15 398.9	4 219.8	27.4	1 101.6	7.2	3 118.2	20.2
Slovenia	1 160.5	171.5	14.8	99.4	8.6	72.1	6.2
Slovakia	2 067.6	197.4	9.5	44.6	2.2	152.8	7.4
Finland	4 047.6	678.3	16.8	99.3	2.5	579.0	14.3
Sweden	5 527.7	517.1	9.4	90.4	1.6	426.7	7.7

United Kingdom	25 992.1	3 061.2	11.8	681.4	2.6	2 379.8	9.2

Source: Eurostat - Agricultural production, Economic Accounts for Agriculture (table aact_eaa01). Total is the sum of 10000 - Crop output and 13000 - Animal output. Fruits correspond to 06000 - Fresh fruit. Vegetables is the sum of 04100 - Fresh vegetables and 05000 - Potatoes (including seeds), i.e. excluding plants and flowers.

Most of the EU's production of fresh fruit and vegetables is consumed internally: overall, only 15% of the total fruit production and 7% of the vegetables production is exported outside the EU (in value). In terms of quantities of fresh fruit produced, the EU exports around 32% of the production of kiwis, 15.5% of pears, 12-13% of apples and nectarines, 6-8% of peaches, lemons and table grapes, and 5.5% or less of the production of apricots, cherries, strawberries, oranges, melons and watermelons. In the case of vegetables, EU exports represent around 12.5% of the production of onions, 5-6% of sweet peppers and mushrooms, and less than 5% of the production of tomatoes, potatoes, cucumbers, carrots, cauliflowers and broccoli, cabbages and eggplants.

Table 1.3 –EU-28 production and exports of fresh fruit and vegetables, by main product, average 2011-2013, thous tons

Product	Production	Exports extra-EU	% of production
Fresh fruit			
Apples	11 429,2	1 428,2	12,5
Pears	2 480,3	383,6	15,5
Peaches	2 522,6	164,4	6,5
Nectarines	1 251,8	163,3	13,0
Apricots	654,2	21,3	3,3
Cherries	799,3	24,1	3,0
Strawberries	1 070,2	59,0	5,5
Oranges	6 176,5	290,6	4,7
Lemons	1 223,0	77,4	6,3
Table grapes	1 753,2	134,5	7,7
Melons	1 938,4	41,0	2,1
Watermelons	2 681,7	47,8	1,8
Kiwis	687,5	222,1	32,3
Fresh vegetables			
Tomatoes	15 337,9	276,7	1,8
Potatoes	59 875,0	681,9	1,1
Mushrooms	1 324,5	70,6	5,3
Cucumbers	2 151,9	60,3	2,8
Carrots	5 216,0	98,8	1,9
Sweet peppers	2 259,2	132,0	5,8
Cauliflowers and broccoli	2 211,7	55,2	2,5
Cabbages	3 567,2	58,1	1,6
Eggplants	723,5	25,9	3,6
Onions	5 948,7	745,0	12,5

1.3.2 Trade flows and competitor analysis

Freshness and perishability of fresh fruit and vegetables produce, as well as the fairly wide variety of products offered by EU countries, make intra-EU trade a very significant share of the sector's total trade (Table 1.4). Intra-EU import covered about 80% of the value of EU's fruit and vegetables imports in 2014, against a higher rate in 2010 (81.2%).

Over the last 5 years the EU/EFTA countries has been constantly recording a negative trade balance in fresh fruit and vegetables foreign trade, totalling 3.6 billion EUR in 2014 (Table 1.4). However, if in value terms the import was higher than export by 15% on average in volume terms – around 4%, indicating that the products, imported to the EU/EFTA was characterized by the higher level of prices than export prices (see Table).
In terms of value, EU/EFTA **exports** of fresh fruits and vegetables grew from 20.5 bln. EUR in 2010 to 22.2 bln. EUR in 2014 (up by 2.0% on average). In terms of quantity, growth also was observed: from 26,314 tonnes in 2010 to 28,444 tonnes in 2014 (up by 2.0% on average).

EU/EFTA **imports** of fresh fruits and vegetables in terms of value grew from 23.6 bln. EUR in 2010 to 25.7 bln. EUR in 2014 (up by 2.2% on average). In terms of quantity, growth was also less pronounced: from 27,198 tonnes in 2010 to 28,962 tonnes in 2014 (up by 1.6% on average). The fact that values grew faster than volumes may be because of price increases due to inflation, international price increases or fluctuations in exchange rates.

Table 1.4 –EU/EFTA foreign trade of fresh fruits and vegetables in 2010-2014, mln. EUR*

Indicator	2010	2011	2012	2013	2014	CAGR, %
Value, mln. Euro						
Export	20 504	20 052	21 778	23 577	22 216	2,0%
Import	23 601	23 408	24 856	27 061	25 787	2,2%
incl. external	4 448	4 657	4 647	4 881	5 094	3,4%
incl. Ukraine	9	6	8	7	6	-7,7%
Ukraine's share	0,20	0,13	0,17	0,15	0,13	
Weight, thous.tons						
Export	26 314	26 856	27 261	28 197	28 444	2,0%
Import	27 198	27 591	28 813	29 861	28 962	1,6%
incl. external	3 877	3 828	3 689	3 857	3 776	-0,7%
incl. Ukraine	28	17	14	21	11	-21,5%
Ukraine's share	0,71	0,43	0,37	0,55	0,28	

Source: Eurostat
** - excluding apples, pears and tropical fruits*

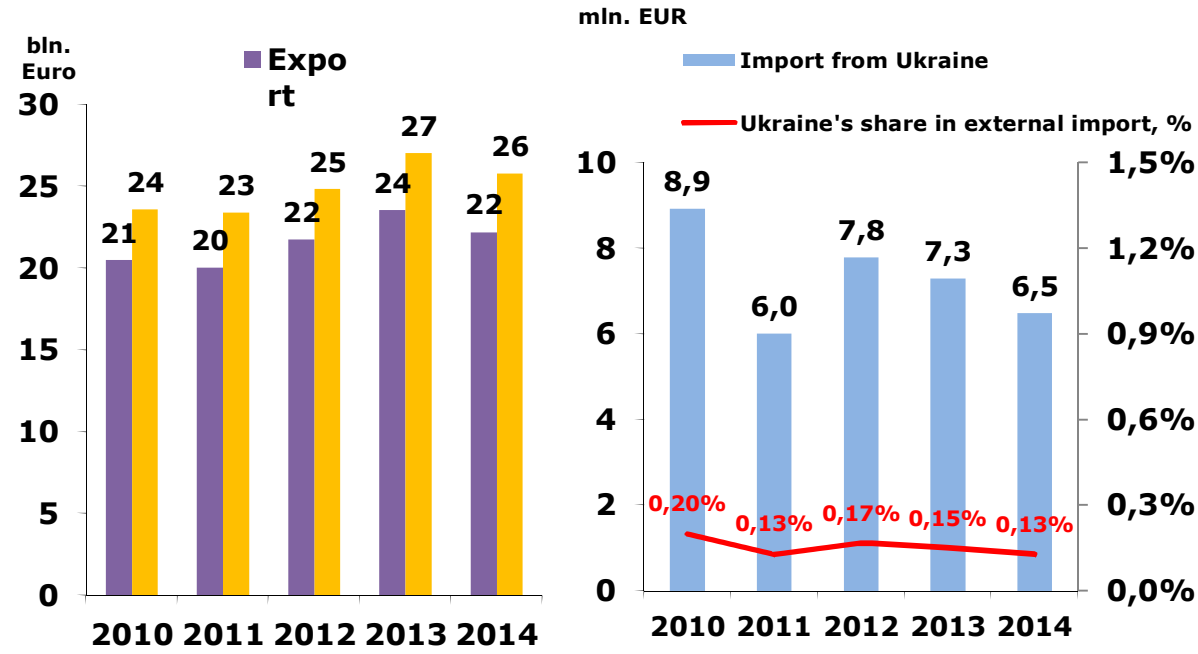


Figure 1.5- EU/EFTA foreign trade of fresh fruits and vegetables in 2010-2014 in value terms

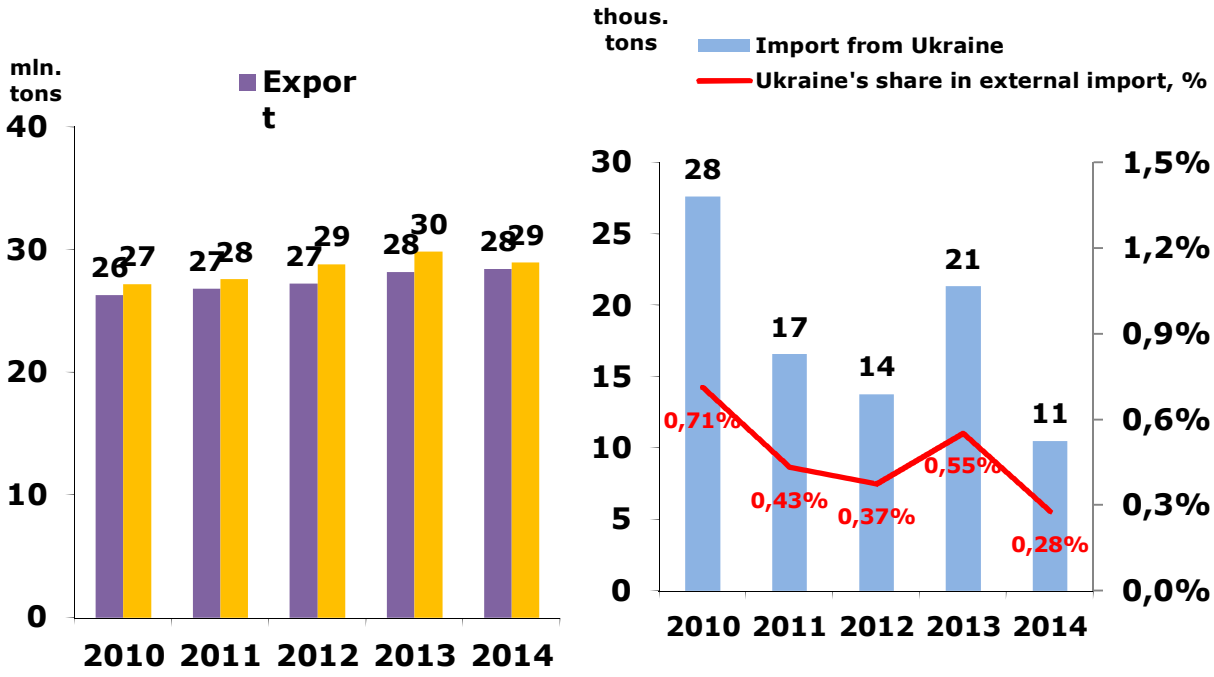


Figure 1.6 - EU/EFTA foreign trade of fresh fruits and vegetables in 2010-2014 in volume terms

Extra-EU export is around 10% of all EU/EFTA fruits and vegetables export in 2014. Hence, Europe mainly exports to other European countries (own production and re-exports). The highest shares of extra-EU export are in shipments of potatoes (26%), stone fruits (19%), root, bulb or tuberous vegetables (17%) and bush fruits (16%).
Extra-EU exported fresh fruits and vegetables consist mainly of fruit-bearing vegetables (529 mln. EUR or 24% in 2014), potatoes (488 mln. EUR or 22%), stone fruits (370 mln. EUR or 17%) and root, bulb or tuberous vegetables (290 mln. EUR or 13%). Together, these product account for more than three fourth of all extra-EU exports of fresh fruits and vegetables.

In 2010-2014 export increase was observed in trade of all products (the largest in the segment of green leguminous vegetables, bush fruits and bush fruits - CAGR 30.4%%, 16.3%%, 14.2%% respectively).

Table 1.5 – EU/EFTA fresh fruits and vegetables export by main product groups in 2010-2014*

Subgroup	ALL EXPORT EU/EFTA		EU/EFTA external export		UA import from EU/EFTA		UA share in external export
	mln. EUR	CAGR in 2010-2014	mln. EUR	CAGR in 2010-2014	mln. EUR	CAGR in 2010-2014	
Value, mln. Euro							
Other fruit-bearing vegetables	7 699,4	1,6%	528,6	4,6%	16,2	1,8%	3,1%
Leafy or stem vegetables	2 488,8	1,7%	132,7	9,5%	5,4	3,5%	4,0%
Potatoes and other edible roots and tubers with high starch or inulin content	1 880,3	-0,7%	488,2	0,3%	5,8	19,1%	1,2%
Stone fruits	2 001,4	0,9%	369,9	6,7%	24,1	-1,1%	6,5%
Root, bulb or tuberous vegetables	1 696,9	-1,9%	290,2	-1,3%	7,5	-5,9%	2,6%
Grapes	1 736,3	2,7%	80,5	-5,4%	4,7	-15,6%	5,9%
Berries and the fruits of the genus vaccinium	1 920,5	11,0%	107,5	14,2%	1,0	6,9%	0,9%
Melons	955,9	2,8%	14,7	7,9%	0,1	-4,7%	0,6%
Mushrooms and truffles	904,6	1,8%	79,2	5,3%	0,0	-58,5%	0,0%
Other tree and bush fruits n.e.c.	538,5	7,1%	85,6	16,3%	9,5	26,1%	11,1%
Green leguminous vegetables	304,3	6,2%	9,3	30,4%	0,0	11,4%	0,4%
Vegetables, fresh, n.e.c.	89,1	4,4%	5,8	4,2%	0,5	6,3%	7,9%
Total	22 216,0	2,0%	2 192,1	3,6%	74,8	0,9%	3,4%
Weight, thous. tons							
Other fruit-bearing vegetables	7 096,4	5,3%	433,3	12,7%	16,7	-3,3%	3,9%
Leafy or stem vegetables	2 831,1	3,6%	241,7	11,0%	12,0	-3,6%	5,0%
Potatoes and other edible roots and tubers with high starch or inulin content	7 686,3	-1,3%	1 359,8	-0,4%	19,0	21,3%	1,4%
Stone fruits	2 106,9	4,6%	447,5	9,7%	42,5	2,5%	9,5%

Root, bulb or tuberous vegetables	3 863,5	0,0%	943,5	1,9%	25,4	-13,9%	2,7%
Grapes	1 084,3	-0,3%	62,9	-6,3%	4,9	-22,3%	7,8%
Berries and the fruits of the genus vaccinium	667,2	8,5%	50,8	21,5%	0,6	11,8%	1,2%
Melons	1 769,0	1,6%	27,6	6,9%	0,1	-12,1%	0,3%
Mushrooms and truffles	429,1	0,3%	66,5	7,1%	0,0	-80,2%	0,0%
Other tree and bush fruits n.e.c.	413,7	8,7%	88,6	21,6%	10,3	20,1%	11,6%
Green leguminous vegetables	358,3	6,6%	13,4	36,3%	0,0	25,3%	0,2%
Vegetables, fresh, n.e.c.	138,1	6,5%	9,6	13,0%	0,5	1,8%	5,3%
Total	28 444,0	2,0%	3 745,2	3,9%	132,0	-2,6%	3,5%

Source: Eurostat
** - excluding apples, pears and tropical fruits*

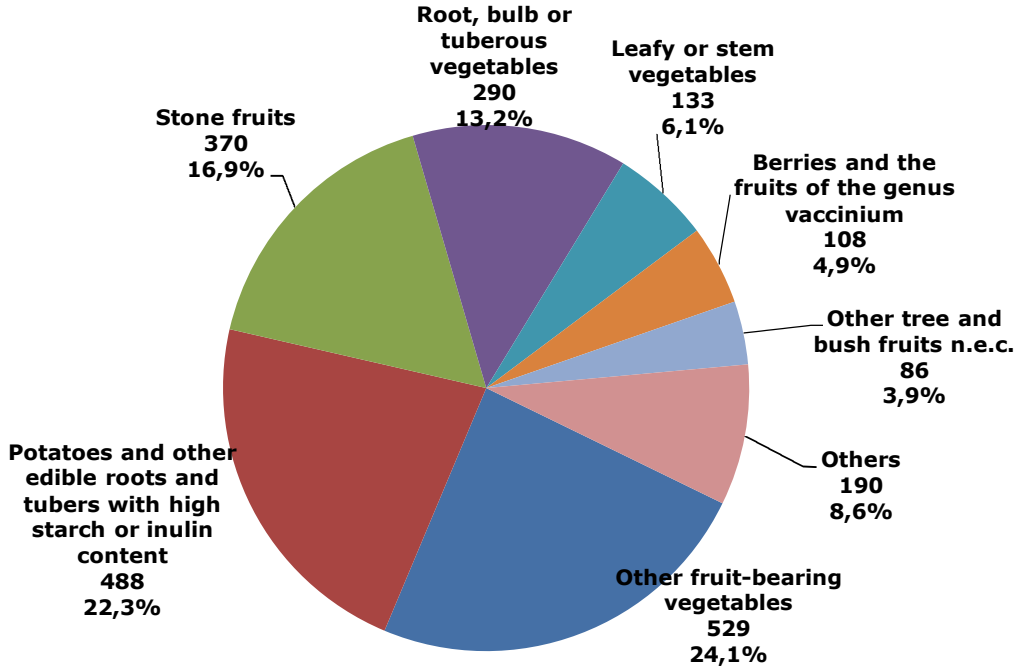


Figure 1.7- EU/EFTA external export of fresh fruits and vegetables by main product groups in 2014, mln. EUR

EU/EFTA fresh fruits and vegetables export by main product groups and subgroups in 2010-2014 is shown in Table 1.6.

Table 1.6 –EU/EFTA fresh fruits and vegetables export by main product groups in 2010-2014*

Group	Subgroup	ALL EXPORT EU/EFTA		EU/EFTA external export		UA import from EU/EFTA		UA share in external export
		mln. EUR	CAGR in 2010-2014	mln. EUR	CAGR in 2010-2014	mln. EUR	CAGR in 2010-2014	
		Value, mln. Euro						
Other fruit-bearing vegetables	Tomatoes	3 440,1	2,5%	252,1	18,6%	7,8	-0,6%	3,1%
	Chillies and peppers, green (only capsicum)	1 937,7	1,4%	150,1	-1,6%	6,2	1,9%	4,1%
	Other fruit-bearing vegetables n.e.c.	1 114,4	-1,6%	69,2	-12,8%	1,0	13,8%	1,4%
	Cucumbers and gherkins	977,5	2,2%	32,4	22,8%	0,4	47,1%	1,1%
	Eggplants (aubergines)	229,7	3,0%	24,8	3,9%	1,0	4,8%	3,9%
Leafy or stem vegetables	Lettuce	994,4	-0,6%	46,9	14,4%	2,7	12,8%	5,8%
	Cauliflowers and broccoli	567,0	1,7%	25,8	14,8%	1,1	11,8%	4,4%
	Cabbages	378,4	1,9%	45,4	3,6%	1,2	-13,0%	2,7%
	Asparagus	225,1	6,8%	5,0	8,4%	0,1	-4,2%	2,0%
	Chicory	197,9	-0,5%	7,6	4,5%	0,1	14,0%	1,2%
	Spinach	86,1	15,8%	1,6	24,8%	0,1	150,9%	7,2%
	Artichokes	39,9	-	0,4	-	0,0	-	1,7%
Potatoes and other edible roots and tubers with high starch or inulin content	Potatoes	1 794,9	-1,3%	486,6	0,3%	5,8	19,1%	1,2%
	Sweet potatoes	57,4	25,1%	0,3	23,1%	0,0	32,8%	3,3%
	Cassava	10,8	-5,6%	0,0	-32,5%	0,0	-	0,1%
	Other edible roots and tubers with high starch or inulin content	15,4	10,0%	1,1	38,2%	0,0	-100,0%	0,0%
	Taro	1,9	-	0,0	-	0,0	-	0,0%

Stone fruits	Nectarines	1 201,1	-0,6%	240,5	4,0%	21,2	-1,7%	8,8%
	Cherries	297,1	3,8%	45,9	19,1%	0,3	17,2%	0,6%
	Sloes	241,6	0,1%	63,5	8,5%	1,6	7,6%	2,4%
	Apricots	261,6	6,7%	20,0	15,9%	1,1	-1,9%	5,3%
Root, bulb or tuberous vegetables	Onions	724,0	-2,9%	212,8	-2,8%	7,0	3,9%	3,3%
	Carrots and turnips	311,9	0,4%	22,0	-6,1%	0,1	-53,1%	0,6%
	Garlic	296,3	-1,4%	33,7	11,9%	0,1	56,3%	0,3%
	Other root, bulb or tuberous vegetables	231,4	3,0%	14,9	4,3%	0,2	-33,4%	1,0%
	Leeks and other alliaceous vegetables	133,3	-8,8%	7,0	8,6%	0,1	-0,6%	1,5%
Grapes	Other grapes, fresh	1 736,3	2,7%	80,5	-5,4%	4,7	-15,6%	5,9%
Berries and the fruits of the genus vaccinium	Strawberries	1 084,7	5,0%	70,4	12,8%	0,6	7,1%	0,9%
	Raspberries	422,3	21,3%	18,4	14,3%	0,1	-8,0%	0,6%
	Other berries, the fruits of the genus vaccinium n.e.c.	413,5	24,1%	18,7	20,6%	0,2	21,6%	1,2%
Melons	Other melons	509,8	4,1%	8,5	7,7%	0,1	-1,7%	0,7%
	Watermelons	446,2	1,4%	6,2	8,0%	0,0	-10,0%	0,4%
Mushrooms and truffles	Mushrooms and truffles	904,6	1,8%	79,2	5,3%	0,0	-58,5%	0,0%
Other tree and bush fruits n.e.c.	Other tree and bush fruits n.e.c.	538,5	7,1%	85,6	16,3%	9,5	26,1%	11,1%
Green leguminous vegetables	Beans, green	192,4	4,4%	2,2	2,2%	0,0	16,1%	1,4%
	Peas, green	85,8	9,9%	2,0	31,3%	0,0	-0,1%	0,4%
	Other green leguminous vegetables	26,1	9,5%	5,1	73,8%	0,0	-	0,0%
Vegetables, fresh, n.e.c.	Vegetables, fresh, n.e.c.	89,1	4,4%	5,8	4,2%	0,5	6,3%	7,9%
TOTAL		22	2,0%	2	3,6%	74,8	0,9%	3,4%

		216,0		192,1				
		Weight, thous. tons						
Other fruit-bearing vegetables	Tomatoes	3 020,4	4,6%	249,4	22,0%	8,3	-6,7%	3,3%
	Chillies and peppers, green (only capsicum)	1 599,3	8,6%	90,9	3,3%	6,3	-0,3%	6,9%
	Other fruit-bearing vegetables n.e.c.	952,8	2,8%	36,5	-4,4%	0,8	-4,6%	2,1%
	Cucumbers and gherkins	1 284,2	5,3%	33,2	20,6%	0,5	35,4%	1,4%
	Eggplants (aubergines)	239,7	5,8%	23,3	9,0%	1,0	3,2%	4,2%
Leafy or stem vegetables	Lettuce	1 046,6	3,7%	44,1	21,5%	3,1	25,3%	7,1%
	Cauliflowers and broccoli	696,9	4,0%	34,4	17,4%	1,5	10,2%	4,4%
	Cabbages	700,1	1,2%	157,1	7,7%	7,1	-11,5%	4,5%
	Asparagus	70,1	5,4%	1,1	10,7%	0,1	2,2%	4,8%
	Chicory	201,9	2,8%	4,3	9,6%	0,1	40,4%	2,4%
	Spinach	84,7	13,5%	0,5	5,9%	0,1	225,3%	22,8%
	Artichokes	30,8	-	0,2	-	0,0	-	1,5%
Potatoes and other edible roots and tubers with high starch or inulin content	Potatoes	7 580,3	-1,5%	1 358,9	-0,4%	19,0	21,3%	1,4%
	Sweet potatoes	58,8	30,2%	0,2	9,5%	0,0	32,0%	3,9%
	Cassava	9,0	-10,1%	0,0	-56,1%	0,0	-	0,0%
	Other edible roots and tubers with high starch or inulin content	36,7	9,6%	0,7	31,3%	0,0	-100,0%	0,0%
	Taro	1,5	-	0,0	-	0,0	-	0,0%
Stone fruits	Nectarines	1 493,6	4,6%	317,7	7,9%	37,8	1,8%	11,9%
	Cherries	149,0	5,5%	34,9	20,2%	0,6	47,6%	1,9%

	Sloes	273,5	2,4%	77,9	12,5%	2,4	10,9%	3,0%
	Apricots	190,8	7,7%	17,1	16,2%	1,6	0,8%	9,4%
Root, bulb or tuberous vegetables	Onions	2 184,3	-0,9%	796,1	2,3%	24,2	-0,9%	3,0%
	Carrots and turnips	911,3	-1,8%	84,0	-7,2%	0,7	-54,2%	0,9%
	Garlic	186,7	11,1%	32,9	29,3%	0,0	64,2%	0,2%
	Other root, bulb or tuberous vegetables	395,0	6,1%	21,7	3,0%	0,3	-49,7%	1,2%
	Leeks and other alliaceous vegetables	186,2	-0,5%	8,9	16,5%	0,2	8,2%	2,0%
Berries and the fruits of the genus vaccinium	Strawberries	513,6	6,3%	45,3	22,7%	0,4	7,3%	0,9%
	Raspberries	75,2	14,8%	2,1	20,2%	0,1	12,3%	2,4%
	Other berries, the fruits of the genus vaccinium n.e.c.	78,3	21,7%	3,4	10,4%	0,1	52,2%	3,1%
Grapes	Other grapes, fresh	1 084,3	-0,3%	62,9	-6,3%	4,9	-22,3%	7,8%
Melons	Other melons	651,4	3,2%	8,8	4,7%	0,1	-7,9%	0,6%
	Watermelons	1 117,6	0,7%	18,7	8,1%	0,0	-18,2%	0,2%
Mushrooms and truffles	Mushrooms and truffles	429,1	0,3%	66,5	7,1%	0,0	-80,2%	0,0%
Other tree and bush fruits n.e.c.	Other tree and bush fruits n.e.c.	413,7	8,7%	88,6	21,6%	10,3	20,1%	11,6%
Green leguminous vegetables	Beans, green	206,9	3,5%	1,3	-12,8%	0,0	26,9%	1,8%
	Peas, green	106,2	9,0%	2,4	34,5%	0,0	13,2%	0,1%
	Other green leguminous vegetables	45,2	20,4%	9,8	81,8%	0,0	-	0,0%
Vegetables, fresh, n.e.c.	Vegetables, fresh, n.e.c.	138,1	6,5%	9,6	13,0%	0,5	1,8%	5,3%
TOTAL		28 444,0	2,0%	3 745,2	3,9%	132,0	-2,6%	3,5%

Source: Eurostat
** - excluding apples, pears and tropical fruits*

The major destinations of extra-EU exports are Russia (763 mln. EUR or 35% in 2014), Belarus (216 mln. EUR or 10%), Algeria (103 mln. EUR or 13%) and Egypt (452 mln. EUR or 9%), which in 2014 accounted for 53% of exports.

Table 1.7 –EU/EFTA export of fresh fruits and vegetables by countries in 2010-2014, mln. Euro*

Country	ALL EXPORT EU/EFTA		EU/EFTA external export		UA import from EU/EFTA		UA share in external export
	mln. EUR	CAGR in 2010-2014	mln. EUR	CAGR in 2010-2014	mln. EUR	CAGR in 2010-2014	
Spain	7 168,1	5,4%	345,1	17,1%	4,5	19,3%	1,3%
Netherlands	6 095,7	0,7%	717,2	-3,5%	10,5	-7,4%	1,5%
Italy	2 104,7	-2,1%	68,6	-2,4%	0,5	-26,6%	0,7%
France	1 718,2	-0,6%	77,7	5,3%	0,7	467,8%	0,9%
Belgium	1 129,9	1,5%	81,7	-7,0%	0,0	-52,2%	0,0%
Germany	796,4	0,5%	35,0	0,4%	0,9	6,1%	2,4%
Poland	758,7	6,7%	217,0	9,3%	46,8	5,6%	21,6%
Greece	477,8	3,2%	121,1	10,9%	9,8	-9,0%	8,1%
Lithuania	445,1	11,0%	390,9	11,5%	0,4	58,9%	0,1%
Austria	221,0	-6,5%	2,0	21,8%	0,0	-	0,0%
United Kingdom	223,4	-2,9%	57,5	13,6%	0,0	-100,0%	0,0%
Portugal	238,0	11,3%	7,1	6,4%	0,0	-100,0%	0,0%
Hungary	142,6	-1,8%	8,8	-2,5%	0,3	-4,8%	3,1%
Denmark	126,8	5,5%	22,7	-2,0%	0,0	-	0,0%
Ireland	120,8	0,6%	0,1	-51,8%	0,0	-	0,0%
Slovenia	78,0	-7,9%	16,3	11,9%	0,2	-12,8%	1,2%
Czech Republic	91,2	-1,6%	0,2	-14,6%	0,0	-	24,3%
Sweden	41,6	-4,3%	0,0	-69,3%	0,0	-	0,0%
Cyprus	49,8	3,5%	2,7	68,2%	0,0	-	0,3%
Romania	53,9	4,9%	3,0	-5,9%	0,0	-	1,5%
Bulgaria	31,7	-5,0%	6,0	-0,8%	0,2	-7,7%	2,8%
Latvia	34,5	7,7%	5,2	-6,1%	0,0	-	0,1%
Slovakia	23,8	-13,3%	0,1	-7,3%	0,0	-28,6%	34,1%
Finland	9,1	-12,2%	2,4	-31,1%	0,0	-	1,3%
Luxembourg	11,7	5,9%	0,4	3,8%	0,0	-	0,0%
Croatia	11,9	28,2%	2,0	8,5%	0,0	-	0,0%
Estonia	3,9	-6,3%	0,3	-31,3%	0,0	-	0,0%
Switzerland	4,1	10,2%	0,8	74,7%	0,0	-	0,0%
Norway	1,9	0,5%	0,0	-31,3%	0,0	-	0,0%
Malta	1,5	27,5%	0,1	-16,8%	0,0	-	0,0%
Iceland	0,2	40,6%	0,2	40,6%	0,0	-	0,0%
TOTAL	22 216,0	2,0%	2 192,1	3,6%	74,8	0,9%	3,4%

Source: Eurostat
** - excluding apples, pears and tropical fruits*

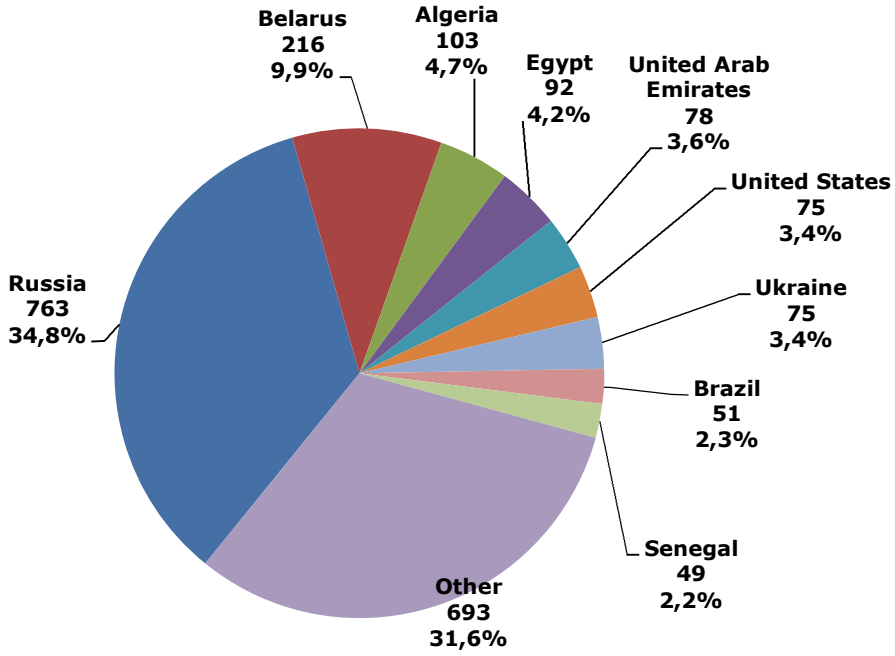


Figure 1.8- EU/EFTA external export of fresh fruits and vegetables by main importing countries in 2014, mln. EUR

The major exporters of extra-EU exports are Netherlands (717 mln. EUR or 33% in 2014), Lithuania (391 mln. EUR or 18%), Spain (345 mln. EUR or 16%) and Poland (217 mln. EUR or 10%), which in 2014 accounted for 77% of exports.

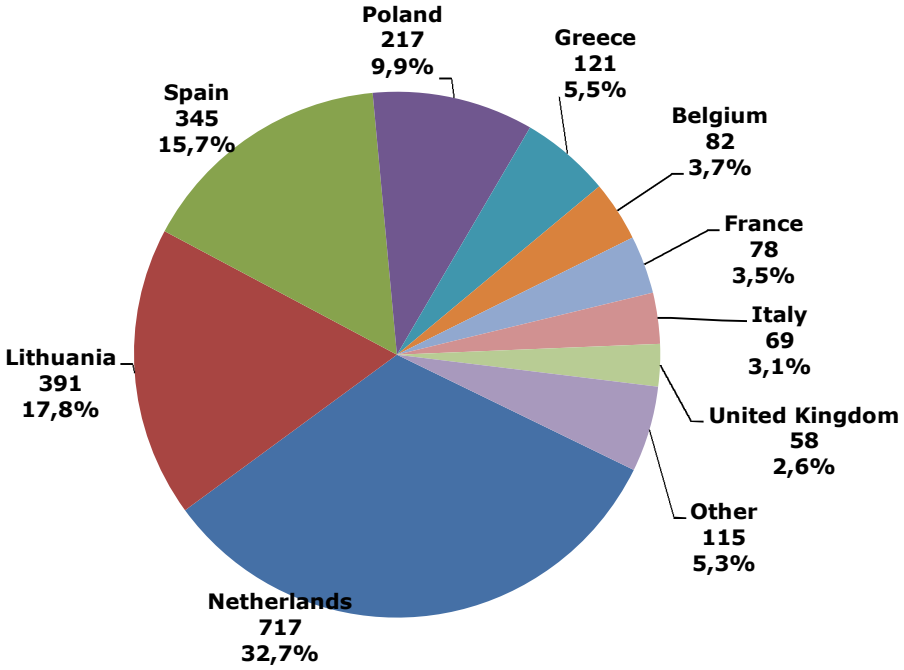


Figure 1.9- EU/EFTA external export of fresh fruits and vegetables by main exporting countries in 2014, mln. EUR

Around 80% of EU/EFTA imports in 2014 are intra-EU imports and 20% - extra-EU import. Hence, a major share of European imports consists of products that are re-exported. The highest levels of extra-EU import are in shipments of green leguminous vegetables (63%), grapes (44%), bush fruits (37%), melons (32%) and berries (20%).
In 2010-2014 the largest external import increase was observed in import of Berries and the fruits of the genus vaccinium, melons and bush fruits (CAGR in value terms 19.6%, 8.1% and 6.9% respectively).

Table 1.8 –EU/EFTA fresh fruits and vegetables import by main product groups in 2010-2014*

Subgroup	ALL IMPORT EU/EFTA		EU/EFTA external import		UA export to EU/EFTA		UA share in external import
	mln. EUR	CAGR in 2010-2014	mln. EUR	CAGR in 2010-2014	mln. EUR	CAGR in 2010-2014	
Value, mln. Euro							
Other fruit-bearing vegetables	8 404,9	0,8%	979,1	-2,2%	0,2	-3,6%	0,0%
Grapes	2 910,4	3,8%	1 292,1	5,1%	0,0	-	0,0%
Leafy or stem vegetables	2 694,3	1,4%	216,6	4,1%	0,0	-49,8%	0,0%
Stone fruits	2 077,0	1,2%	311,5	-0,3%	0,0	30,9%	0,0%
Potatoes and other edible roots and tubers with high starch or inulin content	1 819,4	1,3%	276,6	1,7%	0,0	-	0,0%
Root, bulb or tuberous vegetables	1 785,0	-2,3%	288,7	-4,8%	0,2	6,1%	0,1%
Berries and the fruits of the genus vaccinium	2 155,9	10,5%	427,3	19,6%	0,5	-23,1%	0,1%
Melons	1 412,1	4,6%	450,9	8,1%	1,4	-20,2%	0,3%
Mushrooms and truffles	924,1	1,5%	68,6	2,1%	4,2	2,9%	6,1%
Green leguminous vegetables	829,6	7,9%	525,1	6,6%	0,0	-	0,0%
Other tree and bush fruits n.e.c.	696,4	6,9%	256,8	6,9%	0,0	-	0,0%
Vegetables, fresh, n.e.c.	78,2	0,1%	0,4	-35,5%	0,0	-	0,0%
Total	25 787,1	2,2%	5 093,7	3,4%	6,5	-7,7%	0,1%
Weight, thous. tons							
Other fruit-bearing vegetables	7 190,4	2,0%	970,4	-0,8%	0,3	-11,6%	0,0%
Grapes	1 641,1	-0,1%	624,1	1,0%	0,0	-	0,0%
Leafy or stem vegetables	2 651,2	2,7%	107,9	-1,9%	0,0	-29,1%	0,0%
Stone fruits	1 864,7	3,3%	141,3	-1,2%	0,0	15,2%	0,0%
Potatoes and other edible roots and tubers with high starch or inulin content	7 586,5	0,8%	495,0	-3,9%	0,0	-	0,0%
Root, bulb or tuberous vegetables	3 411,6	-0,6%	404,6	-5,5%	0,8	30,3%	0,2%
Berries and the fruits of the genus vaccinium	688,5	5,2%	92,4	8,9%	0,3	-19,0%	0,3%
Melons	2 244,5	1,9%	574,0	1,3%	8,1	-24,6%	1,4%
Mushrooms and truffles	418,5	-0,5%	13,6	2,5%	0,9	2,1%	6,5%

Green leguminous vegetables	666,2	7,4%	230,2	1,8%	0,0	-	0,0%
Other tree and bush fruits n.e.c.	447,1	8,2%	122,7	10,2%	0,0	-	0,0%
Vegetables, fresh, n.e.c.	151,6	2,9%	0,3	-39,3%	0,0	-	0,0%
Total	28 961,9	1,6%	3 776,4	-0,7%	10,5	-21,5%	0,3%

Source: Eurostat
** - excluding apples, pears and tropical fruits*

Extra-EU imported fresh fruits consist mainly of grapes (1 292 mln. EUR or 47% in 2014), melons (451 mln. EUR or 17%), berries (427 mln. EUR or 16%) and stone fruits (312 mln. EUR or 11%) Together, these product account for more than 90% of all extra-EU imports of fresh fruits. Import fron Ukraine and its share is negligible (see Figure 1.10).

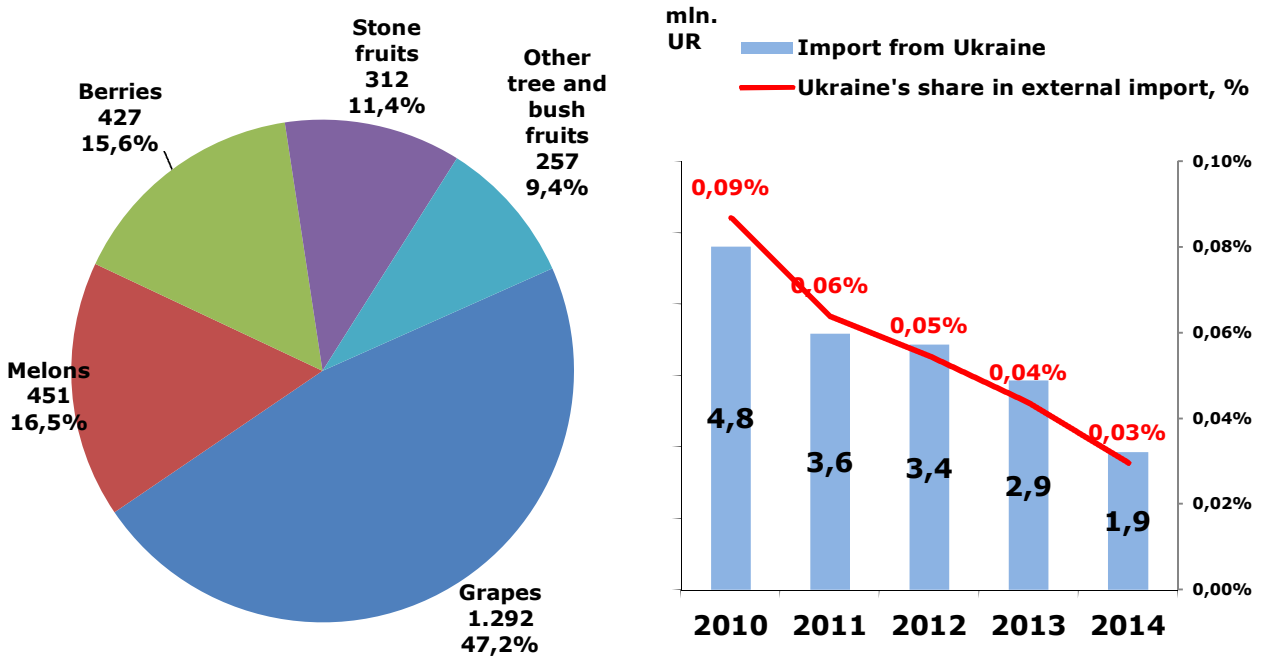


Figure 1.10- EU/EFTA external import of fresh fruits by product groups in 2014, mln. EUR

Extra-EU imported fresh vegetables consist mainly of fruit-bearing vegetables (979 mln. EUR or 42% in 2014), green leguminous vegetables (525 mln. EUR or 22%) and root, bulb or tuberous vegetables (288 mln. EUR or 12%). Together, these product account for more than 76% of all extra-EU imports of fresh vegetables.

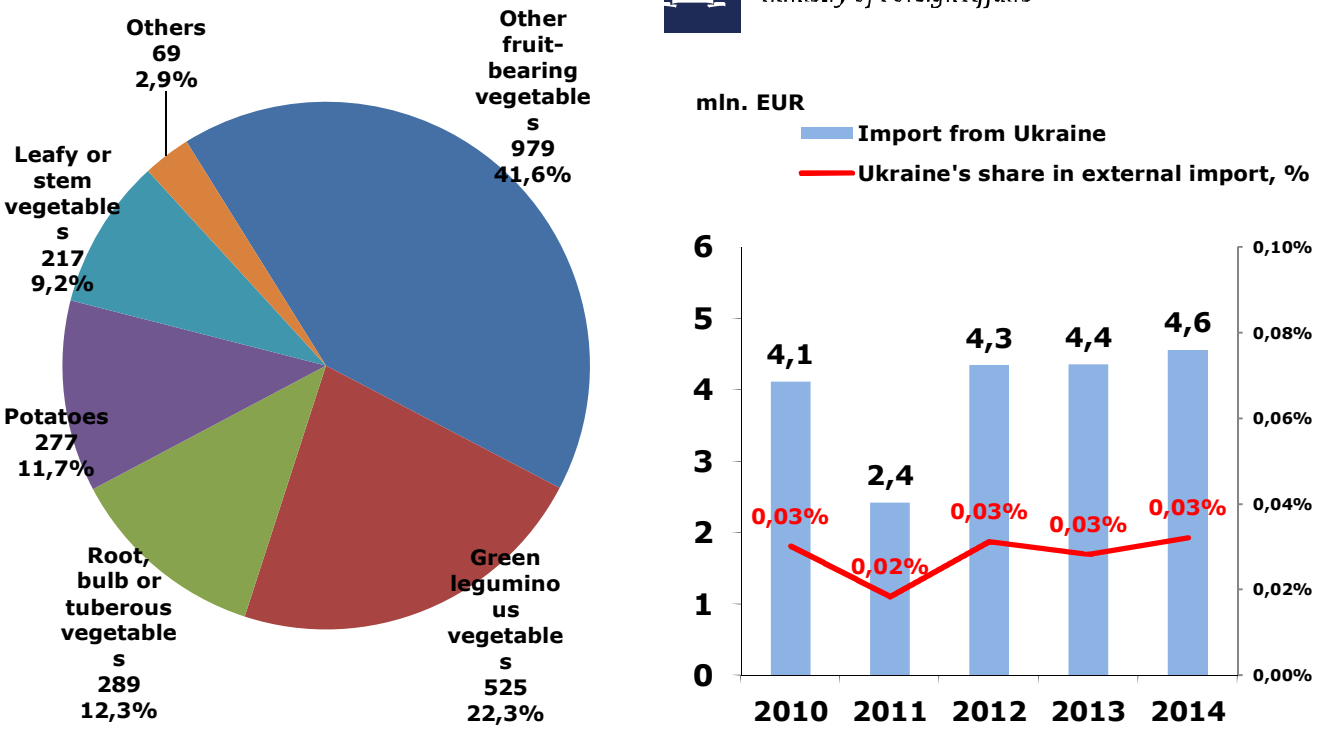


Figure 1.11 - EU/EFTA external import of fresh vegetables by product groups in 2014, mln. EUR

Table 1.9 – EU/EFTA import of fresh fruits and vegetables by main product groups in 2010-2014*

Group	Subgroup	ALL IMPORT EU/EFTA		EU/EFTA external import		UA export to EU/EFTA		UA share in external import
		mln. EUR	CAGR in 2010-2014	mln. EUR	CAGR in 2010-2014	mln. EUR	CAGR in 2010-2014	
	Value, mln. Euro							
Other fruit-bearing vegetables	Tomatoes	3 659,9	0,9%	426,8	-1,5%	0,1	136,6%	0,0%
	Chillies and peppers, green (only capsicum)	2 144,9	1,7%	283,1	-3,9%	0,0	-63,5%	0,0%
	Other fruit-bearing vegetables n.e.c.	1 350,1	-0,4%	223,3	-2,0%	0,0	-	0,0%
	Cucumbers and gherkins	1 027,1	-0,2%	30,7	0,7%	0,1	30,3%	0,3%
	Eggplants (aubergines)	222,9	2,2%	15,3	1,2%	0,0	-48,3%	0,0%
Grapes	Other grapes, fresh	2 910,4	3,8%	1 292,1	5,1%	0,0	-	0,0%
Leafy or stem vegetables	Lettuce	1 066,6	-0,4%	5,0	-23,1%	0,0	-	0,0%
	Cauliflowers and broccoli	488,5	2,7%	13,4	59,0%	0,0	-100,0%	0,0%
	Cabbages	412,6	-1,5%	17,3	-1,6%	0,0	-31,7%	0,0%
	Asparagus	407,4	5,1%	170,6	4,4%	0,0	-	0,0%
	Chicory	168,2	-3,5%	1,9	-13,0%	0,0	-	0,0%
	Spinach	87,9	9,6%	1,6	-12,4%	0,0	-	0,0%
	Artichokes	63,0	-	6,6	-	0,0	-	0,0%
Stone fruits	Nectarines	1 114,7	0,1%	60,9	3,3%	0,0	34,1%	0,0%
	Cherries	386,9	2,7%	137,8	-0,3%	0,0	-100,0%	0,0%
	Sloes	292,3	-0,3%	95,4	0,2%	0,0	-	0,0%
	Apricots	283,0	6,2%	17,4	-10,9%	0,0	-	0,0%
Potatoes and other edible roots and	Potatoes	1 581,7	-0,1%	122,7	-7,8%	0,0	-	0,0%

tubers with high starch or inulin content								
	Sweet potatoes	155,2	23,8%	97,7	23,4%	0,0	-	0,0%
	Other edible roots and tubers with high starch or inulin content	51,1	1,2%	33,3	1,6%	0,0	-	0,0%
	Cassava	26,6	3,7%	18,6	4,1%	0,0	-	0,0%
	Taro	4,7	-	4,3	-	0,0	-	0,0%
Root, bulb or tuberous vegetables	Onions	736,5	-1,1%	166,1	1,6%	0,1	69,5%	0,1%
	Garlic	313,2	-7,8%	60,0	-18,0%	0,0	76,0%	0,0%
	Carrots and turnips	336,8	0,0%	29,0	-3,1%	0,0	68,3%	0,0%
	Other root, bulb or tuberous vegetables (without high starch or inulin content)	248,4	3,4%	6,8	9,1%	0,0	-53,9%	0,1%
	Leeks and other alliaceous vegetables	150,1	-7,3%	26,8	2,2%	0,0	-	0,0%
Berries and the fruits of the genus vaccinium	Strawberries	1 063,2	3,5%	90,7	6,9%	0,0	-	0,0%
	Other berries, the fruits of the genus vaccinium n.e.c.	602,7	24,2%	248,2	26,2%	0,5	-23,1%	0,2%
	Raspberries	489,9	16,5%	88,4	20,9%	0,0	-	0,0%
Melons	Other melons	861,5	4,8%	343,2	7,2%	0,2	103,1%	0,0%
	Watermelons	550,6	4,4%	107,6	11,3%	1,2	-22,5%	1,1%
Mushrooms and truffles	Mushrooms and truffles	924,1	1,5%	68,6	2,1%	4,2	2,9%	6,1%
Green leguminous vegetables	Beans, green	594,2	6,8%	424,3	6,7%	0,0	-	0,0%
	Peas, green	198,2	12,5%	98,8	8,2%	0,0	-	0,0%
	Other green leguminous vegetables	37,2	3,9%	2,0	-24,9%	0,0	-	0,0%

Other tree and bush fruits n.e.c.	Other tree and bush fruits n.e.c.	696,4	6,9%	256,8	6,9%	0,0	-	0,0%
Vegetables, fresh, n.e.c.	Vegetables, fresh, n.e.c.	78,2	0,1%	0,4	-35,5%	0,0	-	0,0%
TOTAL		25 787,1	2,2%	5 093,7	3,4%	6,5	-7,7%	0,1%
	Weight, thous. tons							
Other fruit-bearing vegetables	Tomatoes	3 127,8	1,6%	496,7	-0,9%	0,2	126,4%	0,0%
	Chillies and peppers, green (only capsicum)	1 483,2	3,4%	242,6	-1,7%	0,0	-61,7%	0,0%
	Other fruit-bearing vegetables n.e.c.	1 086,2	1,5%	177,5	0,6%	0,0	-	0,0%
	Cucumbers and gherkins	1 274,5	1,2%	41,9	-0,2%	0,2	8,1%	0,4%
	Eggplants (aubergines)	218,8	4,2%	11,7	3,7%	0,0	-54,7%	0,0%
Leafy or stem vegetables	Lettuce	1 008,1	2,0%	5,9	-20,5%	0,0	-	0,0%
	Cauliflowers and broccoli	560,0	5,4%	3,8	34,6%	0,0	-100,0%	0,0%
	Cabbages	664,4	0,2%	46,0	-3,1%	0,0	-9,2%	0,0%
	Asparagus	112,1	1,4%	42,5	-0,1%	0,0	-	0,0%
	Chicory	161,6	-2,2%	2,3	-12,2%	0,0	-	0,0%
	Spinach	93,6	11,1%	0,9	-17,2%	0,0	-	0,0%
	Artichokes	51,4	-	6,4	-	0,0	-	0,0%
Stone fruits	Nectarines	1 232,1	3,5%	26,7	-1,7%	0,0	16,7%	0,1%
	Cherries	170,3	2,8%	44,1	0,4%	0,0	-100,0%	0,0%
	Sloes	270,1	0,2%	62,2	-1,4%	0,0	-	0,0%
	Apricots	192,1	7,6%	8,3	-5,5%	0,0	-	0,0%
Potatoes and other edible roots and tubers with	Potatoes	7 267,7	0,7%	302,9	-9,6%	0,0	-	0,0%

high starch or inulin content								
	Sweet potatoes	192,3	17,0%	128,4	17,1%	0,0	-	0,0%
	Other edible roots and tubers with high starch or inulin content	90,7	-9,8%	36,1	0,9%	0,0	-	0,0%
	Cassava	31,8	0,0%	23,7	-0,9%	0,0	-	0,0%
	Taro	4,2	-	4,0	-	0,0	-	0,0%
Root, bulb or tuberous vegetables	Onions	1 665,4	-0,4%	280,7	-3,2%	0,7	61,9%	0,2%
	Garlic	187,4	-0,1%	51,3	-9,8%	0,0	75,0%	0,1%
	Carrots and turnips	983,1	-2,2%	54,1	-11,6%	0,0	-12,9%	0,0%
	Other root, bulb or tuberous vegetables (without high starch or inulin content)	386,1	3,9%	7,5	4,5%	0,0	-29,0%	0,5%
	Leeks and other alliaceous vegetables	189,5	-2,3%	11,0	-9,2%	0,0	-	0,0%
Berries and the fruits of the genus vaccinium	Strawberries	474,1	2,0%	30,3	-4,8%	0,0	-	0,0%
	Other berries, the fruits of the genus vaccinium n.e.c.	116,5	22,5%	40,8	22,3%	0,3	-19,0%	0,8%
	Raspberries	97,9	8,0%	21,3	19,0%	0,0	-	0,0%
Grapes	Other grapes, fresh	1 641,1	-0,1%	624,1	1,0%	0,0	-	0,0%
Melons	Other melons	988,6	1,8%	373,3	1,9%	0,7	144,8%	0,2%
	Watermelons	1 255,9	1,9%	200,7	0,4%	7,5	-26,2%	3,7%
Green leguminous vegetables	Beans, green	412,0	4,2%	200,1	1,4%	0,0	-	0,0%
	Peas, green	215,9	15,9%	28,6	7,6%	0,0	-	0,0%
	Other green leguminous vegetables	38,3	4,3%	1,5	-19,9%	0,0	-	0,0%
Mushrooms and truffles	Mushrooms and truffles	418,5	-0,5%	13,6	2,5%	0,9	2,1%	6,5%

Other tree and bush fruits n.e.c.	Other tree and bush fruits n.e.c.	447,1	8,2%	122,7	10,2%	0,0	-	0,0%
Vegetables, fresh, n.e.c.	Vegetables, fresh, n.e.c.	151,6	2,9%	0,3	-39,3%	0,0	-	0,0%
TOTAL		28 961,9	1,6%	3 776,4	-0,7%	10, 5	-21,5%	0,3%

Source: Eurostat
** - excluding apples, pears and tropical fruits*

The major of extra-EU imports are imported by Netherlands (1 541 mln. EUR or 30% in 2014), United Kingdom (1 237 mln. EUR or 24%) and France (691 mln. EUR or 14%), which in 2014 accounted for 68% of import values.

Table 1.10 –EU/EFTA import of fresh fruits and vegetables by countries in 2010-2014, mln. Euro*

Country	ALL IMPORT EU/EFTA		EU/EFTA external import		UA export to EU/EFTA		UA share in external import
	mln. EUR	CAGR in 2010-2014	mln. EUR	CAGR in 2010-2014	mln. EUR	CAGR in 2010-2014	
Germany	5 755,8	1,5%	235,4	7,6%	0,917	-14,9%	0,4%
United Kingdom	3 900,9	3,1%	1 237,2	5,9%	0,000	-	0,0%
Netherlands	2 868,7	3,3%	1 541,0	6,4%	0,004	-3,5%	0,0%
France	2 800,7	2,1%	691,0	2,7%	0,000	-	0,0%
Belgium	1 453,3	5,1%	138,8	-0,3%	0,000	-	0,0%
Italy	1 101,9	-1,0%	113,6	-15,3%	0,000	-100,0%	0,0%
Austria	732,6	-1,8%	130,4	-8,1%	0,022	-35,3%	0,0%
Poland	794,0	4,4%	27,3	-3,2%	2,832	-11,1%	10,4%
Spain	783,3	3,1%	387,3	7,3%	0,000	-	0,0%
Switzerland	708,4	1,1%	121,9	6,6%	0,211	0,5%	0,2%
Sweden	666,6	4,5%	18,7	8,6%	0,000	-	0,0%
Czech Republic	492,6	-1,2%	9,7	-12,1%	0,093	-	1,0%
Lithuania	524,0	12,0%	21,9	20,2%	1,407	19,8%	6,4%
Norway	514,2	4,8%	156,3	7,9%	0,015	-	0,0%
Denmark	446,4	-0,1%	18,8	-0,3%	0,000	-	0,0%
Portugal	338,6	-2,8%	13,7	-1,7%	0,000	-	0,0%
Ireland	324,6	-0,2%	23,6	3,9%	0,000	-	0,0%
Finland	277,8	3,5%	3,5	25,5%	0,000	-	0,0%
Slovakia	210,7	-0,2%	1,0	-32,8%	0,004	-35,5%	0,4%
Slovenia	171,5	-3,9%	57,6	-9,3%	0,035	-	0,1%
Romania	199,2	11,6%	45,0	-4,5%	0,055	70,2%	0,1%
Greece	111,2	-6,8%	17,6	-18,4%	0,028	37,9%	0,2%
Hungary	105,7	-2,7%	11,3	-14,3%	0,000	-100,0%	0,0%
Latvia	109,6	8,3%	6,5	0,3%	0,487	-13,5%	7,5%
Luxembourg	87,3	0,9%	1,1	28,5%	0,000	-	0,0%
Croatia	98,4	7,9%	15,6	-11,7%	0,000	-100,0%	0,0%
Bulgaria	82,5	6,3%	33,8	-4,6%	0,000	-62,6%	0,0%
Estonia	59,0	2,4%	1,0	-7,1%	0,384	-1,5%	39,6%
Cyprus	21,7	-8,4%	2,2	-19,7%	0,000	-	0,0%
Iceland	27,8	7,9%	10,8	9,1%	0,000	-	0,0%
Malta	18,2	2,1%	0,1	-20,0%	0,000	-	0,0%
Liechtenstein	0,1	-29,9%	0,0	-33,9%	0,000	-	0,0%
TOTAL	**25 787,1**	**2,2%**	**5 093,7**	**3,4%**	**6,493**	**-7,7%**	**0,1%**

Source: Eurostat
** - excluding apples, pears and tropical fruits*

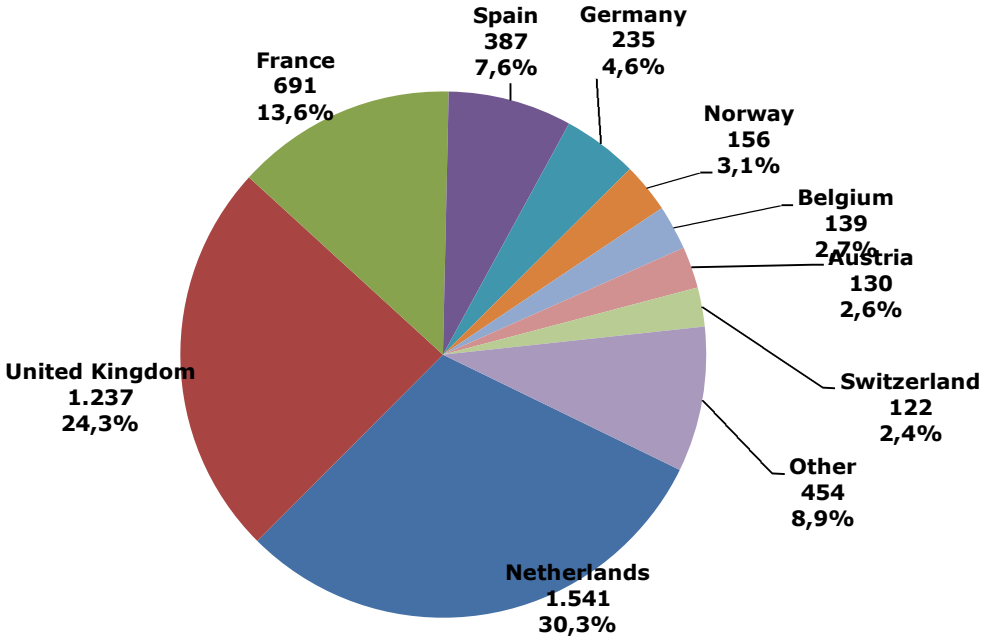


Figure 1.12 - EU/EFTA external import of fresh fruits and vegetables by main importing countries in 2014, mln. EUR

The major exporters of extra-EU imports are Morocco (961 mln. EUR or 19% in 2014), South Africa (625 mln. EUR or 12%), Chile (435 mln. EUR or 9%), Peru (364 mln. EUR or 7%) and Egypt (324 mln. EUR or 6%), which in 2014 accounted for 53% of import values.

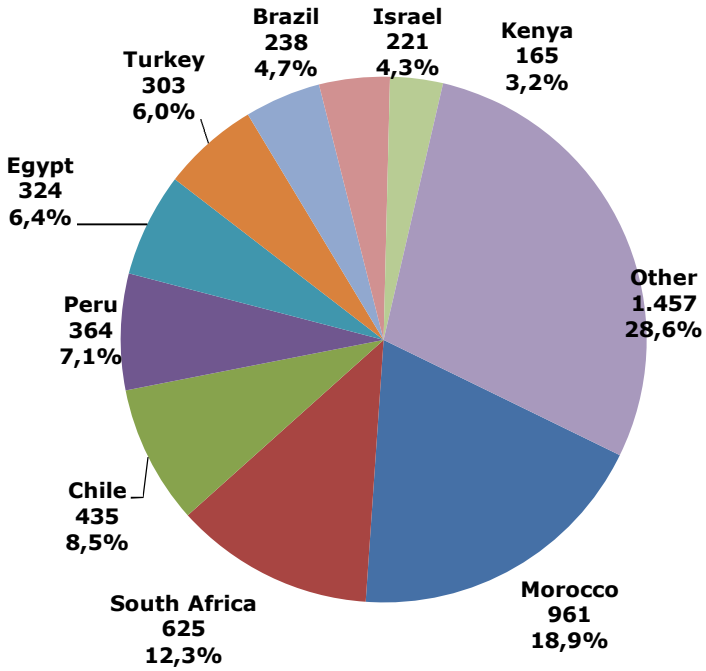


Figure 1.13 - EU/EFTA external import of fresh fruits and vegetables by main exporting countries in 2014, mln. EUR

European fruit and vegetables supply chains are increasingly driven by large retailers. Increasing concentration and consolidation in retail chains, as well as their global

expansion, has improved their position and augmented their buying power in the market. The major effects of the emergence of food retailers in the global food supply chains are through the procurement system of large volumes of products from suppliers. Retailers are building up long term relationships with key suppliers – either producers or wholesalers - capable to meet the requirements necessary to respond to the increased consumer interest for purchasing fresh fruit and vegetables products from supermarkets. While competition at the retail stage fuels changes in formats of retailing and outlets, the tendency to concentration and consolidation also in upstream stages of supply chains materializes a bias against small farms and fuels forms of association at farm level stage. This is the major challenge for small F&V farmers, either from the EU or other supplying areas: how to be part of modern EU-based chains where the retail stage coordinate the other actors.

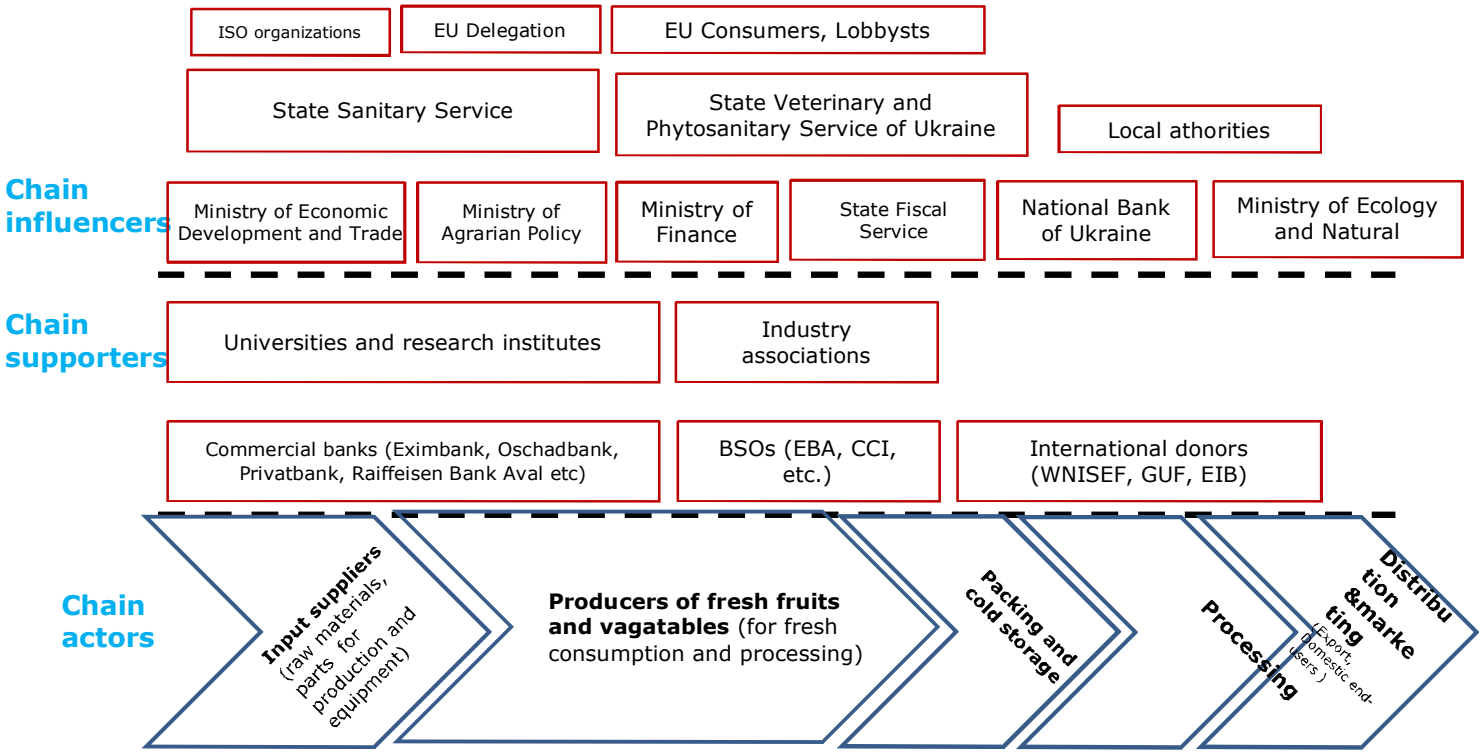
Effects of structural changes can be detected also when observing changes in the trade pattern of the EU's fruit and vegetables sector. A slow decline of the share of Intra-EU imports (from 81.2% to 80.5% in the 5 years) and a slow increase of the structural unbalance between Extra-EU import and export (-3.5 billion euro for EU/EFTA in 2014) show a gradual increase in openness to external trade and suggest a slow process of substitution of EU suppliers incapable of meeting demand and retail requirements stemming from globalized supply chains.

"Substitutes" in supply of vegetables are mainly from the Mediterranean area, but also from Central-South America and some African countries, while Central and South America prevails for fruit (also because of the role played by tropical and off-seasons fruit and vegetables products), although with a significant role of Mediterranean countries for some products, such as citrus. Survival of traditional marketing channels in the EU market, structural backwardness of non-EU suppliers, and EU trade policy devices, converge in determining a relatively slow pace of inclusion of external fruit and vegetables suppliers in the EU-based supply chains for fruit and vegetables.

1.4 Mapping the value chain

The three major stakeholders in this Value Chain are the chain actors, supporters and influencers.

Figure 1.14 - Ukraine fresh fruit and vegetables value chain



Chain actors and their functions

- **Suppliers of raw materials** (seedlings, pesticides, machinery, equipment). These market subjects are divided into two categories: a) domestic producers of raw materials, b) foreign companies exporting raw materials to Ukraine.

- **Manufacturers of fruits and vegetables**. Currently in Ukraine there are about 1 500 companies producers of fruits and vegetables, most of which are SMEs with number of employees less than 100 people. Producers are divided into two categories: a) small and medium producers without own cool storage and packing facilities, b) big producers with own cool storage and packing facilities.

- **Fruit and vegetables processing companies**. Currently in Ukraine there are about 300 companies processors of fruits and vegetables, most of which are SMEs. Processing plants purchase fruits and vegetable inputs from the producers (non-standard production for serving as fresh, residues of fresh and vegetables production).

- **Distributors, dealers, private retailers**. Sales of fresh fruit and vegetables are carried out, usually through intermediaries' distributors (from local and external markets) and dealers (the same way). Exports can be performed directly (large producers) and through wholesale trade companies.

Chain supporters and their functions

- **Sector production associations**. At the national level there is no industry association. The most effective association established in the major producing regions (Vinnytsia, Chernivtsi). Their strategy includes representing and lobbying for the interests of its members; provide support for export development by using its own available resources and combining these with external resources where possible.

- **Universities and research institutes** (horticulture and vegeculture). There is a middle level of interaction between the sector and educational and scientific institutions.

- **Chamber of Commerce of Ukraine**. The main task of the Ukrainian CCI - the creation of favourable conditions for entrepreneurship, promote the comprehensive development of scientific, technological and trade relations between Ukrainian businessmen and their foreign partners, represent the interests of its members on economic activity both in Ukraine and abroad.

- **Private consultants and advisors**. A large number of consulting firms and individual private counsellors are able to provide information and consulting support to businesses of fruit and vegetable industry.

- **European Business Association**. The most important function of the EBA is the collective defence of the members' interests in central and local government bodies of Ukraine, foreign and international organizations.

Chain influencers and their functions

- **Ministry of Economic Development and Trade of Ukraine (**MEDTU) The Ministry is the main body in the system of central bodies of the executive power in formation and providing realization of state regulatory policy of economic and social development (business economics), regulation of price, industrial, investment, external economic policies, state trade policy, state regional policy, state entrepreneurship development policy, technical regulations and security of consumer rights as well as inter-agency coordination for economic and social cooperation of Ukraine with the European Union.

- **Ministry of Ecology & Natural Resources of Ukraine (MENRU)**. Ministry operates in the field of environmental protection, ecological safety, treatment of waste, hazardous chemicals, pesticides and agricultural chemicals and perform state ecological expertise. The Ministry is entitled in the area of atmospheric air, preservation of ozone layer, restoration and protection of flora and fauna, restoration and protection of lands, restoration and protection of water resources (surface, ground, and seawaters), efficient usage of water resources. The Ministry ensures legal and regulatory governing of the water management and land reclamation, geological study and efficient usage of mineral resources, as well as performs state supervision on the fulfilment of the requirements of the environment legislation.

- **Ministry of Finance of Ukraine (MFU).** Ministry of Finance is a principal authority among central executive authorities forming and implementing the financial, budget, tax and customs policy of the State (except for the administration of taxes, customs duties and sales tax and customs policies), policy in the area of state financial control, treasury maintenance of budget funds and accounting.

- **State Fiscal Service of Ukraine (SFSU).** The main objectives of SFSU are: implementation of state tax policy and in the civil customs, public policy in the fight against crimes in the application of tax and customs legislation implementation within the authority provided by law, control the flow to budgets and state funds taxes and fees customs and other charges, public policy administration single contribution and combating offenses during the application of the legislation on the payment of a single fee, state policy on control timeliness of payment in foreign currency statutory term compliance procedure of cash payments for goods (services) and the availability of licenses for economic activities subject to licensing under the law, trade patents.

- **Ministry of Agrarian Policy and Food.** Ministry is the main body on the formulation and implementation of national agricultural policy, policy on agriculture and on food security, public policy in the fields of fisheries and fisheries, protection, use and reproduction of aquatic resources, regulation of fisheries and maritime security fleet vehicles fisheries, veterinary medicine, food safety in the areas of plant protection, protection of rights on varieties grown, land relations, survey and mapping, forestry and hunting, surveillance (monitoring) in agriculture.

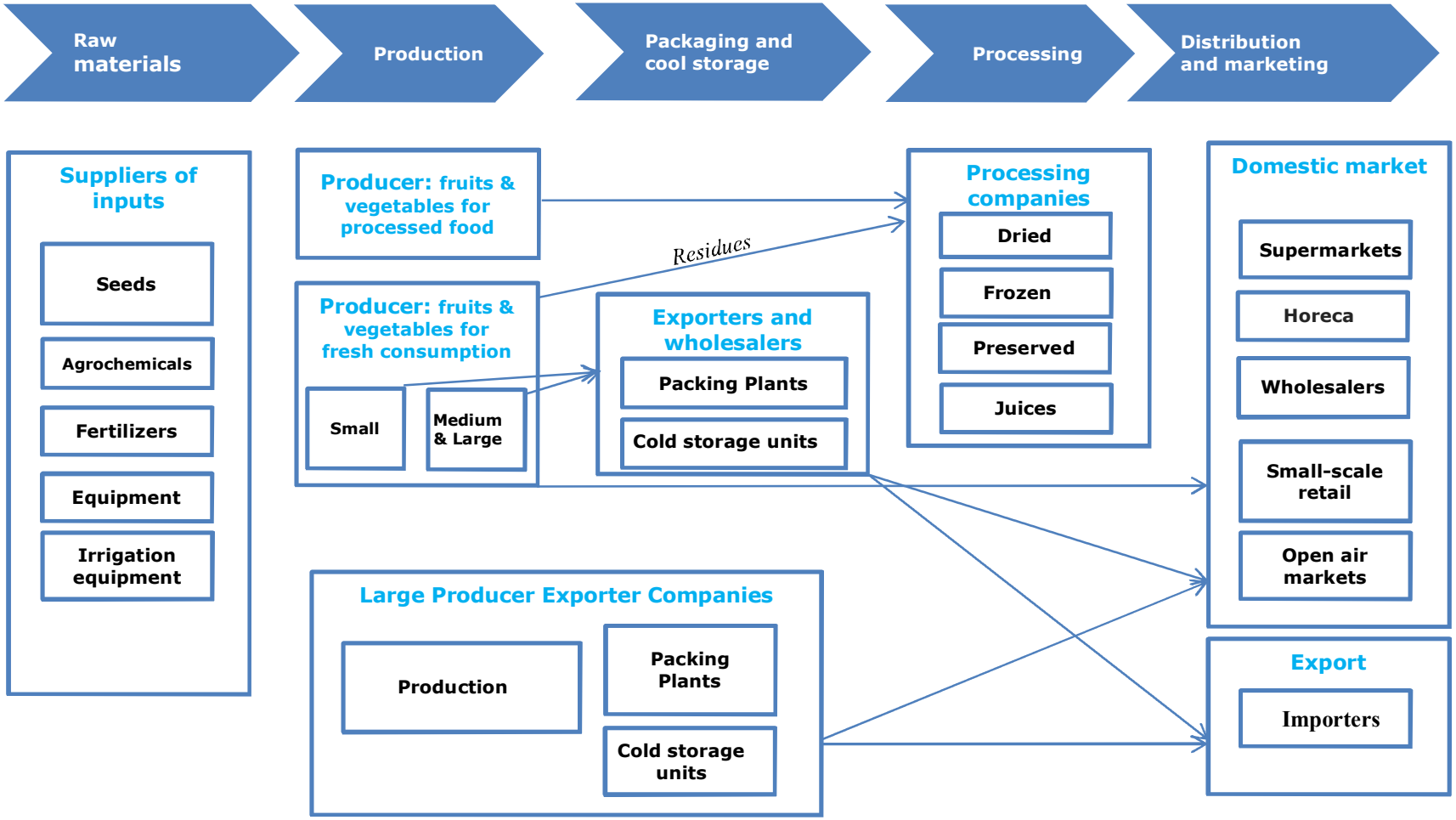
- **State Sanitary and Epidemiological Service of Ukraine.** This body monitors the conformity of fruit and vegetables and the raw materials used, as well as sanitary and epidemiological control at checkpoints across the state border.

- **Certification companies.** Provides a service for issuing certificates for compliance with product standards and requirements set by national and international legislation, as well as providing consulting services to bring the production and business processes in compliance with the standards.

- **Local authorities.** Local authorities can influence the business of local companies through the adoption of regulatory decisions and decisions related to the use of local resources, the distribution of which is within their competence.

The flow of products along the chain is described in Figure 1.15.

Figure 1.15 – Flow of products along the chain of fresh fruit and vegetables in Ukraine



1.5 Bottlenecks along the value chain

1.5.1 Market opportunities

The main market opportunities for Ukraine are:

- Ukraine is located nearby the EU, suggesting short transport time
- favourable climate conditions for majority of horticulture products and fertile lands
- low labour cost and unlikely significant wages increase in the short- and mid-term
- potential to develop EU/EFTA export markets (especially in the organic products sector) after entering into force DCFTA with EU
- opportunities for the manufacturing of baby food (fruit and vegetable puree)
- Ukraine can be a competitive producer and exporter of organic goods. The highly labour-intensive value chains of processed organic fruits could also generate significant socioeconomic benefits, particularly in rural communities.

In the segment of vegetable production in Ukraine almost hasn't a competitive advantage over European producers because the level of mechanization processes in Ukraine is much lower (with the exception of mushrooms garlic, onion).
So Ukraine has competitive advantages in the most labour-intensive sector products, as stone fruits, berries, and melons.

In addition, production and export of berries is promising due to current trends on the EU fruit market. Consumers are more aware of environmental issues, i.e. they require organic, pesticide free, or ecologically responsible products. More and more companies are looking for organic suppliers. 'Super fruits' have become very popular as part of the trend among consumers in Europe towards healthier lifestyles. The word 'super' refers to supposed health benefits as a result of nutritional value and anti-oxidants. Berries that have been labelled as such are blueberries and raspberries; their popularity is expected to grow further as large companies jump on the 'super-fruit bandwagon'. Some popular berries like blackcurrants and blackberries are not commonly mentioned as super fruits despite their excellent nutritional properties, so there are still some marketing opportunities in this context.

These products demonstrated high rates of external import growth: berries (CAGR in 2010-2014 - 26,2%), raspberries (20,9%), watermelons (11,3%), other melons (7,2%), strawberries (6,9%) (Table 1.11).

Table 1.11 –EU/EFTA external import of some fruit and vegetables products in 2014 by main suppliers

Product	EU/EFTA external import		Main suppliers
	mln. EUR	CAGR in 2010-2014	
Berries (cranberries, blueberries, currants, blueberries, etc.)	248,2	26,2	Chile (45%), Argentina (20%), Morocco (16%), Ukraine (0.2%)
Raspberry	88,5	20,9%	Mexico (43%), Morocco (26%), Serbia (11%), Ukraine (0,001%)
Melons	107,6	11,3%	Costa Rica (25%), Brazil (19%), Panama (16%), Ukraine (1%)
Watermelons	343,2	7,2%	Brazil (42%), Morocco (18%), Costa Rica (15%), Ukraine (0,005%)
Strawberry	90,6	6,9%	Morocco (42%), Egypt (42%), USA (7%), Ukraine (-)
Stone fruits (cherries, plums, nectarines)	311,4	-0,3%	South Africa (35%), Turkey (31%), Chile (17%), Ukraine (0.01%)

Source: Eurostat

1.5.2 Key bottlenecks, risks and opportunities along the value chain

Table 1.12 - Value Chain constraints and opportunities

Observed constraints in value chain and how they prohibit export	Critical[1] constraint ? (Y/N)	Solvable in short term[2] (Y/N)	Which (donor) organisation is providing this solution? (CBI, or others)	How can this problem be solved?
Lack of knowledge on EU/EFTA market segments and market access requirements. Companies have insufficient knowledge about the European markets, what EU buyer and what market segment they can cater for.	Y	Y	CBI	Training is needed on market research, and market access requirements, and also existing technical, environmental, phytosanitary regulations and taxation in the EU as a whole and with features in individual countries.
Lack of (export) marketing skills In line with the constraint mentioned above. Due to a poor knowledge about the European markets, consumption culture and the needs of the EU market, combined with the lack of skills and experience in the field of marketing, existing companies struggle to attract new customers and increase their exports. The sales and marketing approach is not attractive to European buyers.	Y	Y	CBI	Training is needed on marketing, also providing with information about current EU market trends on fruit and vegetables consumption, a proactive service minded approach and the right communication with customers.
The lack of direct contacts	Y	Y	CBI	Participation in exhibitions,

[1] Critical means if the constraint is not resolved the programme outcome is not possible, or significantly reduced.
[2] Short term means that the constraint can be addressed within the duration of the programme.

between Ukrainian producers and European companies				trade fairs and other similar events to establish contacts between Ukrainian producers and European consumers
Lack of necessary certifications to enter the EU market (Global GAP, ISO)	Y	Y	CBI	Training is needed on certification procedures. CBI can organize activities (training and trade fair participation) in cooperation with the stakeholders
Lack of internal financial resources and limited access to long-term loans Limited access to cheap credit resources (compared with neighbouring countries) which prevents the expansion of investment in assets and hinders the development of both horticulture and food processing.	Y	N		Existing incentive mechanisms need to be revised to facilitate access by SMEs, and if possible, priorities to be given to agricultural export producers. Fruit and vegetables associations need to take a stronger role in policy advocacy in this respect.
Lack of storage facilities, especially with new equipment and technology level Given the short shelf life of fruits and berries, availability of refrigeration capacity is a key factor for the development of this segment in Ukraine. The lack of sufficiently refrigerators and the need for additional packaging costs (for the products preservation during transportation over long distances) are constraining for growing berries and stone fruit crops.	Y	N	CBI	CBI can organize activities (training and trade fair participation) in cooperation with the stakeholders to promote cooperation between small producers in order to create new capacities. Thus the development the system of grants (or reimbursements) is needed to stimulate horticultural farms forming of farming cooperatives aimed for construction common refrigeration capacity.
Lack of refrigeration facilities in horticultural and vegetable farms. This affects the quality of products safety, and reduces the raw materials for the processing industry.	Y	N		Creation of products sales centres, development of post-harvest and market infrastructure
Fragmentation of producers and lack of cooperation between sector producers. Fragmentation and small scale of farms and orchards and lack of farmer cooperatives impedes efficiency/yields increase, achieving economy of scales and also doesn't allow to develop infrastructure (refrigerator capacities). Small scales keep production costs high, making products less competitive.	Y	Y	CBI	CBI can organize activities (training and trade fair participation) in cooperation with the stakeholders to motivate cooperation in the future. Promote cooperation between small producers to protect their interests and opportunities to enter large amounts of contracts
Lack of state export promotion	Y	N		Compensation of export VAT to

and low level of government support of producers in fresh fruit and vegetables sectors Lack of state export promotion in fresh fruit and vegetables sectors. The sector is hardly supported by the government.				fixed agricultural tax payers.
Lack of a strong positive image and branding for Ukrainian fruit and vegetables sector	Y	Y	CBI	Building institutional capacity within sector associations and train a representative who will be able promote the Ukrainian fruit and vegetables sector in the relevant EU countries CBI can assist in defining a promotion strategy to promote the Ukrainian fruit and vegetables sector and companies.
Weak branch associations which could take a lead in resolving the issues of sector and lobby the interests of manufacturers The sector associations are small and fragmented thus are not able to address exporters' needs. Based on the experience of export to Russia, most companies 'wait' for clients to come, meaning that they lack export-marketing skills for positioning and promoting their product on European markets.	Y	Y	CBI	Existing associations have not sufficient capacity and financial means to promote the Ukrainian fruits and vegetables sector and can only provide limited relevant EU market information, assistance in defining export strategies or technical support. CBI can support the sector organisation through the use of its network in the EU fruit and vegetables sector as well as through Market intelligence. Besides that they can organise buyer missions and trade fair participation in cooperation with sector associations to create more cohesion between the individual members and attract new members.
Lack of awareness among stakeholders on CSR issues on the EU market (labour, safety, environmental and other social responsibilities) Without proper awareness of CSR issues (which are increasingly part of the buyer requirements in Europe), potential exporters cannot enter the market with success.	Y	N	CBI	CBI with cooperation of the interested BSOs and associations, information sharing activities should be conducted on specific CSR requirements relating to fruit and vegetable sector.
Lack of bilateral cooperation agreement between Ukrainian phytosanitary authorities and relevant bodies of other states. The lack of cooperation agreements leads to non-recognition by phytosanitary origin	Y	Y		Revitalization of the work necessary for the conclusion of bilateral agreements between phytosanitary agencies to eliminate barriers to trade

certificates in designation countries (Indonesia, the Middle East)				
Low quality of raw materials for processing. Most processing plants provide raw materials caused by many small farmers and farmlands. Very often, the quality does not meet required standards.	Y	N		Development of the system of incentives for the development of raw orchards (fruits which are intended solely for processing)
Regulatory constraints resulting in more narrow range of allowed pesticides and high product costs. Due to the existing regulatory rules In Ukraine, list of certified pesticides and plant protection products is much smaller than in the EU countries (not all European pesticides allowed in Ukraine). So, Ukrainian producers are limited in the choice of protection means, and thus protection system is ineffective because addiction pests and diseases to pesticides. The above situation is due to the need of European pesticides certification by corresponding Ukrainian regulatory authorities, which are often associated with corruption risks.	Y	Y		Allow to use EU approved pesticides without certification in Ukraine
Deficit of quality planting material Insufficient availability of quality planting material, especially stone fruit crops that meet the current demand (virus tested stem cuttings, power tree growth, price quality relationship).	Y	Y		Development the preferential crediting system of producers for purchasing quality planting material
No domestic competitive varieties of fruit and berry crops those are not inferior to foreign analogues (with flavouring properties, keeping quality etc.) No domestic competitive varieties of fruit and berry crops those are not inferior to foreign analogues (with flavouring properties, keeping quality etc.).	Y	N		Establishing cooperation between Ukrainian and EU pomology research centres for the development of new competitive breeds
Inconsistency of fruits products to European quality standards (fruit diameter, no damage, etc.)	Y	N		Compliance of farming cultivation and harvesting schemes
Climate and natural risks (frost, hail, pests, disease) **are** still **one**	Y	N		Public assistance (concessional lending, privileges in VAT

of the main obstacles to sustainable development of the industry and negatively affect the quality of the final product.				payment on the import of equipment, etc.) in the procurement hail-defence nets, irrigation systems, and so on.
The great level of labour inputs and the short after harvest period berry and stone fruit compared with apples are obstacles to berries production	Y	N		Promotion of facilitate mechanization in berry production
Low level of production culture and pricing policy for organic products are the main obstacles to the organic production development	Y	N		Development of measures to regulate the prices of raw materials for organic production and signing long-term contracts between processors and gardeners
Unstable supply of fresh fruit and vegetable processing enterprises through lower prices (compared with the fresh fruits and berries for fresh consumption), and accordingly the reluctance of households to establish the raw orchards (fruits which are intended solely for processing). Absence of contractual agreements with food processing companies limits fruit cultivation attractiveness for farmers.	Y	N		Absence of contractual agreements with food processing companies limits fruit cultivation attractiveness for farmers Development of incentives for the development of raw orchards (fruits assigned exclusively for processing)
Lack of industrial capacities and raw materials base development for dried and frozen fruit and berries production. Poor production segment of dried fruits and frozen products in Ukraine in connection with the need for large investments in equipment (the purchase and creation of modern dryers and adoption of modern production skills)	Y	N		Policy measures elaboration for the development of the dried and frozen products production (concessional lending, VAT non-payment on the import of equipment, etc.)
Observed opportunities in value chain and how they benefit export	**Critical opportunity? (Y/N)**	**Short term benefit (Y/N)**	**Which (donor) organisation is benefiting from this opportunity? (CBI, or others)**	**How can this opportunity be benefited from?**
Ukraine is located nearby the EU, suggesting short transport time	Y	Y	CBI	- Through promotion and image building of Ukraine
Favourable climate conditions for majority of horticulture products and fertile lands	Y	Y	CBI	- Through promotion and image building of Ukraine
Low labour cost and unlikely significant wages increase in the	Y	Y	CBI	- Through promotion and image building of Ukraine

short- and mid-term				- Marketing training
Potential to develop EU/EFTA export markets (especially in the organic products sector) after entering into force DCFTA with EU	Y	Y	CBI	- Through exhibiting on trade fairs in those markets, contact agents and contact with relevant sector organizations in target markets.
Opportunities for the manufacturing of baby food (fruit and vegetable puree)	Y	Y	CBI	- Through promotion and image building of Ukraine - Exhibit at the right fairs - Training on product development skills and marketing
Ukraine can be a competitive producer and exporter of organic goods, given favourable climatic conditions, fertile soils and an efficient agricultural sector. The highly labour-intensive value chains of processed organic fruits could also generate significant socioeconomic benefits, particularly in rural communities.	Y	Y	CBI	- Through promotion and image building of Ukraine - Exhibit at the right fairs - Training on product development skills and marketing
Observed Social Responsibility risks in value chain	**Critical risk? (Y/N)**	**Solvable in short term (Y/N)**	**Which (donor) organisation is benefiting from this opportunity? (CBI, or others)**	**How can this opportunity be benefited from?**
Growing demand from European buyers on working circumstances in producing countries.	Y	N	CBI	CBI will link up as much as possible with existing local and/or international CSR initiatives in Ukraine

1.5.3 Main constraints in the value chain

The main constraints of fresh fruit and vegetable sector are:

1. Lack of knowledge on EU/EFTA market segments and market access requirements.
2. Lack of (export) marketing skills
3. The lack of direct contacts between Ukrainian producers and European companies
4. Lack of necessary certifications to enter the EU market (Global GAP, ISO)
5. Lack of internal financial resources and limited access to long-term loans
6. Lack of storage facilities, especially with new equipment and technology level
7. Fragmentation of producers and lack of cooperation between sector producers.
8. Weak branch associations which could take a lead in resolving the issues of sector and lobby the interests of manufacturers

1.6 Context information

1.6.1 Number of enterprises active in the chain and percentage of which is actively exporting

Most of the Ukraine's production of fresh fruit and vegetables is consumed internally (Table 1.13). In terms of quantities of fresh fruit and vegetables produced, the Ukrainian exports around 2.7% of the production of watermelons, 1.5% of tomatoes, 1.4% of onions, cabbagesandand aubergines. In the case of fruits, Ukrainian exports represent around 0.9% of the production of cherries, 0.4% of strawberries.

Number of companies that are active in the fresh fruits and vegetables sector exporters is from 5-10 (mainly in the segment of fruit) 30-40 (tomatoes and potatoes).

Table 1.13 – Number of enterprises active in the chain and estimated number of actively exporting in 2014

Product	Production, tons		Export, tons	Export share in production, %		Estimated number of enterprises actively exporting, units
	Total	agricultural enterprise without private households		Total	agricultural enterprise without private households	
Tomatoes	4 088,4	1 134,4	61,8	1,5%	5,5%	about 30-40
Cucumbers and gherkins	1 660,3	80,1	17,3	1,0%	21,7%	about 20
Potatoes	23 693,4	758,9	16,1	0,1%	2,1%	about 30-40
Onions and shallots	1 108,6	218,0	15,5	1,4%	7,1%	about 20
Watermelons	547,6	43,2	14,7	2,7%	34,0%	about 10
Carrots and turnips	890,7	116,7	6,5	0,7%	5,5%	about 10
Vegetables, nes	1 505,8	82,1	3,7	0,2%	4,6%	about 10
Peppers	187,9	9,7	2,7	1,4%	27,5%	about 10
Cabbages	1 876,6	183,1	2,6	0,1%	1,4%	about 10
Cherries	182,9	3,4	1,7	0,9%	49,9%	5-10
Aubergines(egg-plants)	86,9	5,1	1,2	1,4%	24,0%	about 5

Melons	137,6	1,6	1,0	0,7%	60,5%	about 15
Plums and sloes	163,2	4,4	0,5	0,3%	12,6%	5-10
Strawberries	66,9	8,0	0,3	0,4%	3,1%	about 10
Garlic	191,1	1,2	0,2	0,1%	13,2%	about 10
Cauliflowers	23,0	1,9	0,0	0,2%	2,0%	5-10
Apricots	64,5	0,7	0,0	0,0%	1,1%	5-10
Raspberries, blackberries, mulberries and loganberries	30,8	1,0	0,0	0,0%	0,3%	5-10
Peaches, nectarines	22,5	5,3	0,0	0,0%	0,0%	5-10

Source: State Statistic Service of Ukraine, own estimations

1.6.2 Value addition at each step of the value chain

In the value added structure of fresh fruits and vegetables production the largest share accounted for the production stage (45-55%), in which profits is about 50-60%.
The share of raw materials is also significant (20-30%), in which about half falls on imported materials (pesticides).

Table 1.14 –Value division between the value chain, %

Indicator	Raw materials production	Manufacturing	Distribution	Retail	Total added value
Fruits	20-30	45-55	10-20	5-10	100
Approximate share of Ukraine, %	***50***	***100***	***0***	***0***	**-**
Vegetables	20	50-60	15	15-25	100
Approximate share of Ukraine, %	***75***	***100***	***0***	***0***	**-**

1.6.3 Currently exported volumes and amounts

Over the last 5 years the Ukraine has been constantly recording a negative trade balance in fresh fruits and vegetables, totalling 153 million EUR in 2014 (Table 1.15). However, if in value terms the advantage was – 4.2 times, while in volume terms – 1.7 only times, indicating that the products, imported to Ukraine was characterized by higher level of prices than export prices.

The Ukrainian total export value in 2014 of the selected products amounted to 47 million EUR or 152 thous. tons (down by 6.2% and 0.7% on average from 2010 respectively). Dynamics of export was unstable (maximum level - 60 mln. Euros in 2010, and the minimum - 47 mln. EUR in 2014).

Import volumes of fresh fruits and vegetables in 2014 amounted to 200 million. EUR or 252 thous. Tons (up by 3.7% in value terms, while decreased by 5.8% in quantity terms respectively). Import shipments were also volatile (in 2010-2013 there was an annual increase to 260 million. Euros, while in 2014 the volumes fell to 200 mln. Euros).

Table 1.15 –Ukrainian foreign trade of fresh fruits and vegetables in 2010-2014, mln. EUR*

Flow	Indicator	2010	2011	2012	2013	2014	CAGR, %
Export	Value, mln. Euro	60	52	57	52	47	-6,2%
	Weight, thous. tons	157	152	194	197	152	-0,7%
Import	Value, mln. Euro	173	151	277	260	200	3,7%
	Weight, thous. tons	321	304	279	243	252	-5,8%

Source: State Statistic Service of Ukraine
** - excluding apples, pears and tropical fruits*

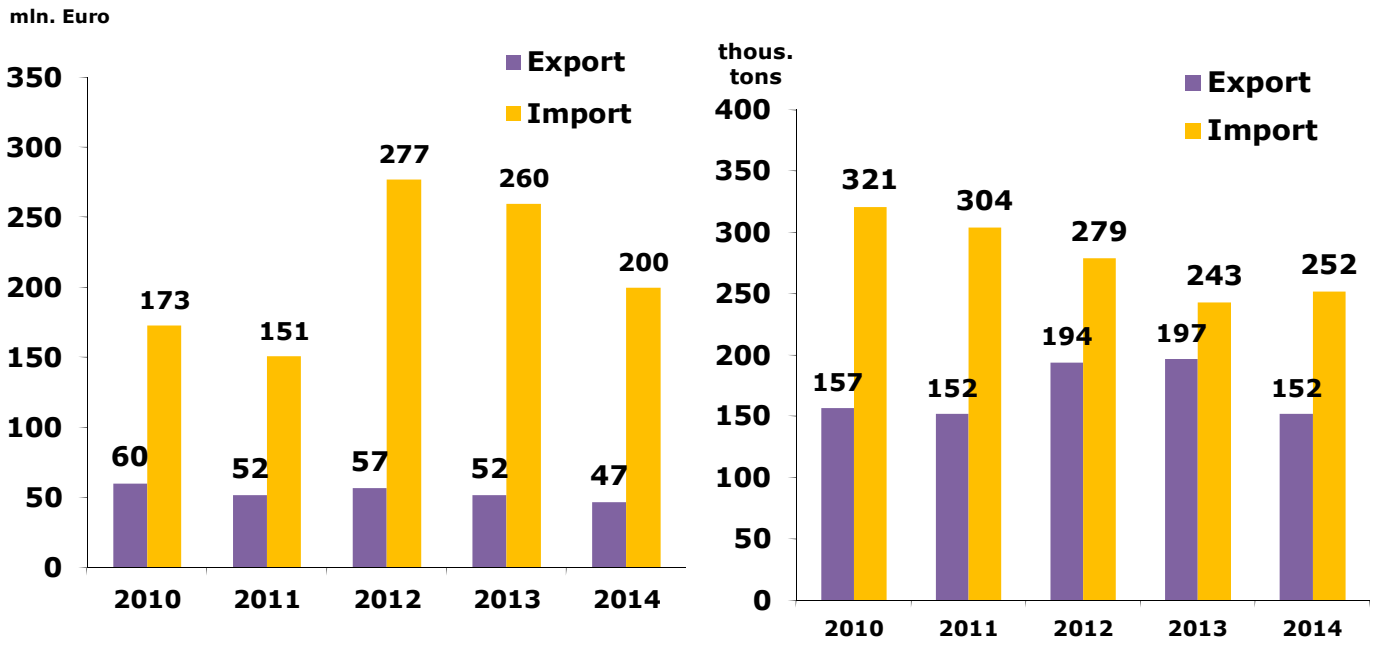


Figure 1.16 - Ukrainian foreign trade of fresh fruits and vegetables in 20102014

The main sales markets of selected products were Russia (29.2 mln. EUR or 62.7%), CIS (11.5 mln. EUR or 24.7%) and the EU/EFTA (4.7 mln. EUR or 10.0% in 2014). Together, these regions account for almost 98% of exports.

In 2010-2014 there was a significant increase in exports to CIS countries (CAGR 19,0%), while export shipments to EU/EFTA and Russia declined (CAGR -11.7% and -10.8% respectively). In value terms, the largest increase occurred to CIS (+6 mln. EUR), and decrease to Russia (-17 mln. EUR) and EU/EFTA (-3 mln. EUR).

Table 1.16 – Ukraine's export of fresh fruits and vegetables by main destinations in 2010-2014*

Indicator	Region	2010	2011	2012	2013	2014	CAGR, %
Value, 000 Euro	Russia	46 086	43 894	39 564	36 113	29 199	-10,8%
	CIS	5 733	3 113	6 035	6 912	11 485	19,0%
	EU/EFTA	7 646	4 865	10 144	5 529	4 655	-11,7%

	Asia	369	38	993	1 913	285	-6,3%
	Other	101	129	295	1 030	855	70,5%
	America	57	58	69	65	53	-1,5%
	Africa	6	12	119	76	1	-28,5%
	TOTAL	**59 997**	**52 109**	**57 219**	**51 637**	**46 533**	**-6,2%**
Weight, tons	Russia	94 497	118 156	118 222	110 481	82 546	-3,3%
	CIS	27 884	15 967	34 284	35 994	45 672	13,1%
	EU/EFTA	31 965	16 838	32 651	21 424	10 748	-23,9%
	Asia	1 546	58	4 710	19 527	4 058	27,3%
	Other	577	788	3 675	9 048	9 191	99,8%
	America	62	64	80	74	71	3,6%
	Africa	5	8	472	571	2	-16,8%
	TOTAL	**156 536**	**151 878**	**194 095**	**197 120**	**152 288**	**-0,7%**

Source: State Statistic Service of Ukraine
** - excluding apples, pears and tropical fruits*

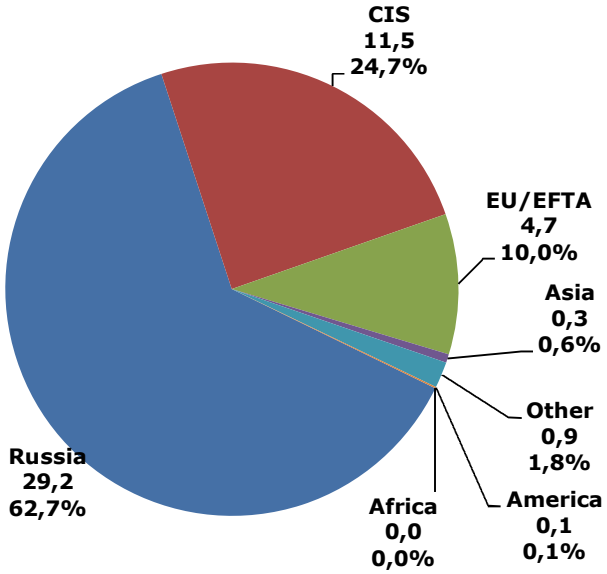


Figure 1.17 - Ukrainian export of fresh fruits and vegetables in 2014, mln. EUR

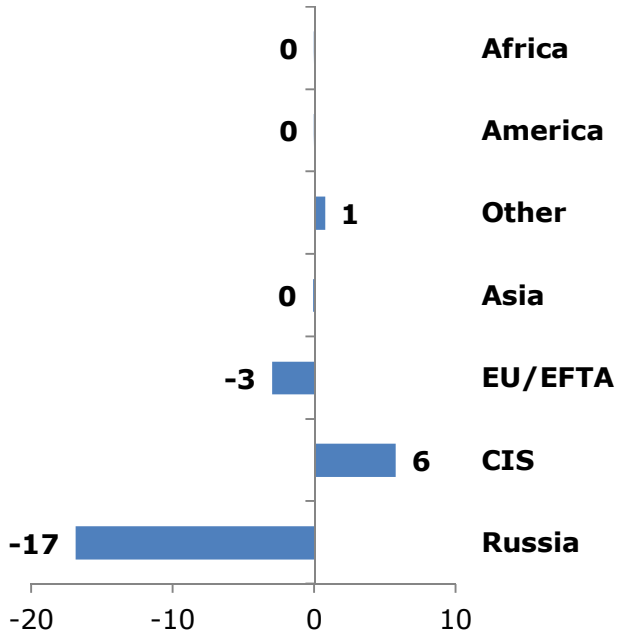


Figure 1.18 – Increase of Ukrainian fresh fruits and vegetables export in 2010-2014, mln. EUR

The main export product groups are tomatoes (20.9 mln. EUR or 44.9% in 2014), cucumbers (8.3 mln. EUR or 17.9%) and mushrooms (4.4 mln. EUR or 9.4%), which in 2014 accounted for 72% of exports.

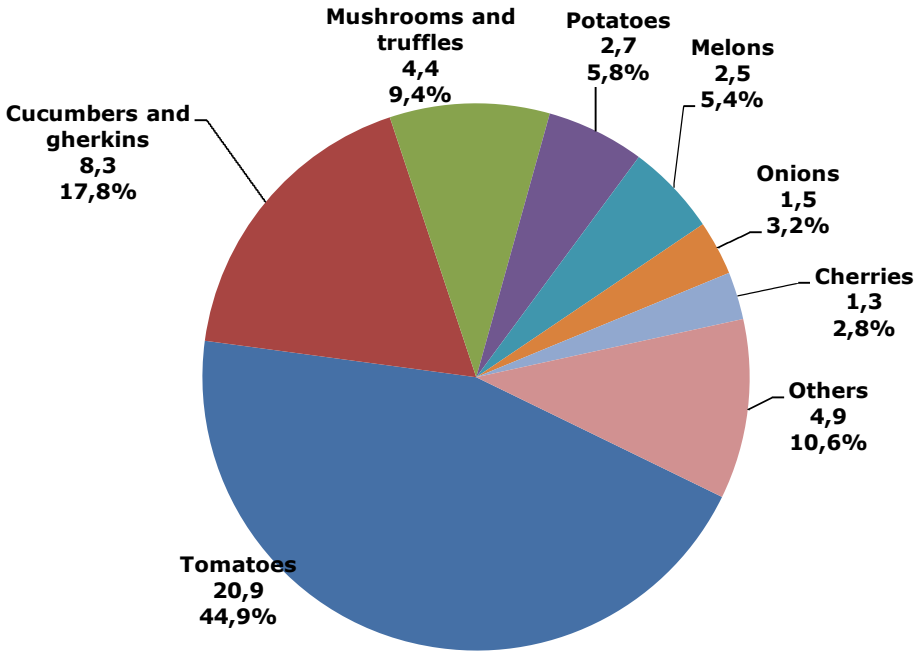


Figure 1.19 - Ukrainian export of fresh fruits and vegetables by main product groups in 2014, mln. EUR

In 2010-2014 there was a significant exports decrease of a majority of product groups, the highest in segment of green leguminous vegetables (CAGR -35,9%), stone fruits (CAGR -23,9%) and the highest increase in segments of root, bulb or tuberous vegetables (CAGR 27.4%), mushrooms (CAGR 1.4%).

Table 1.17 –Ukraine's export of fresh fruits and vegetables by main product groups in 2010-2014*

Indicator	Product group	2010	2011	2012	2013	2014	CAGR, %
Value, 000 Euro	Other fruit-bearing vegetables	38 398	37 385	36 777	28 973	30 084	-5,9%
	Root, bulb or tuberous vegetables	1 167	2 583	2 802	8 028	3 100	27,7%
	Melons	4 869	2 591	2 295	2 878	2 531	-15,1%
	Potatoes and other edible roots and tubers with high starch or inulin content	2 354	2 479	870	2 310	2 692	3,4%
	Leafy or stem vegetables	3 815	1 058	1 787	2 520	1 300	-23,6%
	Green leguminous vegetables	798	63	5 366	387	135	-35,9%
	Stone fruits	4 201	2 523	2 717	3 003	1 407	-23,9%
	Mushrooms and truffles	2 850	1 863	2 655	2 437	4 389	11,4%
	Berries and the fruits of the genus vaccinium	1 456	1 511	1 923	999	862	-12,3%
	Other tree and bush fruits n.e.c.	74	32	7	1	1	-63,1%
	Grapes	16	21	19	100	31	19,1%
	Vegetables, fresh, n.e.c.	1	1	1	1	1	9,9%

	Total	**59 997**	**52 109**	**57 219**	**51 637**	**46 533**	**-6,2%**
Weight, tons	Other fruit-bearing vegetables	75 124	94 074	109 182	69 513	83 075	2,5%
	Root, bulb or tuberous vegetables	4 008	10 656	24 826	69 649	25 063	58,1%
	Melons	43 777	23 183	15 204	20 986	15 645	-22,7%
	Potatoes and other edible roots and tubers with high starch or inulin content	7 264	11 509	7 175	16 288	16 088	22,0%
	Leafy or stem vegetables	13 855	5 252	9 190	13 191	6 597	-16,9%
	Green leguminous vegetables	5 693	182	22 880	1 381	398	-48,6%
	Stone fruits	4 885	5 494	3 725	4 650	2 242	-17,7%
	Mushrooms and truffles	795	703	800	731	2 529	33,5%
	Berries and the fruits of the genus vaccinium	842	728	1 076	625	613	-7,6%
	Other tree and bush fruits n.e.c.	269	60	18	0	1	-75,7%
	Grapes	24	35	20	107	36	11,2%
	Vegetables, fresh, n.e.c.	0	0	0	0	1	38,5%
	Total	156 536	151 878	194 095	197 120	152 288	-0,7%

Source: State Statistic Service of Ukraine
** - excluding apples, pears and tropical fruits*

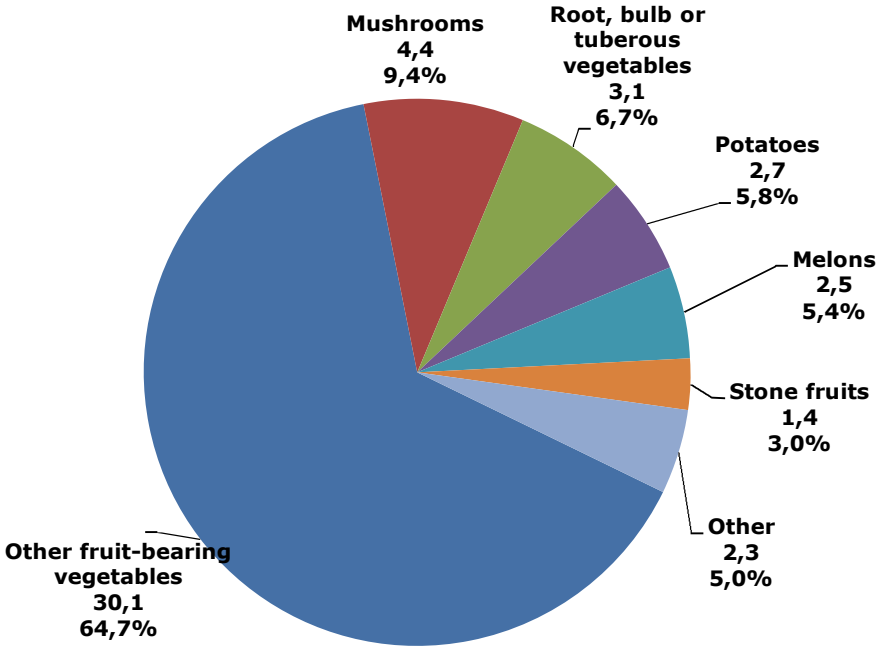


Figure 1.20 - Ukrainian export of fresh fruits and vegetables by main product groups in 2014, mln. EUR

Table 1.18 –Ukraine's export of fresh fruits and vegetables by main product groups and commodity items in 2010-2014*

Indicator	Group	Commodity item	CAGR in 2010-2014	2014							
				TOTAL	EU/ EFTA	Russia	CIS	Asia	Africa	America	Other
Value, 000 Euro	Other fruit-bearing vegetables	Tomatoes	-8,5%	**20 894**	90	14 268	6 530	3	0	3	0
		Cucumbers and gherkins	0,6%	**8 276**	88	7 455	728	2	0	2	0
		Chillies and peppers, green (only capsicum)	16,4%	**746**	6	533	195	8	0	2	2
		Eggplants (aubergines)	29,0%	**167**	2	36	128	1	0	1	0
		Total	-5,9%	**30 084**	185	22 292	7 581	14	0	8	3
	Root, bulb or tuberous vegetables	Onions	62,2%	**1 496**	133	504	374	211	0	2	272
		Carrots and turnips	90,3%	**902**	13	547	340	1	0	1	0
		Other root, bulb or tuberous vegetables (without high starch or inulin content)	-2,3%	**640**	6	360	272	1	0	1	0
		Garlic	-22,5%	**59**	19	10	4	1	0	26	0
		Leeks and other alliaceous vegetables	-35,5%	**3**	0	1	0	1	0	0	0
		Total	27,7%	**3 100**	171	1 422	990	214	0	31	272
	Melons	Watermelons	-17,4%	**2 232**	945	0	1 286	0		0	0
		Other melons	45,2%	**298**	139	20	139	0		0	
		Total	-15,1%	**2 531**	1 084	20	1 425	1		0	0
	Potatoes and other edible roots and tubers with high starch or inulin content	Potatoes	3,4%	**2 692**	8	989	1 127	8	1	8	552
		Other edible roots and tubers with high starch or inulin content	-100,0%								
		Total	3,4%	**2 692**	8	989	1 127	8	1	8	552
	Leafy or stem vegetables	Cabbages	-30,3%	**446**	4	268	166	4	0	3	2
		Artichokes	-19,3%	**763**	2	684	74	2	0	1	0
		Spinach	-0,8%	**19**	0	19	0	0		0	
		Lettuce	-15,2%	**52**	1	45	0	5		0	0

	Cauliflowers and broccoli	51,4%	**19**	0	16	1	1	0	0	0
	Asparagus	-	**0**				0			
	Chicory	-	**0**						0	
	Total	-23,6%	**1 300**	8	1 032	241	12	0	4	2
Green leguminous vegetables	Peas, green	-39,1%	**99**	67	0		33	0	0	
	Other green leguminous vegetables	-								
	Beans, green	-17,3%	**35**	34	0		0		0	1
	Total	-35,9%	**135**	101	0		33	0	0	1
Stone fruits	Cherries	-21,4%	**1 312**		1 306	6				
	Apricots	-68,5%	**2**	0	2					0
	Sloes	-35,1%	**93**	0	93		0		0	0
	Nectarines	-43,3%	**1**	0	0		0		0	0
	Total	-23,9%	**1 407**	0	1 401	6	0		0	0
Mushrooms and truffles	Mushrooms and truffles	11,4%	**4 389**	2 645	1 664	54	1	0	1	25
	Total	11,4%	**4 389**	2 645	1 664	54	1	0	1	25
Berries and the fruits of the genus vaccinium	Other berries, the fruits of the genus vaccinium n.e.c.	-18,3%	**639**	424	215					
	Strawberries	80,4%	**218**	0	156	61	1		0	
	Raspberries	17,8%	**5**	0	5		0			
	Total	-12,3%	**862**	424	376	61	1		0	
Other tree and bush fruits n.e.c.	Other tree and bush fruits n.e.c.	-63,1%	**1**	1			0		0	
	Total	-63,1%	**1**	1			0		0	
Grapes	Other grapes, fresh	19,1%	**31**	28	2	0	1		0	0
	Total	19,1%	**31**	28	2	0	1		0	0
Vegetables, fresh, n.e.c.	Vegetables, fresh, n.e.c.	9,9%	**1**	0	0		0	0	0	
	Total	9,9%	**1**	0	0		0	0	0	
TOTAL		**-6,2%**	**46 533**	**4 655**	**29 199**	**11 485**	**285**	**1**	**53**	**855**

Weight, tons	Other fruit-bearing vegetables	Tomatoes	1,2%	**61 840**	157	42 967	18 711	2	0	3	0
		Cucumbers and gherkins	4,6%	**17 340**	152	15 817	1 366	1	0	2	0
		Chillies and peppers, green (only capsicum)	18,5%	**2 665**	9	1 127	1 504	11	0	1	13
		Eggplants (aubergines)	53,0%	**1 230**	1	185	1 042	1	0	1	0
		Total	2,5%	**83 075**	320	60 097	22 623	15	0	7	14
	Root, bulb or tuberous vegetables	Onions	78,3%	**15 481**	710	5 526	2 310	3 810	0	5	3 119
		Carrots and turnips	125,8%	**6 454**	22	2 657	3 769	1	0	4	0
		Other root, bulb or tuberous vegetables (without high starch or inulin content)	11,9%	**2 958**	41	1 948	964	1	0	3	0
		Garlic	-15,3%	**163**	36	91	19	0	0	16	0
		Leeks and other alliaceous vegetables	-24,0%	**7**	0	6	1	0	0	0	0
		Total	58,1%	**25 063**	809	10 229	7 064	3 813	0	29	3 119
	Melons	Watermelons	-23,8%	**14 671**	7 436	2	7 230	1		1	0
		Other melons	46,0%	**974**	675	27	271	0		0	
		Total	-22,7%	**15 645**	8 112	30	7 501	1		2	0
	Potatoes and other edible roots and tubers with high starch or inulin content	Potatoes	22,0%	**16 088**	11	3 756	6 204	73	1	24	6 018
		Other edible roots and tubers with high starch or inulin content	-100,0%								
		Total	22,0%	**16 088**	11	3 756	6 204	73	1	24	6 018
	Leafy or stem vegetables	Cabbages	-28,4%	**2 605**	24	890	1 650	5	0	8	28
		Artichokes	-0,1%	**3 748**	1	3 241	502	1	0	1	0
		Spinach	16,3%	**101**	0	100	1	0		0	
		Lettuce	-8,2%	**105**	0	103	1	0		0	0
		Cauliflowers and broccoli	100,1%	**38**	0	21	16	1	0	0	0
		Asparagus	-	**0**				0			
		Chicory	-	**0**						0	

	Total	-16,9%	**6 597**	26	4 356	2 170	7	0	10	29
Green leguminous vegetables	Peas, green	-50,7%	**332**	182	0		149	0	0	
	Other green leguminous vegetables	-								
	Beans, green	-9,6%	**66**	63	1		0		0	2
	Total	-48,6%	**398**	246	1		149	0	0	2
Stone fruits	Cherries	-15,5%	**1 687**		1 678	9				
	Apricots	-63,0%	**8**	0	8					0
	Sloes	-16,4%	**547**	0	547		0		0	0
	Nectarines	-62,8%	**0**	0	0		0		0	0
	Total	-17,7%	**2 242**	0	2 233	9	0		0	0
Mushrooms and truffles	Mushrooms and truffles	33,5%	**2 529**	891	1 579	49	0	0	1	10
	Total	33,5%	**2 529**	891	1 579	49	0	0	1	10
Berries and the fruits of the genus vaccinium	Other berries, the fruits of the genus vaccinium n.e.c.	-18,8%	**358**	297	62					
	Strawberries	92,2%	**252**	0	200	52	0		0	
	Raspberries	65,4%	**3**	0	3		0			
	Total	-7,6%	**613**	297	265	52	0		0	
Other tree and bush fruits n.e.c.	Other tree and bush fruits n.e.c.	-75,7%	**1**	1			0		0	
	Total	-75,7%	**1**	1			0		0	
Grapes	Other grapes, fresh	11,2%	**36**	36	0	0	0		0	0
	Total	11,2%	**36**	36	0	0	0		0	0
Vegetables, fresh, n.e.c.	Vegetables, fresh, n.e.c.	38,5%	**1**	0	1		0	0	0	
	Total	38,5%	**1**	0	1		0	0	0	
TOTAL		**-0,7%**	**152 288**	**10 748**	**82 546**	**45 672**	**4 058**	**2**	**71**	**9 191**

Source: State Statistic Service of Ukraine
** - excluding apples, pears and tropical fruits*

Ukrainian import of fresh fruits and vegetables is shown in Appendix 1.

1.6.4 Trends in supply and demand

The main trends on EU market for the coming years will be healthy natural products, corporate social responsibility (CSR) and convenience.

Consumers are more aware of environmental issues, i.e. they require organic, pesticide free, or ecologically responsible products. More and more companies are looking for organic suppliers.

The current situation of the European fresh fruits and vegetables sector arises mainly from long-term changes in the structure of the global fresh fruits and vegetables sector:

- consumers increasingly demand services, including convenience in food purchasing and preparation, taste, and variety, and are increasingly concerned for food safety and quality;
- sales are increasingly being controlled by fewer and fewer retailers, with a growing bargaining power;
- the role of the WTO and bilateral negotiations are becoming more important in widening competition;
- multinational agribusiness is becoming more important due to upgrading of logistics, communication and information technology, transport enabling fresh products to be transported from many origins.
- producers prices have usually been volatile for fresh fruits and vegetables and seem declining in trend in the last few years, while retail prices are either constant or increasing, indicating either increasing rents being captured by downstream actors or increasing levels of value added;
- final demand for fresh fruits and vegetables is generally more stable than supply and changes tend to occur over longer periods of time. Available data on consumption suggests a trend of slow increase in consumption of fresh fruits and vegetables in the EU, particularly for those countries starting from lower levels of per capita consumption.
- 'Super fruits' have become very popular as part of the trend among consumers in Europe towards healthier lifestyles. The word 'super' refers to supposed health benefits as a result of nutritional value and anti-oxidants. Berries that have been labelled as such are blueberries and raspberries; their popularity is expected to grow further as large companies jump on the 'super-fruit bandwagon'. Some popular berries like blackcurrants and blackberries are not commonly mentioned as super fruits despite their excellent nutritional properties, so there are still some marketing opportunities in this context.
- fresh fruits and vegetables supply chains are increasingly driven by large retailers. Increasing concentration and consolidation in retail chains, as well as their global expansion, has improved their position and augmented their buying power in the market. The major effects of the emergence of food retailers in the global food supply chains are through the procurement system of large volumes of products from suppliers. Retailers are building up long term relationships with key suppliers – either producers or wholesalers - capable to meet the requirements necessary to respond to the increased consumer interest for purchasing fresh fresh fruits and vegetables products from supermarkets.
- consumers are increasingly concerned about where products originate, and how they are produced. They demand more sustainable (i.e. socially and environmentally responsible) food products from retailers. Fruit and vegetables are the most

important category of sustainable food products that are purchased by consumers, with shares of between 15 and 36% in total organic sales in the four largest EU markets.

1.6.5 Social Responsibility risk level in the chain

CSR has become one of the pillars of the Dutch policy for development cooperation, in particular labour conditions.

Ukrainian manufacturers do not always comply with social standards based on the conventions of the International Labour Organization (ILO) and the United Nations' Universal Declaration of Human Rights. There are some risks of employing children under age of 15, excessive use of natural resources, employment under minimum wages, excessive working hours and risks of non-compliance with local and/or international environmental regulations.

However, the risk level is not significant and it is under control of the State Committee for Industrial Safety, Labour Protection and Mining Supervision and other controlling authorities.

CBI can play a constructive and proactive role in assisting the governmental institutions and the implementation in the fruit and vegetable sector through the sector organization and the manufacturers.

Current Social Responsibility Risk Index is shown in Figure.

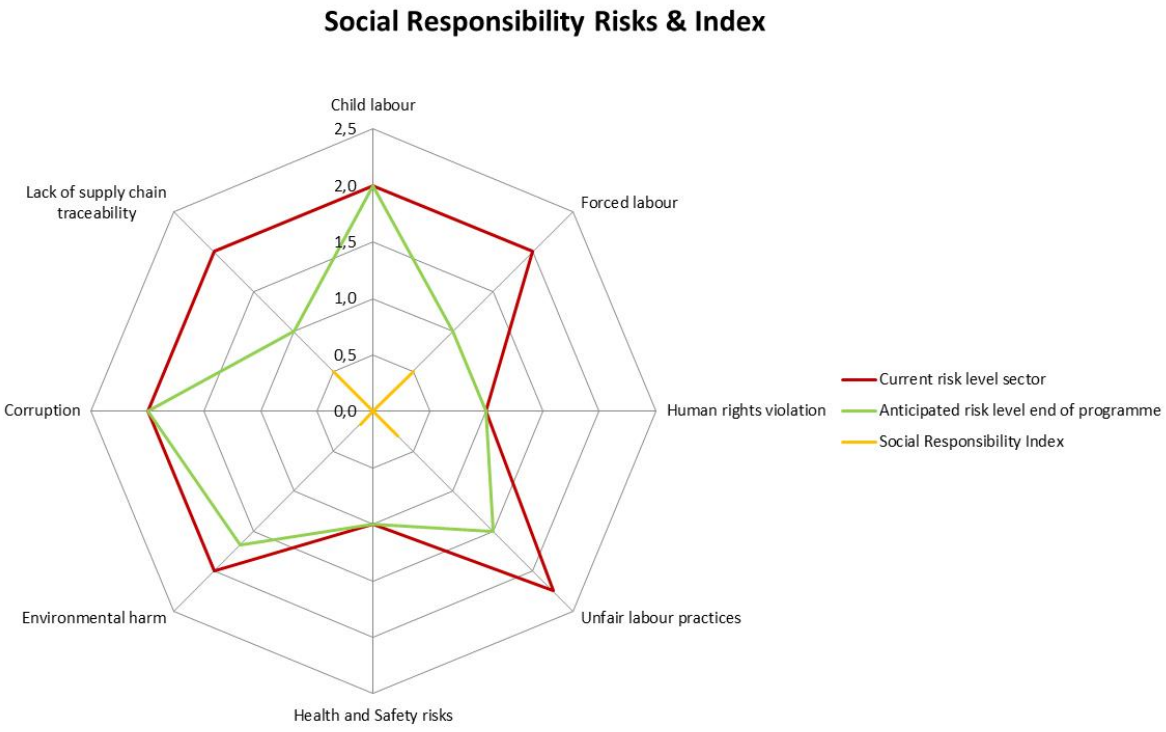


Figure 1.21 - Social Responsibility Risk Score & Index Ukraine

1.7 Recommendations for intervention

1.7.1 Potential improvement of export and social responsibility

Taking into account market opportunities (see section 1.5) and interviews with industry experts the Ukraine's potential for export growth to EU/EFTA markets by product group is presented in the table below.

Table 1.19 –EU/EFTA's and Ukraine's foreign trade statistics in 2014, potential for Ukraine's export growth to EU/EFTA of some fresh fruit and vegetables product subgroups, million EUR

Group	Subgroup	EU/EFTA external import		UA export to EU/EFTA		UA share in external import	Growth potential, million EUR by 2017
		mln. EUR	CAGR in 2010-2014	mln. EUR	CAGR in 2010-2014		
Stone fruits	Nectarines	60,9	3,3%	0,025	34,1%	0,0%	**+0,03**
	Cherries	137,8	-0,3%	0,000	-100,0%	0,0%	**+0,01**
	Sloes	95,4	0,2%	0,000		0,0%	**+0,01**
	Apricots	17,4	-10,9%	0,003		0,0%	**+0,01**
Root, bulb or tuberous vegetables	Onions	166,1	1,6%	0,137	69,5%	0,1%	**+0,16**
	Garlic	60,0	-18,0%	0,021	76,0%	0,0%	**+0,03**
Berries and the fruits of the genus vaccinium	Strawberries	90,7	6,9%	0,000		0,0%	**+0,00**
	Other berries, the fruits of the genus vaccinium n.e.c.	248,2	26,2%	0,502	-23,1%	0,2%	**+0,60**
	Raspberries	88,4	20,9%	0,001		0,0%	**+0,00**
Melons	Other melons	343,2	7,2%	0,156	103,1%	0,0%	**+0,19**
	Watermelons	107,6	11,3%	1,211	-22,5%	1,1%	**+1,45**
Mushrooms and truffles	Mushrooms and truffles	68,6	2,1%	4,215	2,9%	6,1%	**+5,06**
Other tree and bush fruits n.e.c.	Other tree and bush fruits n.e.c.	256,8	6,9%	0,001	-	0,0%	**+0,00**
TOTAL abovementioned		**5 093,7**	**3,4%**	**6,55**			**+7,55**

1.7.2 Recommendation towards CBI

We would recommend CBI to further develop a programme for intervention in the fresh fruits and vegetables value chain in Ukraine. According to our estimates, there are possibilities to raise export of the sector's products to EU/EFTA by 7.55 mln EUR (by 75-100%) during next 2-3 years due to CBI support. Thus, access to European markets will be able to partially replace the loss of markets by Ukrainian producers in Russia and CIS countries and to compensate sharp decline in domestic demand.

The main areas of intervention, in which CBI can play a role, in order to realize sustainable export growth to Europe are:

- Exposure to European opportunities and sourcing needs, through matchmaking and trade promotion activities.
- Specific and up-to-date development and provision of EU market information.
- Capacity building in areas of export marketing, production technologies and CSR.

Fresh fruits and vegetables sector can be supported through a number of interventions, as follows:

- exposure and linkage to European opportunities and sourcing needs, e.g. through partnering with associations such as FRUCOM, European Fruit and Vegetables Trade Association (EUCOFEL) and similar ones in Europe.
- development, regularly update and provision of EU/EFTA market intelligence information;
- capacity building in areas of export marketing and CSR.
- assistance in certification procedures for Ukrainain producers.

1.7.3 Risk analysis

Table 1.20 –Risk assessment

Risk (general or specific)	Possible impact on proposed CBI intervention	Level	Influence	Mitigation strategy
Specific risk: EU buyer doesn't accept manufacturers timeline to achieve compliance standard	This will have a direct impact on the follow up of the CBI programme, as it won't benefit export to the EU	3	3	CBI has to focus on the most important compliance that can be achieved with little investment. Therefor manufacturer can show their willingness to comply
Specific risk: manufacturers won't get access to competitive financing in the near future	This will have direct impact on the CBI programme as manufacturer can't invest in necessary upgrading or improvements to be able to change price focus or to achieve compliance standard	5	3	CBI has to focus on setting up the programme for manufacturers in a way they that they can start up and then improve/upgrade along the way because of higher profits they will start making. So basically by self-financing
Specific risk: implementation of other donor program(s) in the sector	Other donor program(s) may duplicate CBI efforts	1	2	CBI has to constantly monitor other donors' activities and coordinate its actions with them
General risk: resumption of active hostilities by Russia in eastern Ukraine	Violation of economic links between the companies in the value chain, especially in eastern Ukraine, a further reduction in domestic demand, as a result - the bankruptcy of some enterprises involved in the programme	2	4	The risk is beyond control of CBI and there is no mitigation strategy

Risk level: 1=Rare; 2=Unlikely; 3=Possible; 4=Likely; 5=Almost certain.
Influence: 1=Negligible; 2=Minor; 3=Moderate; 4=Major; 5=Severe.

2 PROCESSED FRUIT AND VEGETABLES VALUE CHAIN ANALYSIS

2.1 Introduction

Processing of fruit and vegetables is part of the 'food industry' sector that includes home meat products, dairy products, bakery products and others. The fruit and vegetable processing industry represents about 5% of the turnover in the food industry.
There are 335 registered fruit and vegetables processing companies in Ukraine, and most of them are small or medium-sized (Table 2.1).

Over the last 5 years in terms of national currency, Ukrainian fruit and vegetables processing sector has been constantly recording turnover growth to 11 544 million UAH (1 149 thous. tons) in 2014, (the total increase was +45%). However, if in Euro terms the turnover decreased by 3% (735 million EUR) due to the devaluation of the hryvnia.
The sector is realizing 0.9% of the country's overall export and its contribution to the GDP during 2012 – 2014 was about 0.3% (value added of the sector was 349 mln. EUR in 2014).

Figure 2.1- Turnover and value added of Ukraine's fruit and vegetables processing industry in 2010-2014

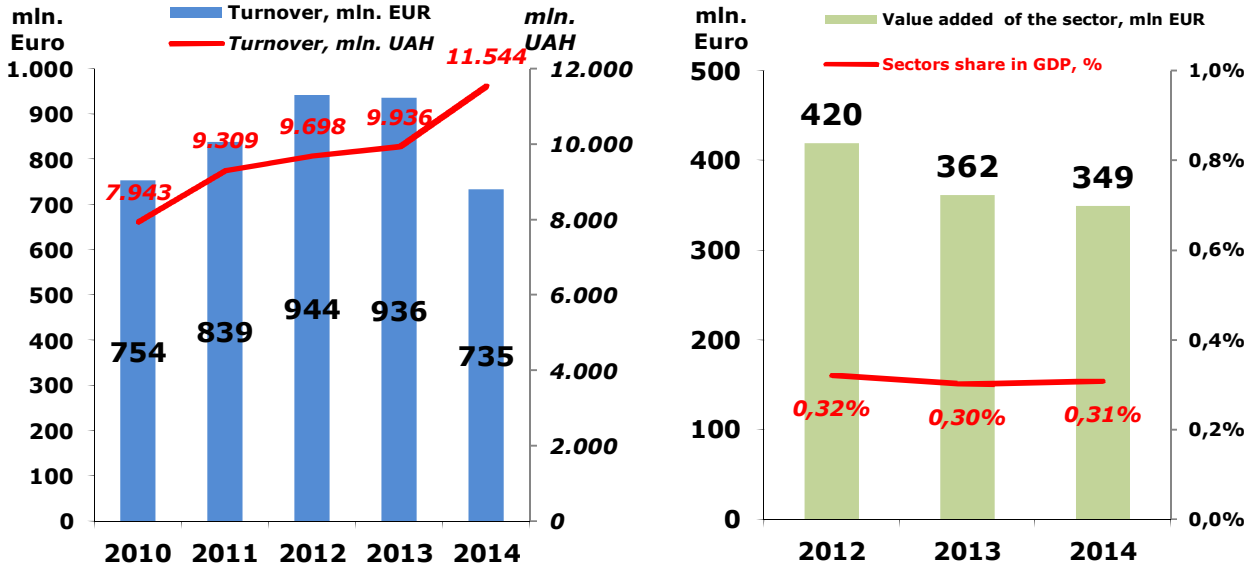


Table 2.1 –Basic indicators of activity of business entities of processed fruits and vegetables sector in 2010-2014

Indicator	2010	2011	2012	2013	2014
Number of enterprises, units	**398**	**394**	**326**	**357**	**335**
Number of employees, thous. person	**20,5**	**22,5**	**22**	**21,1**	**19,4**
Turnover, mln. UAH	**7943,1**	**9309,1**	**9697,6**	**9936,2**	**11544,4**
Production value, mln. UAH	**n.a.**	**n.a.**	**11205,1**	**10979,5**	**14596,8**
Value added, mln. UAH	**n.a.**	**n.a.**	**4310,9**	**3837,6**	**5492,0**
Financial results of enterprises before taxation, mln. UAH					
Financial result (balance)	-32,9	39,3	74,1	137,1	-2284,1
in % to the total	58,6	62,6	60,3	60,3	59,4
Businesses earned a profit	287,6	362,7	496,6	498,1	562,7
in % to the total	41,4	37,4	39,7	39,7	40,6
Companies made a losses	320,5	323,4	422,5	361	2846,8
Net profit (loss) of enterprises, mln. UAH					
Financial result (balance)	-103,6	-40	-43,8	18,5	-2216
in % to the total	57,8	61,2	59,3	59,1	58,7
Businesses earned a profit	249,6	301,8	394,3	415,3	506,6
in % to the total	42,2	38,8	40,7	40,9	41,3
Companies made a losses	353,2	341,8	438,1	396,8	2722,6
Profitability of operational activity, %	**3,2**	**3,3**	**4,7**	**4,3**	**-0,8**
Profitability of all activity, %	**-1,0**	**-0,3**	**-0,3**	**0,1**	**-10,6**

Source: State Statistic Service of Ukraine

The assortment of processed fruit and vegetable products produced by industry is determined by available raw materials of domestic origin: grape, cherries, apples, plumps, apricots, peaches, strawberry, raspberry, blueberry, black currant, gherkins, cabbage, marrow, eggplants, pepper, tomatoes, bean, green peas etc., and last times, sweet corn and mushrooms. Priorities of Ukrainian enterprises are put on the products which are of stable demand on domestic market and foreign markets in the segments of:

- canned vegetables and fruit
- natural juices and concentrates
- ketchup and sauces
- frozen vegetables and fruits
- dry fruits
- processed potatoes

The leading enterprises of the industry are independent companies (like 'Veres', 'Sandora', 'Chumak', 'Bonduelle', Nestle ('Torchyn Product') or form a part of the large food processing and distribution holdings (like Gaysin Cannery, Agrofusion group).

The capacities for processing of fruit and vegetables are mainly located in regions where fruit and vegetables grow, thus reducing significantly the share of transportation costs in the price structure of final product. In 2014 Ukraine processed about 1.15 million tons of processed fruit and vegetables (of them market of processed vegetables is estimated as 600 million EUR).

The Ukrainian market of processed fruit and vegetables is quite promising and has good potential of growth. Gradual denial of homemade canning, and the wide range of industrial analogues with low price and stable presence in the stores contribute to development of domestic manufacturing sector.

The combination of these factors and the fact that present consumption makes only 1/3 of the recommended norm may result in considerable market growth.

According to prognosis in coming years the market of canned peas, sweet corn, processed potatoes and tomatoes, frozen fruits and vegetables will continue growing, despite the decrease of production volumes by individual operators.

There is a challenge for Ukrainian producers to conquer the market of neighbouring European countries, first of all, due to insufficient development of domestic raw material base, lack of experienced workforce and production capacities in these countries.

As expected the growth of consumption in the sector will be modest - 3-8%. But this is inevitable because of the continuing urbanization of the population. Domestic manufacturers are increasing capacity and strengthen its market position. According to forecasts of market operators, in few years 'unbranded' processed fruit and vegetables will disappear from the market.

2.2 Management summary

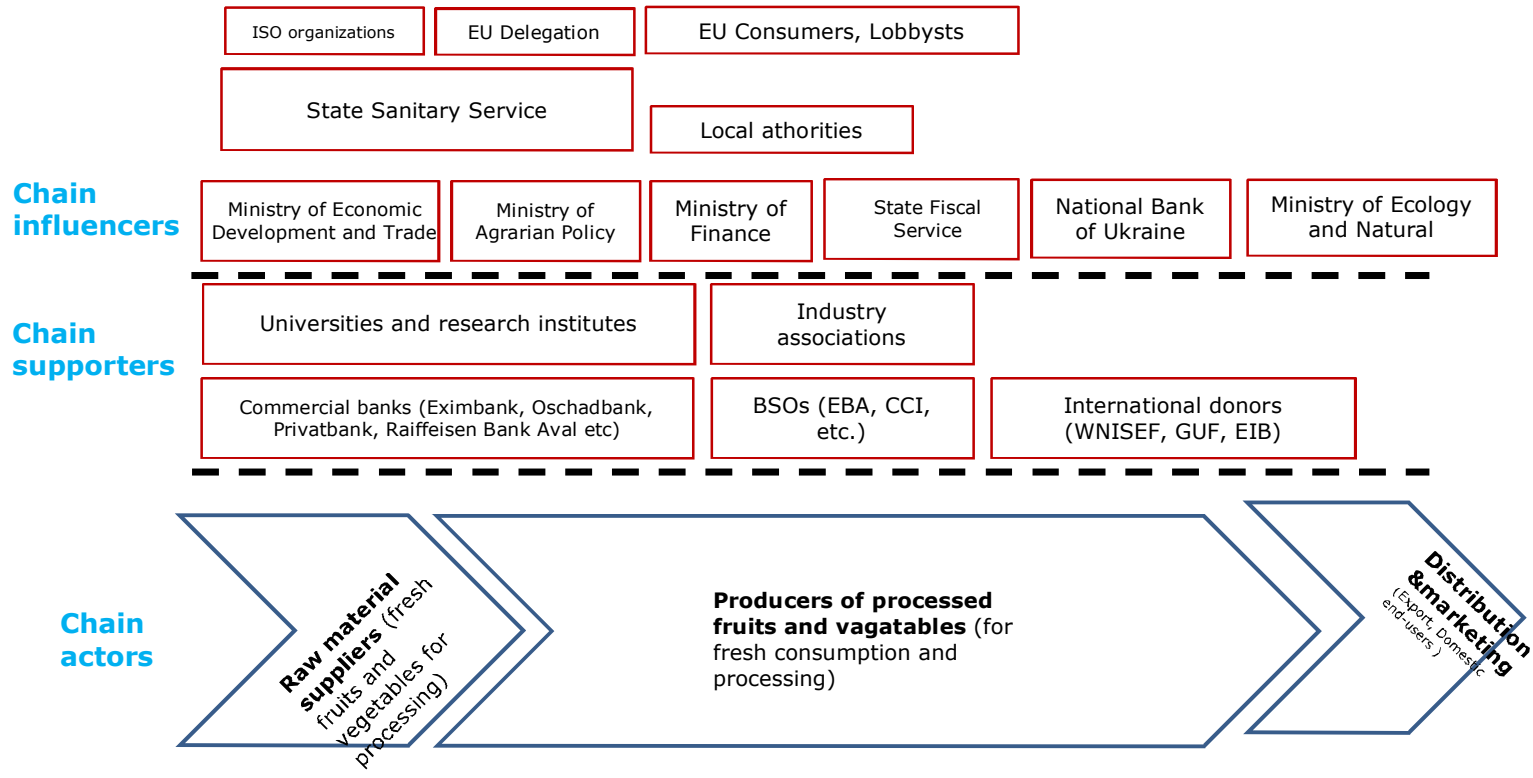
Objective

The principal objective of this value chain analysis (VCA) is to assess whether or not a CBI intervention in a processed fruits and vegetables sector in Ukraine will contribute significantly to export growth and, if so, identify and define the opportunities for these interventions.

Methodology

The VCA was conducted by a team of Ukrainian experts. About 20 interviews have been held with corporate representatives as well as industry experts.

Mapping the value chain



Bottlenecks along the value chain

Below is an overview of the main identified bottlenecks that currently hamper export growth to the EU/EFTA.

Observed constraints in value chain and how they prohibit export
Lack of knowledge on EU/EFTA market segments and market access requirements.
Lack of (export) marketing skills
The lack of direct contacts between Ukrainian producers and European companies
Lack of necessary certifications to enter the EU market (ISO)

Observed constraints in value chain and how they prohibit export
Lack of internal financial resources and limited access to long-term loans
Lack of storage facilities, especially with new equipment and technology level
Lack of refrigeration facilities in horticultural and vegetable farms
Lack of state export promotion and low level of government support of producers in fresh fruit and vegetables sectors
Lack of a strong positive image and branding for Ukrainian fruit and vegetables sector
Weak branch associations which could take a lead in resolving the issues of sector and lobby the interests of manufacturers
Lack of awareness among stakeholders on CSR issues on the EU market (labour, safety, environmental and other social responsibilities)
Low quality of raw materials for processing.
Climate and natural risks are one of the main obstacles to sustainable development
The great level of labour inputs and the short afterharvest period berry and stone fruit compared with apples are obstacles to berries production
Low level of production culture and pricing policy for organic products are the main obstacles to the organic production development
Unstable supply of fresh fruit and vegetable processing enterprises through lower prices (compared with the fresh fruits and berries for fresh consumption)
Lack of industrial capacities and raw materials base development for dried and frozen fruit and berries production.

EU/EFTA market opportunities

The main market opportunities for Ukrainian processed fruits and vegetables are in the segments, in which Ukraine demonstrated stable export increase: canned fruits and vegetables (CAGR of Ukrainian export to EU/EFTA in 2010-2014 – 23-63%), fruit and vegetable juices (9-22%), frozen vegetables (18%), frozen fruits (2%), jams, fruit jellies and fruit or nut puree and pastes (9%).

Recommendations for intervention

- exposure and connexion to European opportunities and sourcing needs, e.g. through partnering with associations such as FRUCOM (European Federation of the Trade in Dried Fruit, Edible Nuts, Processed Fruit & Vegetables, Processed Fishery Products, Spices and Honey), PROFEL (European Association of Fruit and Vegetable Processing Industries), European Fruit Juice Association (AIJN) and similar ones in Europe.
- development, regularly update and provision of EU/EFTA market intelligence information;
- capacity building in areas of export marketing and CSR.
- assistance in certification procedures for Ukrainain producers.

2.3 Export Market Analysis

2.3.1 Segmentation of EU/EFTA markets and product groups

EU processed fruits and vegetables market apparent consumption grew from 45.6 billion EUR in 2010 to 53.9 billion EUR in 2014 (up by 4.2% on average). Import share in apparent consumption accounts for about 14%.

Table 2.2 –EU processed fruits and vegetables market apparent consumption in 2010-2014, mln. EUR*

Indicator	2010	2011	2012	2013	2014	CAGR, %
Production	42 394	44 796	46 058	47 971	50 358	4,4%
Export	2 684	3 050	3 519	3 660	3 892	9,7%
Import	5 935	6 792	6 970	7 051	7 440	5,8%
Apparent consumption	**45 645**	**48 538**	**49 509**	**51 363**	**53 906**	**4,2%**
Import share in apparent consumption, %	13%	14%	14%	14%	14%	

** - data on EFTA market is not available*

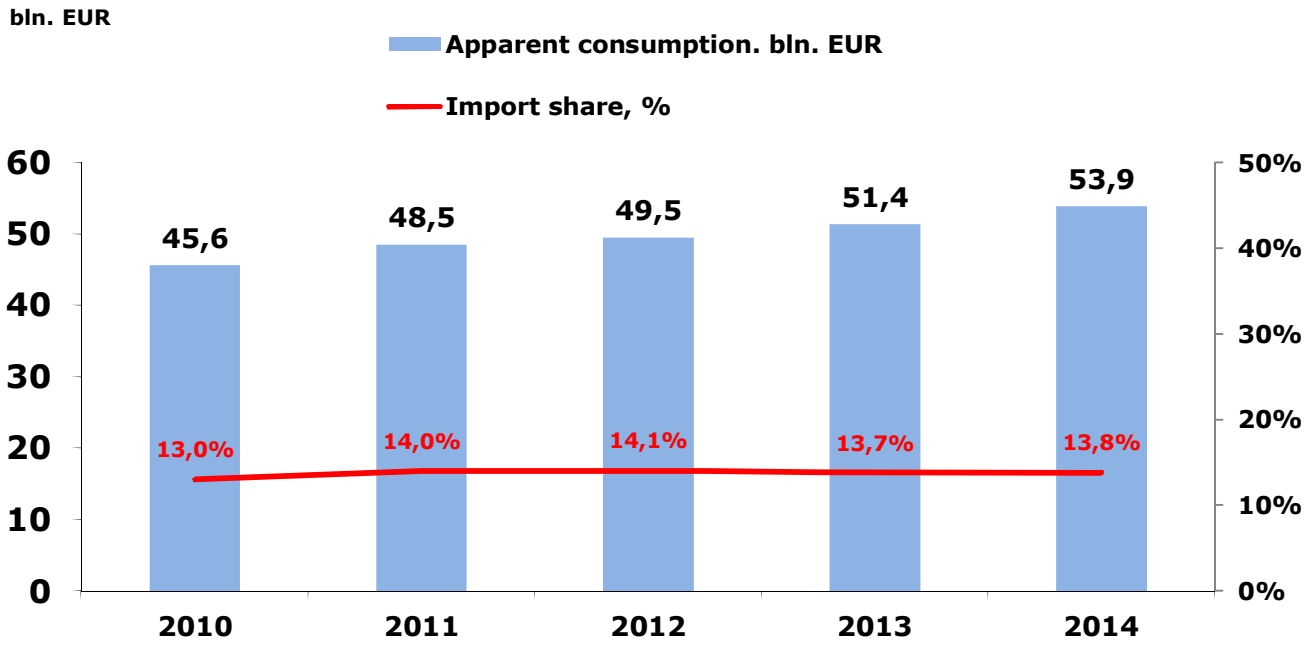


Figure 2.2 - EU processed fruits and vegetables market apparent consumption in 2010-2014 in value terms

Canned fruits and vegetables (14.6 billion EUR in 2014), other processed and preserved fruit and vegetables (mostly potatoes crisps and nuts) (14.0 billion Euros) and fruit and vegetable juices (10.8 billion Euros), comprise the greatest share of apparent consumption (about 73%).

Table 2.3 –EU processed fruits and vegetables market apparent consumption of in 2010-2014 by product groups, mln. EUR*

Group	Production	Export	Import	Consumption	
				mln. EUR	CAGR in 2010-2014
Canned fruit and vegetables	14 611	454	475	14 632	2,8%
Other processed and preserved fruit and vegetables	11 690	864	3 207	14 033	4,4%
Fruit and vegetable juices	9 245	737	2 274	10 781	3,5%
Frozen vegetables	9 148	1 111	308	8 345	5,5%
Jams, fruit jellies and fruit or nut puree and pastes	3 651	293	129	3 487	8,7%
Frozen fruits	1 036	181	683	1 538	6,0%
Dried vegetables	978	251	363	1 090	5,7%
TOTAL	**50 358**	**3 892**	**7 440**	**53 906**	**4,2%**

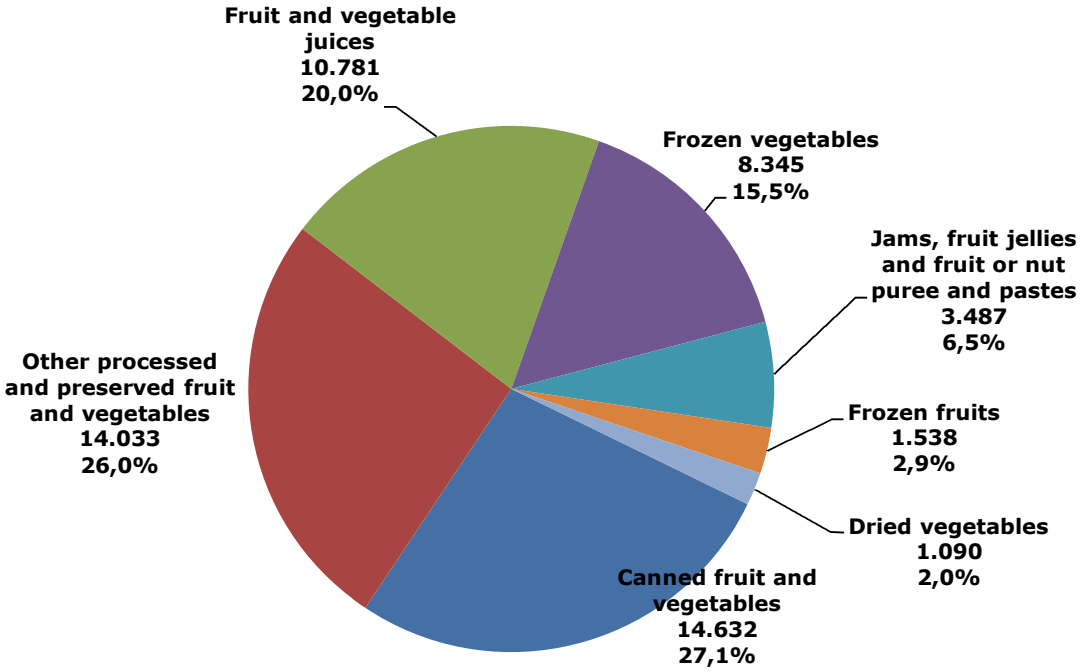


Figure 2.3- EU processed fruits and vegetables market apparent consumption of in 2014, mln. EUR

Table 2.4 –EU processed fruits and vegetables market apparent consumption of in 2010-2014 by product groups and subgroups, mln. EUR*

Group	Subgroup	Production	Export	Import	Consumption	
					mln. EUR	CAGR in 2010-2014
Canned fruit and vegetables	Vegetables and mixtures of vegetables, n.e.c. (excluding prepared vegetable dishes and frozen vegetables and mixtures of vegetables)	4 812	0	0	4 812	4,7%
	Vegetables (excluding potatoes), fruit, nuts and other edible parts of plants, prepared or preserved by vinegar or acetic acid	1 951	156	274	2 069	-1,3%
	Prepared or preserved olives (excluding prepared vegetable dishes and olives dried, frozen or preserved by vinegar or acetic acid)	1 650	0	0	1 650	6,4%
	Concentrated tomato puree and paste	967	255	194	905	2,6%
	Beans, preserved otherwise than by vinegar or acetic acid, except prepared vegetable dishes	1 164	0	0	1 164	1,5%
	Preserved tomatoes, whole or in pieces (excluding prepared vegetable dishes and tomatoes preserved by vinegar or acetic acid)	1 167	0	0	1 167	2,1%
	Unconcentrated tomato puree and paste	864	43	7	828	5,9%
	Prepared or preserved mushrooms and truffles (excluding prepared vegetable dishes and mushrooms and truffles dried, frozen or preserved by vinegar or acetic acid)	533	0	0	533	-3,0%
	Frozen vegetables and mixtures of vegetables (excluding prepared vegetable dishes, frozen vegetables and mixtures of vegetables uncooked or cooked by steaming or boiling in water, or preserved by vinegar or acetic acid)	561	0	0	561	4,5%
	Prepared or preserved sweetcorn (excluding prepared vegetable dishes and sweetcorn dried, frozen or preserved by vinegar or acetic acid)	445	0	0	445	3,7%
	Peas, preserved otherwise than by vinegar or acetic acid, except prepared vegetable dishes	346	0	0	346	-1,2%
	Preserved sauerkraut (excluding prepared vegetable dishes and sauerkraut dried, frozen or preserved by vinegar or acetic acid)	114	0	0	114	1,7%
	Preserved asparagus (excluding prepared vegetable dishes and asparagus dried, frozen or preserved by vinegar or acetic acid)	37	0	0	37	-1,5%
Other processed and preserved fruit and vegetables	Fruit, prepared or preserved, n.e.c. (excluding MΓjsli)	2 966	355	909	3 521	4,8%
	Potatoes prepared or preserved, including crisps (excluding frozen, dried, by vinegar or acetic acid, in the form of flour, meal or flakes)	3 888	147	15	3 756	4,1%
	Prepared or preserved nuts (other than groundnuts)	2 397	129	714	2 983	10,9%
	Dried fruit (excluding bananas, dates, figs, pineapples, avocados, guavas, mangoes, mangosteens, citrus fruit and grapes)	643	84	421	980	-4,4%

	Prepared or preserved groundnuts (including peanut butter	737	41	38	734	0,9%
	Dried grapes	104	17	579	666	3,1%
	Vegetable by-products and waste for animal consumption, n.e.c.	168	16	367	519	5,2%
	Cooking and other preparation services (concentration, etc) for the preservation of fruit and vegetables	360	0	0	360	12,1%
	Vegetables provisionally preserved by sulphur dioxide gas, in brine, in sulphur water or in other preservative solutions, but unsuitable in that state for immediate consumption	149	24	136	261	1,9%
	Potatoes prepared or preserved in the form of flour, meal or flakes (excluding frozen, dried, crisps, by vinegar or acetic acid)	131	24	2	109	-17,9%
	Other fruit and nuts provisionally preserved by sulphur dioxide gas, in brine, sulphur water or in other preservative solutions, but unsuitable for immediate consumption	127	23	10	114	1,4%
	Peel of citrus fruit or melons, fresh, frozen, dried or provisionally preserved in brine, in sulphur water or in other preservative solutions	19	4	15	30	18,7%
Fruit and vegetable juices	Unconcentrated orange juice (excluding frozen)	2 111	78	1 453	3 486	4,8%
	Mixtures of fruit and vegetable juices	2 082	98	11	1 996	4,5%
	Apple juice	1 464	142	172	1 494	2,6%
	Unconcentrated juice of any single fruit or vegetable, not fermented and not containing added spirit (excluding orange, grapefruit, pineapple, tomato, grape and apple juices)	930	135	229	1 025	-0,4%
	Other fruit and vegetable juices n.e.c.	1 200	39	18	1 179	2,5%
	Grape juice (including grape must)	659	102	11	569	15,1%
	Pineapple juice	182	16	161	327	-3,9%
	Unconcentrated juice of any single citrus fruit (excluding orange and grapefruit)	151	87	85	149	-5,8%
	Frozen unconcentrated orange juice	120	25	61	156	9,3%
	Grapefruit juice	93	5	71	159	-2,3%
	Orange juice n.e.c.	152	6	0	147	2,7%
	Tomato juice	101	5	1	97	4,7%
Frozen vegetables	Frozen vegetables and mixtures of vegetables, uncooked or cooked by steaming or boiling in water (excluding potatoes)	4 233	379	305	4 159	1,8%
	Frozen potatoes, prepared or preserved (including potatoes cooked or partly cooked in oil and then frozen	4 400	726	3	3 678	9,2%
	Frozen potatoes, uncooked or cooked by steaming or boiling in water	514	6	0	508	16,3%

Jams, fruit jellies and fruit or nut puree and pastes	Jams, marmalades, fruit jellies, fruit or nut purees and pastes, being cooked preparations (excluding of citrus fruit, homogenized preparations)	3 434	276	127	3 285	9,8%
	Citrus fruit jams, marmalades, jellies, purees or pastes, being cooked preparations (excluding homogenized preparations)	217	17	2	202	-4,4%
Frozen fruits	Frozen fruit and nuts uncooked or cooked by steaming or boiling in water	1 036	181	683	1 538	6,0%
Dried vegetables	Dried potatoes in the form of flour, meal, flakes, granules and pellets	481	148	4	337	11,5%
	Dried vegetables (excluding potatoes, onions, mushrooms and truffles) and mixtures of vegetables, whole, cut, sliced, broken or in powder, but not further prepared	301	71	172	402	2,3%
	Dried mushrooms and truffles, whole, cut, sliced, broken or in powder, but not further prepared	99	21	98	177	2,8%
	Dried onions, whole, cut, sliced, broken or in powder, but not further prepared	90	11	90	169	7,5%
	Dried potatoes whether or not cut or sliced but not further prepared	6	1	0	5	6,6%
TOTAL		**50 358**	**3 892**	**7 440**	**53 906**	**4,2%**

2.3.2 Trade flows and competitor analysis

Over the last 5 years the EU/EFTA countries has been constantly recording a negative trade balance in footewear foreign trade, totalling 7 305 million EUR in 2014 (Table 2.5). However, if in volume terms the import was higher than export by more than 2 times, indicating that the products, exported from the EU/EFTA was characterized by the high level of prices than import prices.

In terms of value, EU/EFTA exports of processed fruits and vegetables grew from 25.0 bln EUR in 2010 to 31.3 bln EUR in 2014. In terms of quantity, growth was less pronounced, but it was still from 25,978 tonnes in 2010 to 27,701 tonnes in 2014. The fact that values grew faster than volumes may be because of price increases due to inflation, international price increases or fluctuations in exchange rates.

EU/EFTA imports of processed fruits and vegetables in terms of value grew from 33.1 bln EUR in 2010 to 41.5 bln EUR in 2014. In terms of quantity, growth was also less pronounced: from 33,745 tonnes in 2010 to 35,561 tonnes in 2014.

Table 2.5

EU/EFTA foreign trade of processed fruits and vegetables in 2010-2014, mln. EUR

Indicator	2010	2011	2012	2013	2014	CAGR, %
Value, mln. Euro						
Export	25 009	27 164	28 834	30 057	31 249	5,7%
Import	33 070	36 076	37 858	39 431	41 457	5,8%
incl. external	12 197	13 467	14 051	14 595	15 884	6,8%
incl. Ukraine	100	107	140	136	163	12,9%
Ukraine's share	0,82	0,79	1,00	0,93	1,03	
Weight, thous.tons						
Export	25 978	26 209	26 637	27 346	27 701	1,6%
Import	33 475	33 931	33 533	34 926	35 561	1,5%
incl. external	12 224	12 339	11 962	12 657	13 238	2,0%
incl. Ukraine	131	69	152	142	180	8,4%
Ukraine's share	1,07	0,56	1,27	1,12	1,36	

Source: Eurostat

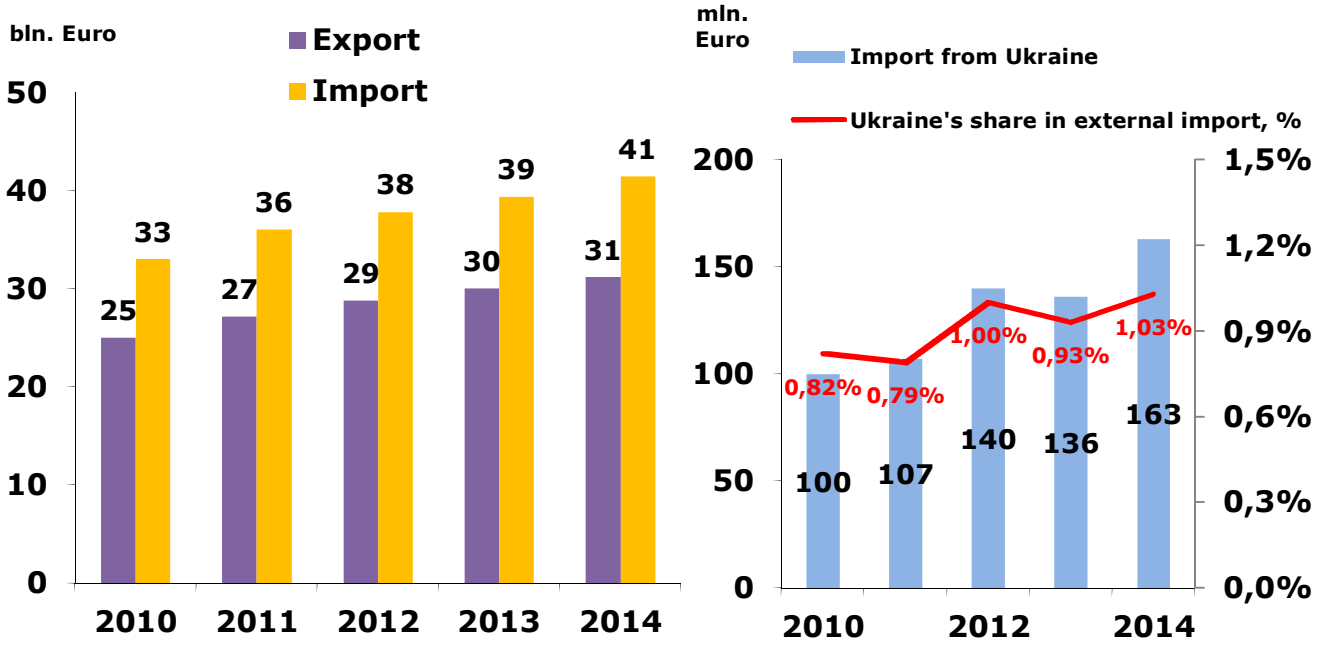


Figure 2.4 - EU/EFTA foreign trade of processed fruits and vegetables in 2010-2014 in value terms

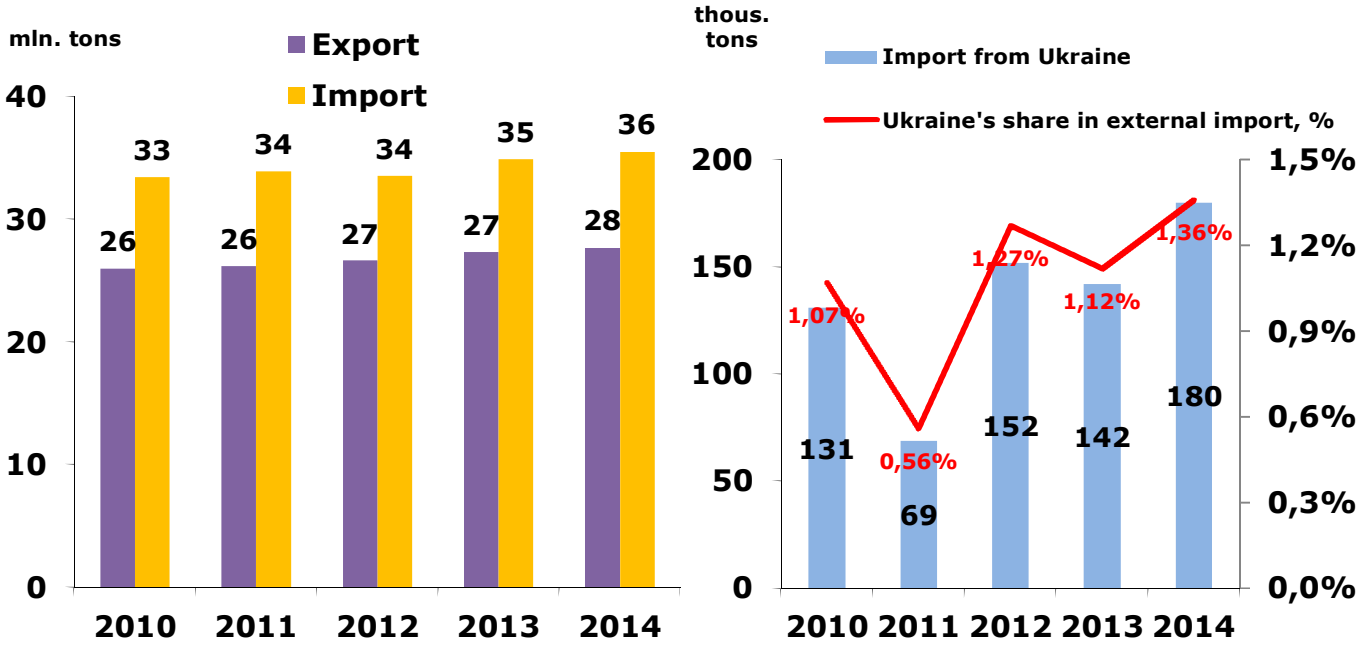


Figure 2.5 - EU/EFTA foreign trade of processed fruits and vegetables in 2010 2014 in volume terms

Extra-EU export is around 17% of all EU/EFTA export in 2014. Hence, Europe mainly exports to other European countries (own production and re-exports). The highest rates

of extra-EU export are shipments of dried vegetables (25%) and jams, fruit jellies and fruit or nut puree and pastes (23%).

Extra-EU exported processed fruits and vegetables consist mainly of canned fruits and vegetables (2 290 mln. EUR or 44% in 2014), frozen vegetables (1 078 mln. EUR or %31) and fruits and vegetables juices (627 mln. EUR or 12%). Together, these product account for more than three fourth of all extra-EU exports of processed fruits and vegetables.

In 2010-2014 export increase was observed in trade of all products (the largest in the segment of frozen vegetables, other processed and preserved fruit and vegetables and fruit and vegetable juices - CAGR 16.5%, 12.7%, 8.5% respectively).

Table 2.6 – EU/EFTA processed fruits and vegetables export by main product groups in 2010-2014

Subgroup	ALL EXPORT EU/EFTA		EU/EFTA external export		UA import from EU/EFTA		UA share in external export
	mln. EUR	**CAGR in 2010-2014**	**mln. EUR**	**CAGR in 2010-2014**	**mln. EUR**	**CAGR in 2010-2014**	
Value, mln. Euro							
Canned fruit and vegetables	11 914,6	4,9%	2 289,5	7,6%	31,0	-3,9%	1,4%
Fruit and vegetable juices	5 319,5	3,6%	626,6	8,5%	11,9	-10,5%	1,9%
Frozen vegetables	5 530,4	5,3%	1 078,2	16,5%	14,2	6,8%	1,3%
Other processed and preserved fruit and vegetables	4 911,6	10,4%	564,9	12,7%	22,4	4,1%	4,0%
Frozen fruits	1 278,0	6,0%	129,6	6,9%	2,6	3,8%	2,0%
Jams, fruit jellies and fruit or nut puree and pastes	1 194,5	7,6%	271,8	5,6%	2,2	1,5%	0,8%
Dried vegetables	1 100,6	6,7%	270,4	4,2%	4,2	11,0%	1,5%
Total	31 249,2	5,7%	5 230,9	9,5%	88,5	-1,0%	1,7%
Weight, thous. tons							
Canned fruit and vegetables	10 715,7	2,5%	1 813,8	4,8%	27,4	-4,5%	1,5%
Fruit and vegetable juices	5 369,7	-0,5%	456,9	5,5%	7,1	-13,5%	1,6%
Frozen vegetables	7 173,7	3,0%	1 533,1	11,9%	19,6	4,7%	1,3%
Other processed and preserved fruit and vegetables	1 798,2	1,4%	202,9	7,0%	9,6	5,5%	4,7%
Frozen fruits	813,1	0,9%	94,8	4,4%	3,1	-3,3%	3,3%
Jams, fruit jellies and fruit or nut puree and pastes	631,2	2,8%	128,4	1,1%	1,5	-12,3%	1,2%
Dried vegetables	1 199,6	-2,8%	462,1	-5,3%	1,9	16,6%	0,4%
Total	27 701,2	1,6%	4 691,9	5,5%	70,2	-2,2%	1,5%

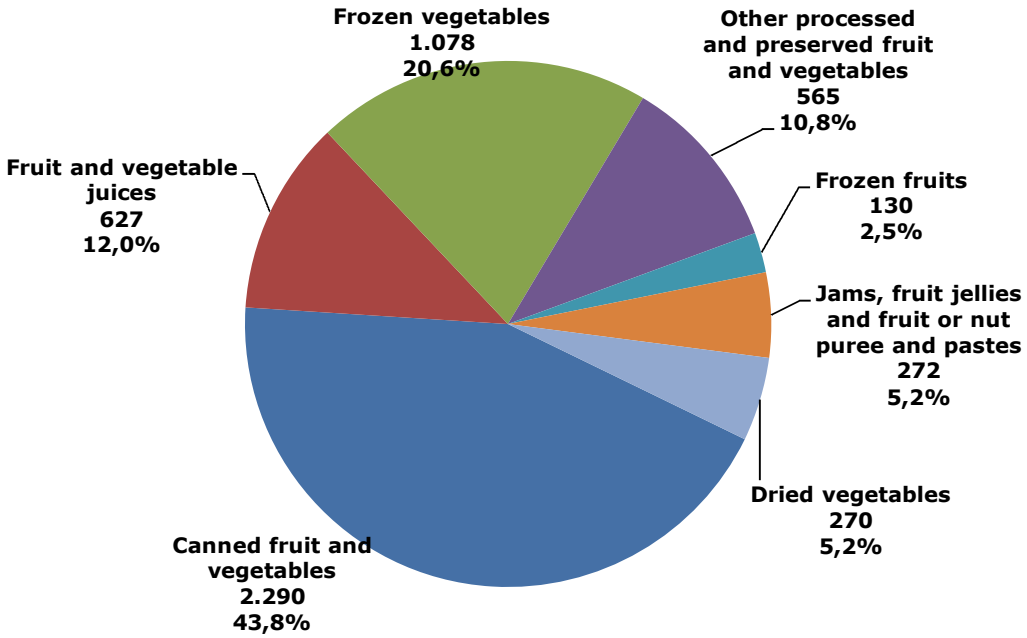


Figure 2.6 - EU/EFTA external export of processed fruits and vegetables by main product groups in 2014, mln. EUR

EU/EFTA processed fruits and vegetables export by main product groups in 2010-2014 is shown in Table 2.7.

Table 2.8 –EU/EFTA processed fruits and vegetables export by main product groups in 2010-2014

Group	Subgroup	ALL EXPORT EU/EFTA		EU/EFTA external export		UA import from EU/EFTA		UA share in external export
		mln. EUR	CAGR in 2010-2014	mln. EUR	CAGR in 2010-2014	mln. EUR	CAGR in 2010-2014	
	Value, mln. Euro							
Canned fruit and vegetables	Other vegetables (except potatoes), preserved otherwise than by vinegar or acetic acid, except prepared vegetable dishes	5 677,4	5,1%	1 583,8	6,8%	20,8	-3,5%	1,3%
	Other prepared, dried or preserved fruits and nuts	4 939,8	4,6%	413,3	12,2%	5,6	-0,6%	1,4%
	Vegetables (except potatoes), fruit, nuts and other edible parts of plants, prepared or preserved by vinegar or acetic acid	636,9	3,3%	139,2	4,2%	1,4	-2,1%	1,0%
	Beans, preserved otherwise than by vinegar or acetic acid, except prepared vegetable dishes	471,9	7,6%	90,3	10,9%	0,3	-5,9%	0,3%
	Peas, preserved otherwise than by vinegar or acetic acid, except prepared vegetable dishes	188,5	3,2%	62,9	5,9%	2,9	-11,4%	4,6%
Fruit and vegetable juices	Orange juice	1 981,3	3,0%	80,7	9,8%	0,5	-13,2%	0,6%
	Other fruit and vegetable juices	1 164,4	4,7%	221,3	11,0%	4,0	-5,3%	1,8%
	Apple juice	937,7	7,6%	123,6	29,9%	0,3	-11,2%	0,2%
	Mixtures of fruit and vegetable juices	573,9	1,7%	83,0	-1,3%	3,0	-16,2%	3,7%
	Grape juice	378,0	4,7%	95,7	-0,1%	3,0	-10,4%	3,1%
	Pineapple juice	170,3	-5,4%	13,8	-5,3%	0,9	-10,3%	6,3%
	Grapefruit juice	86,6	-2,4%	4,1	-1,3%	0,2	14,3%	3,8%
	Tomato juice	27,2	3,3%	4,3	14,7%	0,1	40,9%	2,0%
Frozen vegetables	Potatoes, frozen	3 018,1	7,0%	727,6	15,3%	9,8	7,4%	1,4%
	Vegetables, frozen	2 512,3	3,5%	350,6	19,1%	4,3	5,3%	1,2%

Other processed and preserved fruit and vegetables	Groundnuts and nuts, shelled	1 818,5	19,7%	127,4	17,1%	1,4	17,9%	1,1%
	Potatoes prepared or preserved	1 120,0	2,3%	157,8	5,1%	13,0	5,2%	8,2%
	Nuts, groundnuts, roasted, salted or otherwise prepared	1 309,2	8,7%	116,9	16,9%	5,7	-2,0%	4,8%
	Homogenised food preparations and dietetic food	277,4	14,0%	93,3	19,2%	2,1	17,4%	2,3%
	Vegetables provisionally preserved	170,7	8,6%	20,7	20,7%	0,0	-4,6%	0,1%
	Fruit, nuts, fruit-peel and other parts of plants, preserved by sugar	123,7	7,5%	23,1	12,2%	0,2	-12,6%	0,9%
	Fruit and nuts, provisionally preserved, not for immediate consumption	92,1	4,0%	25,6	6,1%	0,1	-24,4%	0,2%
Frozen fruits	Fruit and nuts, uncooked or cooked, frozen	1 278,0	6,0%	129,6	6,9%	2,6	3,8%	2,0%
Jams, fruit jellies and fruit or nut puree and pastes Dried vegetables	Jams, fruit jellies and fruit or nut puree and pastes	1 194,5	7,6%	271,8	5,6%	2,2	1,5%	0,8%
	Dried vegetables	535,6	7,6%	79,2	7,0%	2,8	4,9%	3,6%
	Peas, dry	179,6	5,4%	31,2	-3,2%	1,1	37,7%	3,7%
	Beans, dry	167,8	11,0%	38,6	19,4%	0,2	26,1%	0,5%
	Broad beans, dry	104,7	-1,7%	80,0	-3,2%	0,0	-100,0%	0,0%
	Pulses (dried leguminous vegetables) n.e.c.	58,4	10,9%	35,2	17,7%	0,0	-64,0%	0,0%
	Lentils, dry	34,3	4,7%	3,4	4,2%	0,0	-	0,2%
	Chick peas, dry	18,9	8,1%	2,5	11,3%	0,0	-	0,2%
	Pigeon peas, dry	1,1	-	0,1	-	0,0	-	0,0%
	Cow peas	0,3	-	0,1	-	0,0	-	0,0%
TOTAL		31 249,2	5,7%	5 230,9	9,5%	88,5	-1,0%	1,7%
	Weight, thous. tons							
Canned fruit and vegetables	Other vegetables (except potatoes), preserved otherwise than by vinegar or acetic acid, except prepared vegetable dishes	4 948,3	3,4%	1 269,2	4,4%	19,5	-1,7%	1,5%
	Other prepared, dried or preserved fruits and nuts	4 505,8	1,5%	268,5	6,9%	3,7	2,3%	1,4%

	Vegetables (except potatoes), fruit, nuts and other edible parts of plants, prepared or preserved by vinegar or acetic acid	520,6	2,3%	93,9	2,9%	0,9	-15,0%	1,0%
	Beans, preserved otherwise than by vinegar or acetic acid, except prepared vegetable dishes	539,3	3,1%	107,3	7,0%	0,3	-7,7%	0,3%
	Peas, preserved otherwise than by vinegar or acetic acid, except prepared vegetable dishes	201,8	1,1%	74,8	4,8%	2,9	-17,7%	3,9%
Fruit and vegetable juices	Orange juice	2 208,2	-1,5%	69,7	5,9%	0,3	-15,7%	0,4%
	Other fruit and vegetable juices	573,3	1,0%	121,0	13,3%	1,2	-10,2%	1,0%
	Apple juice	1 142,0	2,1%	107,4	22,5%	0,2	-16,9%	0,2%
	Mixtures of fruit and vegetable juices	573,9	-0,8%	63,3	-6,1%	2,1	-15,1%	3,3%
	Grape juice	512,8	-0,8%	70,9	-5,1%	2,3	-16,2%	3,2%
	Pineapple juice	217,3	-1,4%	14,7	-1,6%	0,8	-6,1%	5,6%
	Grapefruit juice	91,0	-9,3%	3,0	-10,5%	0,1	9,9%	2,5%
	Tomato juice	51,2	1,0%	6,8	14,6%	0,1	45,7%	1,8%
Frozen vegetables	Potatoes, frozen	4 212,4	3,6%	1 150,4	12,3%	13,9	5,7%	1,2%
	Vegetables, frozen	2 961,4	2,1%	382,7	10,8%	5,7	2,6%	1,5%
Other processed and preserved fruit and vegetables	Groundnuts and nuts, shelled	264,0	4,3%	17,8	1,3%	0,2	8,4%	1,2%
	Potatoes prepared or preserved	766,6	-1,2%	55,5	-3,3%	5,6	3,0%	10,1%
	Nuts, groundnuts, roasted, salted or otherwise prepared	313,4	-1,1%	26,3	9,3%	2,0	1,3%	7,7%
	Homogenised food preparations and dietetic food	161,7	10,6%	61,2	20,4%	1,5	37,0%	2,5%
	Vegetables provisionally preserved	184,6	13,6%	18,3	22,6%	0,0	12,8%	0,2%
	Fruit, nuts, fruit-peel and other parts of plants, preserved by sugar	42,5	2,2%	7,8	7,8%	0,1	-2,1%	0,9%
	Fruit and nuts, provisionally preserved, not for immediate consumption	65,4	-6,5%	15,9	6,0%	0,1	-6,6%	0,6%
Dried	Dried vegetables	164,2	5,1%	19,4	3,7%	0,5	-3,7%	2,8%

vegetables	Peas, dry	408,2	-3,4%	40,7	-19,5%	1,2	36,2%	2,9%
	Beans, dry	133,8	-0,7%	52,1	23,5%	0,1	47,9%	0,3%
	Broad beans, dry	302,2	-10,3%	238,9	-11,0%	0,0	-100,0%	0,0%
	Pulses (dried leguminous vegetables) n.e.c.	134,7	10,0%	104,1	17,8%	0,0	-70,9%	0,0%
	Lentils, dry	32,8	6,2%	3,8	10,7%	0,0	-	0,2%
	Chick peas, dry	19,6	5,9%	2,7	4,9%	0,0	-	0,4%
	Pigeon peas, dry	3,5	-	0,2	-	0,0	-	0,0%
	Cow peas	0,4	-	0,3	-	0,0	-	0,0%
Frozen fruits	Fruit and nuts, uncooked or cooked, frozen	813,1	0,9%	94,8	4,4%	3,1	-3,3%	3,3%
Jams, fruit jellies and fruit or nut puree and pastes	Jams, fruit jellies and fruit or nut puree and pastes	631,2	2,8%	128,4	1,1%	1,5	-12,3%	1,2%
TOTAL		27 701,2	1,6%	4 691,9	5,5%	70,2	-2,2%	1,5%

The major exporters of extra-EU exports are Spain (992 mln. EUR or 19% in 2014), Italy (871 mln. EUR or 17%), Netherlands (679 mln. EUR or 13%) and Belgium (452 mln. EUR or 9%), which in 2014 accounted for 57% of exports.

Table 2.9 –EU/EFTA export of processed fruits and vegetables by countries in 2010-2014, mln. Euro

Country	ALL EXPORT EU/EFTA		EU/EFTA external export		UA import from EU/EFTA		UA share in external export
	mln. EUR	CAGR in 2010-2014	mln. EUR	CAGR in 2010-2014	mln. EUR	CAGR in 2010-2014	
Belgium	5 364,9	4,3%	452,2	17,3%	0,7	8,6%	0,2%
Netherlands	5 002,2	5,5%	678,9	17,3%	7,3	-5,1%	1,1%
Spain	3 883,5	8,8%	992,3	9,0%	15,4	-2,9%	1,6%
Italy	3 582,8	5,3%	871,0	7,0%	4,7	-2,1%	0,5%
Germany	3 428,5	6,3%	249,0	5,2%	5,2	-9,9%	2,1%
France	2 407,3	3,3%	450,4	6,5%	2,1	-3,5%	0,5%
Poland	1 810,2	7,8%	331,8	8,9%	36,7	5,7%	11,1%
Greece	1 061,8	4,2%	364,6	8,8%	2,3	-7,9%	0,6%
United Kingdom	762,6	6,1%	242,1	9,6%	0,2	74,3%	0,1%
Austria	707,7	4,4%	84,3	11,0%	1,8	8,0%	2,1%
Hungary	680,4	6,1%	101,1	1,8%	10,6	-7,2%	10,5%
Portugal	517,6	8,1%	139,1	10,2%	0,1	-	0,1%
Denmark	301,9	5,0%	28,5	-3,0%	0,0	-56,3%	0,0%
Sweden	253,9	2,4%	29,5	2,2%	0,0	-51,9%	0,0%
Czech Republic	217,2	11,6%	7,2	16,0%	0,4	23,9%	5,5%
Bulgaria	203,0	5,4%	31,3	7,3%	0,4	26,7%	1,2%
Luxembourg	174,3	4,0%	0,3	18,4%	0,0	-	0,0%
Lithuania	131,3	11,8%	28,7	7,5%	0,1	-15,5%	0,3%
Romania	143,1	10,5%	24,6	16,1%	0,1	-9,5%	0,4%
Ireland	121,5	5,6%	10,4	20,7%	0,0	148,3%	0,1%
Slovakia	99,1	6,5%	2,9	43,9%	0,1	20,5%	4,0%
Switzerland	88,7	0,2%	27,3	-1,0%	0,0	7,3%	0,1%
Latvia	75,0	19,2%	16,8	10,1%	0,1	29,1%	0,5%
Slovenia	66,3	10,7%	6,7	8,2%	0,2	24,0%	2,4%
Finland	42,2	1,9%	13,1	-3,2%	0,0	58,7%	0,0%
Estonia	43,9	15,1%	7,9	19,7%	0,0	11,3%	0,1%
Croatia	40,3	11,7%	19,1	12,6%	0,0	-	0,0%
Cyprus	23,0	7,9%	18,1	9,9%	0,0	-100,0%	0,0%
Norway	13,8	-4,6%	0,8	44,2%	0,0	-	0,0%
Liechtenstein	0,8	-2,1%	0,0	-16,3%	0,0	-	0,0%
Malta	0,5	23,3%	0,5	24,8%	0,0	-	0,0%
Iceland	0,1	-10,4%	0,1	8,4%	0,0	-	0,0%
TOTAL	31 249,2	5,7%	5 230,9	9,5%	88,5	-1,0%	1,7%

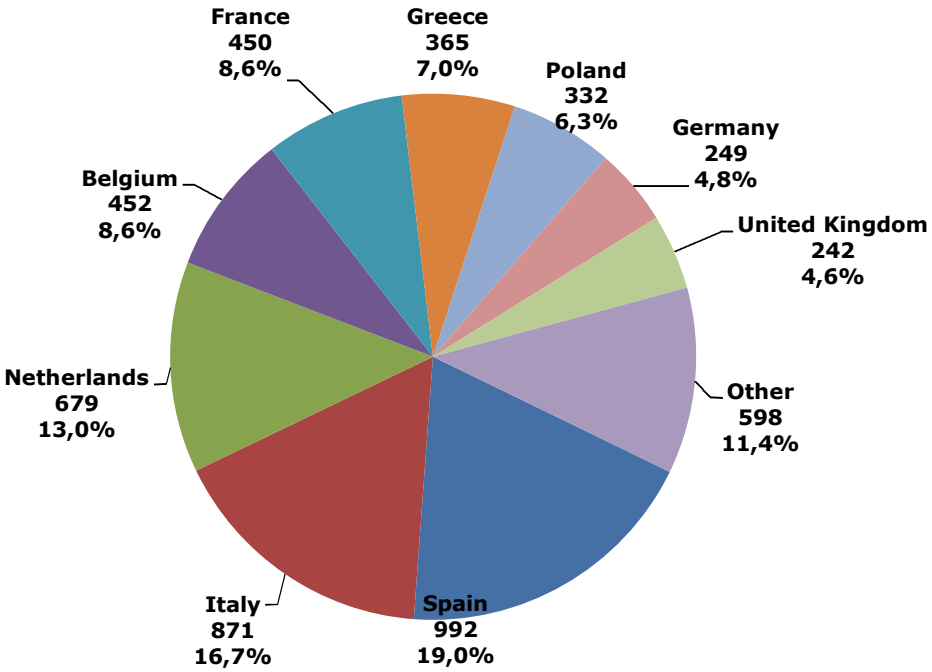


Figure 2.7 - EU/EFTA external export of processed fruits and vegetables by main exporting countries in 2014, mln. EUR

The major of extra-EU exports are imported by USA (1 006 mln. EUR or 19% in 2014), Russia (563 mln. EUR or 11%), Japan (336 mln. EUR or 6%) and Saudi Arabia (261 mln. EUR or 5%).

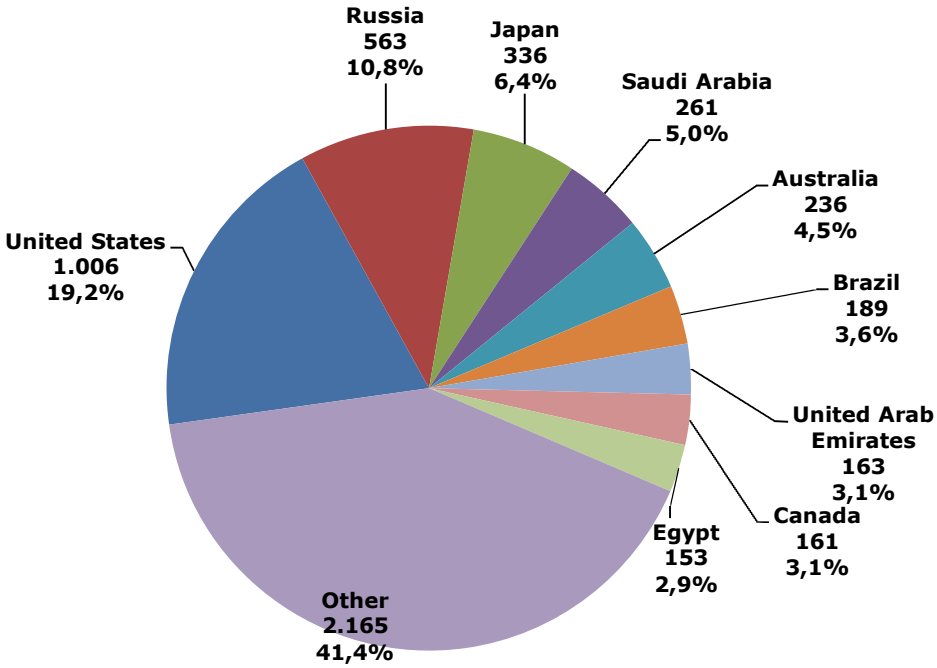


Figure 2.8 - EU/EFTA external export of processed fruits and vegetables by main importing countries in 2014, mln. EUR

Around 62% of EU/EFTA imports in 2014 are intra-EU imports and 38% - extra-EU import. Hence, a major share of European imports consists of products that are re-exported. The highest rates of extra-EU import are in shipments of dried vegetables (61%), other processed and preserved fruit and vegetables (51%) and canned fruit and vegetables (42%).

Extra-EU/EFTA imported processed fruits and vegetables consist mainly of canned fruits and vegetables (6 687 mln. EUR or 42% in 2014), other processed and preserved fruit and vegetables (4 442 mln. EUR or 28%) and fruits and vegetables juices (2 327 mln. EUR or 15%). Together, these product account for more than 85%of all extra-EU imports of processed fruits and vegetables.

In 2010-2014 the largest import increase was observed in import of jams, fruit jellies (CAGR 20.0% in value terms and 19.3% in volume terms).

Table 2.10 –EU/EFTA processed fruits and vegetables import by main product groups in 2010-2014

Subgroup	ALL IMPORT EU/EFTA		EU/EFTA external import		UA export to EU/EFTA		UA share in external import
	mln. EUR	CAGR in 2010-2014	mln. EUR	CAGR in 2010-2014	mln. EUR	CAGR in 2010-2014	
Value, mln. Euro							
Canned fruit and vegetables	15 797,8	3,7%	6 687,0	3,0%	13,1	55,4%	0,2%
Fruit and vegetable juices	7 166,8	4,5%	2 327,3	7,8%	38,5	17,9%	1,7%
Other processed and preserved fruit and vegetables	8 766,6	12,8%	4 442,0	15,2%	49,3	27,9%	1,1%
Frozen vegetables	4 770,5	3,7%	317,8	-0,5%	2,3	18,2%	0,7%
Dried vegetables	2 102,8	5,6%	1 286,6	5,9%	16,1	-2,8%	1,3%
Frozen fruits	1 909,1	5,9%	703,6	3,8%	43,7	1,9%	6,2%
Jams, fruit jellies and fruit or nut puree and pastes	943,2	9,0%	119,6	20,0%	0,0	9,2%	0,0%
Total	41 456,7	5,8%	15 883,8	6,8%	163,0	12,9%	1,0%
Weight, thous. tons							
Canned fruit and vegetables	16 174,7	1,6%	7 727,7	1,1%	14,2	50,6%	0,2%
Fruit and vegetable juices	7 693,1	2,0%	2 705,8	6,8%	85,1	32,0%	3,1%
Other processed and preserved fruit and vegetables	2 256,2	1,4%	830,5	3,7%	8,3	14,8%	1,0%
Frozen vegetables	5 745,0	1,3%	245,0	-4,3%	1,2	42,3%	0,5%
Dried vegetables	2 029,9	-0,4%	1 220,9	-0,2%	51,5	-9,4%	4,2%
Frozen fruits	1 162,3	0,7%	439,9	-1,4%	19,8	1,8%	4,5%
Jams, fruit jellies and fruit or nut puree and pastes	499,6	5,5%	68,4	19,3%	0,0	7,4%	0,0%
Total	35 560,8	1,5%	13 238,3	2,0%	180,1	8,4%	1,4%

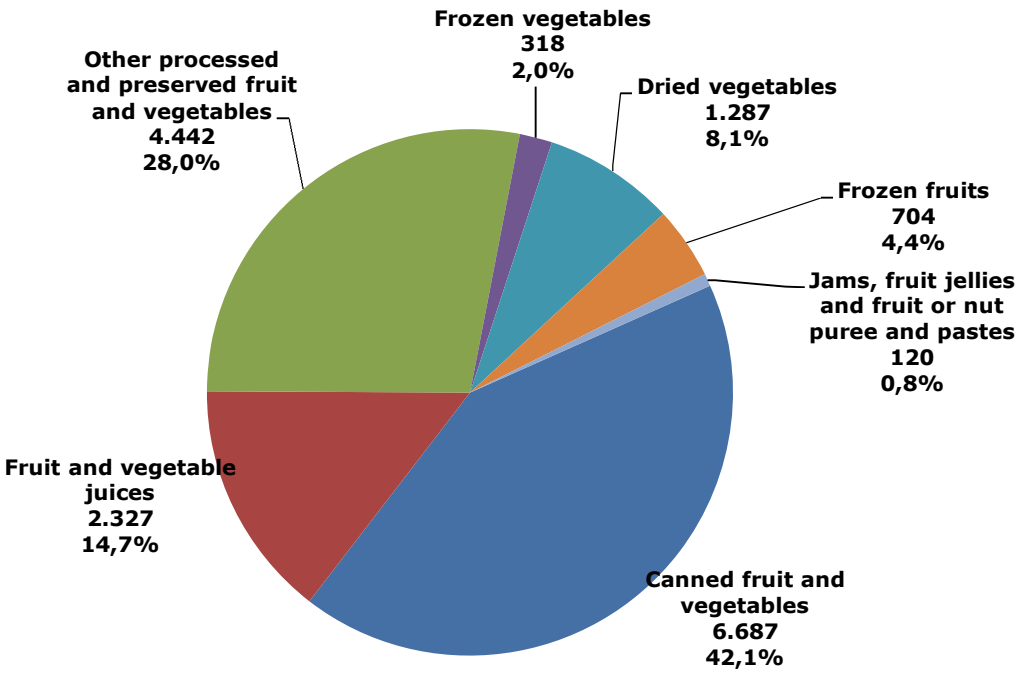


Figure 2.9 - EU/EFTA external import of processed fruits and vegetables by product groups in 2014, mln. EUR

EU/EFTA import of processed fruits and vegetables by main product groups in 2010-2014 is shown in Table 2.11.

Table 2.11 –EU/EFTA import of processed fruits and vegetables by main product groups in 2010-2014

Group	Subgroup	ALL IMPORT EU/EFTA		EU/EFTA external import		UA export to EU/EFTA		UA share in external import
		mln. EUR	CAGR in 2010-2014	mln. EUR	CAGR in 2010-2014	mln. EUR	CAGR in 2010-2014	
	Value, mln. Euro							
Canned fruit and vegetables	Other prepared, dried or preserved fruits and nuts	9 751,1	3,8%	5 408,6	3,0%	1,0	23,2%	0,0%
	Other vegetables (except potatoes), preserved otherwise than by vinegar or acetic acid, except prepared vegetable dishes	4 727,4	3,7%	925,9	2,4%	11,3	63,2%	1,2%
	Vegetables (except potatoes), fruit, nuts and other edible parts of plants, prepared or preserved by vinegar or acetic acid	773,4	3,1%	289,7	4,2%	0,8	45,0%	0,3%
	Beans, preserved otherwise than by vinegar or acetic acid, except prepared vegetable dishes	413,6	5,4%	58,7	3,9%	0,0	-11,4%	0,0%
	Peas, preserved otherwise than by vinegar or acetic acid, except prepared vegetable dishes	132,3	1,8%	4,0	2,6%	0,0	9,5%	1,2%
Fruit and vegetable juices	Orange juice	3 549,0	7,5%	1 558,6	13,7%	0,1	4,6%	0,0%
	Other fruit and vegetable juices	1 228,2	2,5%	335,2	1,5%	0,4	8,6%	0,1%
	Apple juice	917,6	2,7%	171,5	0,4%	37,5	18,2%	21,9%
	Mixtures of fruit and vegetable juices	655,3	3,6%	12,1	-2,0%	0,2	22,3%	1,3%
	Pineapple juice	324,0	-6,3%	163,7	-7,0%	0,0	-100,0%	0,0%
	Grape juice	283,0	6,0%	11,4	24,7%	0,0	-	0,0%
	Grapefruit juice	174,3	0,7%	73,7	2,7%	0,0	-26,7%	0,0%
	Tomato juice	35,3	5,6%	1,0	-3,7%	0,3	2,1%	27,5%
Other processed and preserved fruit and vegetable	Groundnuts and nuts, shelled	5 177,2	16,8%	3 445,5	17,0%	46,0	29,9%	1,3%
	Nuts, groundnuts, roasted, salted or otherwise prepared	2 004,5	10,7%	788,5	10,8%	1,4	1,6%	0,2%
	Potatoes prepared or preserved	922,8	5,1%	9,9	6,7%	0,1	-17,4%	0,7%
	Vegetables provisionally preserved	255,7	1,7%	136,8	5,4%	1,8	22,0%	1,3%
	Homogenised food preparations and dietetic food	201,3	9,0%	10,0	28,4%	0,0	56,7%	0,0%

s	Fruit, nuts, fruit-peel and other parts of plants, preserved by sugar	115,7	5,3%	26,1	12,1%	0,0	-53,4%	0,0%
	Fruit and nuts, provisionally preserved, not for immediate consumption	89,4	4,1%	25,3	4,1%	0,0	-	0,0%
Frozen vegetables	Vegetables, frozen	2 437,0	2,1%	313,3	-0,6%	2,3	18,2%	0,7%
	Potatoes, frozen	2 333,5	5,6%	4,4	2,1%	0,0	-	0,0%
Dried vegetables	Dried vegetables	866,1	4,6%	388,2	5,2%	0,1	7,4%	0,0%
	Beans, dry	675,3	11,0%	563,2	11,2%	0,2	27,4%	0,0%
	Peas, dry	232,9	5,7%	87,0	3,2%	15,3	-3,7%	17,6%
	Lentils, dry	151,1	-3,6%	127,6	-3,8%	0,2	-	0,1%
	Chick peas, dry	117,6	1,9%	100,7	1,1%	0,2	25,8%	0,2%
	Broad beans, dry	39,3	2,6%	9,4	4,9%	0,0	-	0,1%
	Pulses (dried leguminous vegetables) n.e.c.	13,4	-4,1%	4,1	-7,6%	0,0	-	0,5%
	Cow peas	5,7	-	5,1	-	0,0	-	0,0%
	Pigeon peas, dry	1,4	-	1,3	-	0,0	-	0,0%
Frozen fruits	Fruit and nuts, uncooked or cooked, frozen	1 909,1	5,9%	703,6	3,8%	43,7	1,9%	6,2%
Jams, fruit jellies and fruit or nut puree and pastes	Jams, fruit jellies and fruit or nut puree and pastes	943,2	9,0%	119,6	20,0%	0,0	9,2%	0,0%
TOTAL		41 456,7	5,8%	15 883,8	6,8%	163,0	12,9%	1,0%
	Weight, thous. tons							
Canned	Other prepared, dried or preserved fruits and nuts	10 784,5	1,6%	6 668,7	1,5%	0,4	19,1%	0,0%

fruit and vegetables	Other vegetables (except potatoes), preserved otherwise than by vinegar or acetic acid, except prepared vegetable dishes	4 159,1	1,4%	743,6	-3,2%	12,7	54,4%	1,7%
	Vegetables (except potatoes), fruit, nuts and other edible parts of plants, prepared or preserved by vinegar or acetic acid	660,9	2,8%	275,3	3,0%	1,0	42,8%	0,4%
	Beans, preserved otherwise than by vinegar or acetic acid, except prepared vegetable dishes	438,1	1,8%	37,6	-0,9%	0,0	-17,4%	0,0%
	Peas, preserved otherwise than by vinegar or acetic acid, except prepared vegetable dishes	132,1	-0,1%	2,4	2,4%	0,1	8,1%	2,6%
Fruit and vegetable juices	Orange juice	4 192,2	4,6%	2 024,7	10,7%	0,1	-3,8%	0,0%
	Other fruit and vegetable juices	601,3	-0,8%	140,2	-1,5%	0,4	14,9%	0,3%
	Apple juice	1 167,3	-0,1%	217,7	-1,6%	83,8	32,9%	38,5%
	Mixtures of fruit and vegetable juices	613,5	0,5%	9,2	-7,8%	0,2	13,9%	2,4%
	Pineapple juice	411,7	-1,9%	221,6	-1,2%	0,0	-100,0%	0,0%
	Grape juice	454,3	-1,5%	6,7	19,7%	0,0	-	0,0%
	Grapefruit juice	191,4	-4,6%	84,0	-3,3%	0,0	-28,3%	0,0%
	Tomato juice	61,4	3,6%	1,7	-0,9%	0,6	-0,6%	34,8%
Other processed and preserved fruit and vegetables	Groundnuts and nuts, shelled	818,8	5,3%	557,5	5,2%	7,2	20,0%	1,3%
	Nuts, groundnuts, roasted, salted or otherwise prepared	470,7	1,7%	142,6	1,7%	0,6	-10,5%	0,5%
	Potatoes prepared or preserved	569,3	-2,8%	3,4	7,0%	0,0	-17,2%	0,7%
	Vegetables provisionally preserved	190,9	-1,5%	91,5	-1,3%	0,4	16,7%	0,4%
	Homogenised food preparations and dietetic food	88,8	3,9%	4,8	17,1%	0,0	77,8%	0,0%
	Fruit, nuts, fruit-peel and other parts of plants, preserved by sugar	43,3	3,0%	9,7	7,8%	0,0	-40,5%	0,0%
	Fruit and nuts, provisionally preserved, not for immediate consumption	74,5	-0,6%	21,0	-1,8%	0,0	-	0,0%
Frozen vegetables	Vegetables, frozen	2 676,3	1,0%	241,7	-4,3%	1,2	42,3%	0,5%
	Potatoes, frozen	3 068,6	1,6%	3,3	-3,7%	0,0	-	0,0%

Dried vegetables	Dried vegetables	366,2	2,0%	126,5	1,3%	0,0	-17,5%	0,0%
	Beans, dry	555,3	-0,2%	485,4	-0,1%	0,5	18,0%	0,1%
	Peas, dry	605,4	-1,8%	248,5	-3,0%	50,2	-9,8%	20,2%
	Lentils, dry	218,0	-0,9%	196,2	-0,5%	0,3	-	0,2%
	Chick peas, dry	164,5	3,6%	143,8	3,3%	0,4	29,9%	0,3%
	Broad beans, dry	87,2	-7,1%	9,8	0,4%	0,0	-	0,1%
	Pulses (dried leguminous vegetables) n.e.c.	24,9	-4,7%	2,9	-11,7%	0,0	-	1,6%
	Cow peas	6,8	-	6,3	-	0,0	-	0,0%
	Pigeon peas, dry	1,6	-	1,6	-	0,0	-	0,0%
Frozen fruits	Fruit and nuts, uncooked or cooked, frozen	1 162,3	0,7%	439,9	-1,4%	19,8	1,8%	4,5%
Jams, fruit jellies and fruit or nut puree and pastes	Jams, fruit jellies and fruit or nut puree and pastes	499,6	5,5%	68,4	19,3%	0,0	7,4%	0,0%
TOTAL		35 560,8	1,5%	13 238,3	2,0%	180,1	8,4%	1,4%

The major of extra-EU imports are imported by Germany (2 731 mln. EUR or 17% in 2014), Belgium (2 424 mln. EUR or 15%), Netherlands (2 352 mln. EUR or 15%) and United Kingdom (1 778 mln. EUR or 11), which in 2014 accounted for 58% of import values.

Belgium and the Netherlands are important entry ports (especially through the harbours of Rotterdam and Antwerp) and are European trading hubs for products entering Europe. The value of Belgium and Dutch imports, therefore, includes those products that are then re-exported to other countries. Hence, a major share of European imports consists of products that are re-exported

Table 2.12 –EU/EFTA import of processed fruits and vegetables by countries in 2010-2014, mln. Euro

Country	ALL IMPORT EU/EFTA		EU/EFTA external import		UA export to EU/EFTA		UA share in external import
	mln. EUR	CAGR in 2010-2014	mln. EUR	CAGR in 2010-2014	mln. EUR	CAGR in 2010-2014	
Germany	8 095,2	5,9%	2 730,8	8,1%	17,1	3,7%	0,6%
France	5 322,3	5,1%	1 230,2	4,9%	15,9	24,0%	1,3%
United Kingdom	4 821,2	4,7%	1 777,6	3,9%	5,6	-0,3%	0,3%
Belgium	4 059,4	6,6%	2 424,4	6,9%	0,7	-2,7%	0,0%
Netherlands	3 935,8	6,6%	2 352,3	8,0%	10,9	11,1%	0,5%
Italy	2 941,3	6,1%	1 526,0	7,7%	8,6	1,3%	0,6%
Spain	2 146,2	7,2%	1 194,2	9,7%	4,2	-18,0%	0,3%
Austria	1 137,2	5,0%	252,8	4,2%	19,6	8,2%	7,8%
Poland	1 140,4	6,5%	298,3	7,6%	39,0	21,1%	13,1%
Sweden	1 063,6	5,9%	267,4	5,0%	1,2	-22,8%	0,5%
Switzerland	840,2	4,3%	423,2	6,8%	2,0	85,8%	0,5%
Denmark	704,1	7,4%	127,4	6,3%	0,0	-49,7%	0,0%
Portugal	558,3	3,0%	111,1	-0,1%	0,2	-	0,2%
Ireland	561,3	5,2%	79,0	7,1%	0,0	-	0,0%
Czech Republic	546,1	4,9%	84,3	7,4%	6,6	30,9%	7,8%
Greece	475,9	2,0%	227,4	7,8%	5,1	24,0%	2,3%
Norway	458,2	3,8%	238,5	2,9%	0,4	136,7%	0,2%
Finland	433,6	6,0%	51,4	7,1%	0,0	-32,6%	0,1%
Hungary	311,8	4,9%	53,2	9,9%	8,1	74,2%	15,2%
Romania	363,4	13,7%	65,9	3,3%	9,4	102,3%	14,2%
Slovakia	281,1	6,8%	31,5	13,7%	0,2	0,7%	0,6%
Bulgaria	192,9	7,1%	69,2	10,6%	0,1	4,3%	0,1%
Croatia	188,7	5,9%	61,2	-3,7%	0,0	-54,4%	0,0%
Lithuania	186,4	10,6%	58,6	13,7%	6,1	14,8%	10,3%
Slovenia	177,9	6,2%	68,8	10,7%	0,0	-28,1%	0,0%
Luxembourg	134,8	7,5%	0,9	161,7%	0,0	-	0,0%
Latvia	122,8	11,8%	27,3	11,5%	1,7	21,5%	6,2%
Estonia	101,0	10,3%	8,7	-2,7%	0,4	2,1%	4,9%
Cyprus	68,4	0,8%	19,7	-0,3%	0,0	-50,3%	0,1%

Malta	43,6	5,9%	5,6	20,9%	0,0	-	0,0%
Iceland	38,2	6,8%	16,0	4,6%	0,1	-	0,4%
Liechtenstein	5,3	9,2%	0,9	12,7%	0,0	-	0,0%
TOTAL	41 456,7	5,8%	15 883,8	6,8%	163,0	12,9%	1,0%

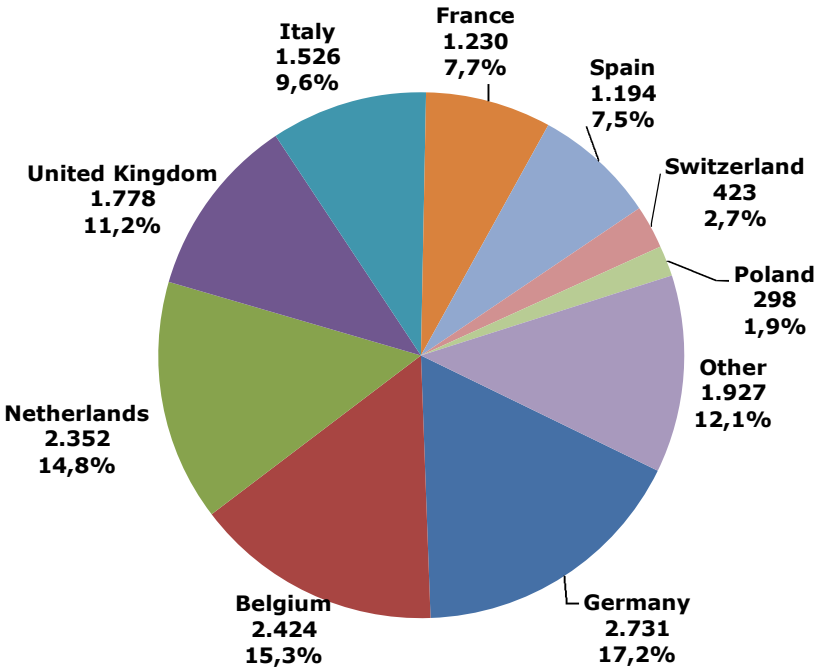


Figure 2.10 - EU/EFTA external import of processed fruits and vegetables by main importing countries in 2014, mln. EUR

The major exporters of extra-EU imports are Turkey (2 578 mln. EUR or 16% in 2014), USA (2 274 mln. EUR or 14%), Brazil (1 490 mln. EUR or 9%) and China (1 091 mln. EUR or 7%), which in 2014 accounted for 46% of import values.

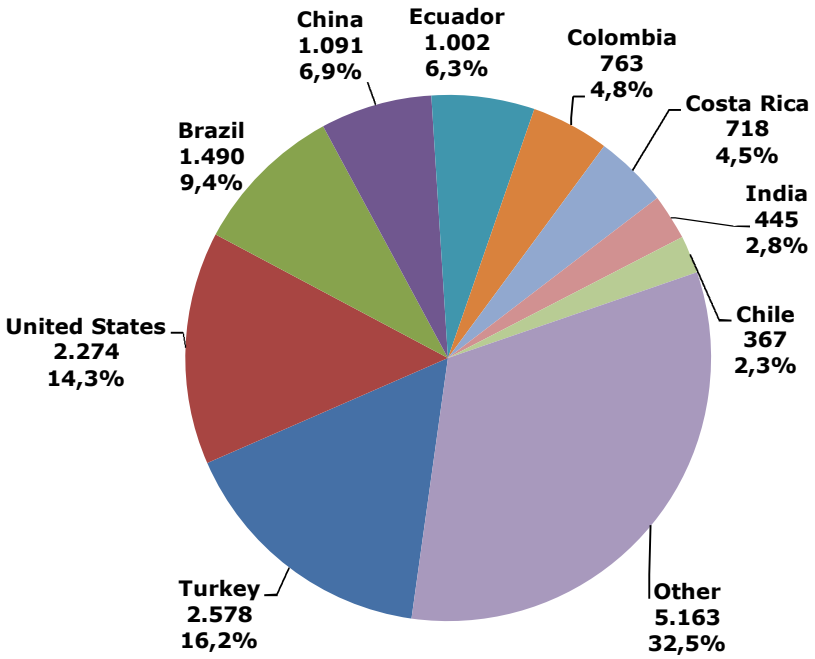
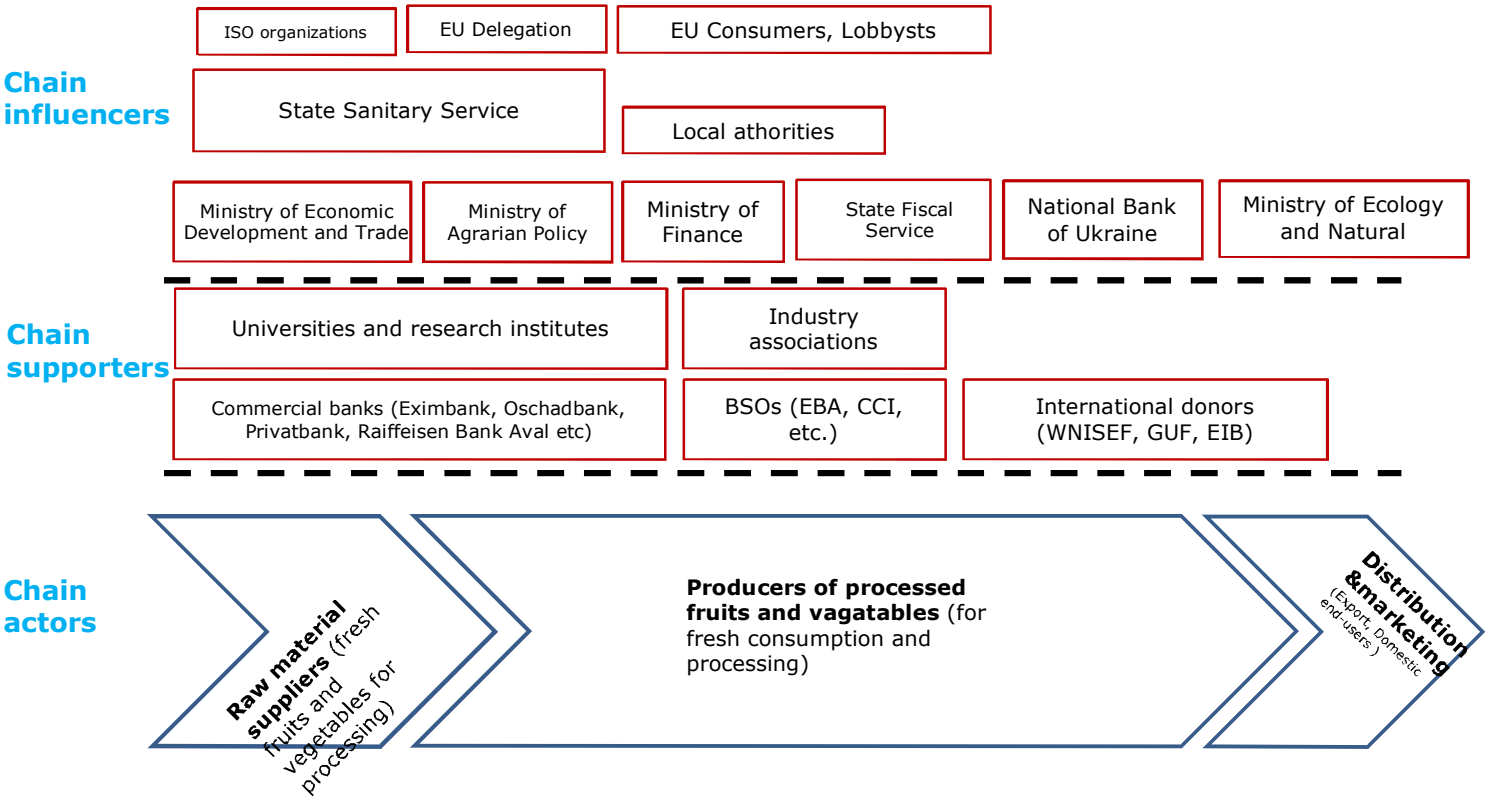


Figure 2.11 - EU/EFTA external import of processed fruits and vegetables by main exporting countries in 2014, mln. EUR

2.4 Mapping the value chain

The three major stakeholders in this Value Chain are the chain actors, supporters and influencers.

Figure 2.12 - Ukraine processed fruit and vegetables value chain



Chain actors and their functions

- **Suppliers of raw materials** (fresh fruits and vegetables for processing).

- **Fruit and vegetables processing companies**. Currently in Ukraine there are about 300 companies processors of fruits and vegetables, most of which are SMEs. Processing plants purchase fruits and vegetable inputs from the producers (non-standard production for serving as fresh, residues of fresh and vegetables production).
- **Distributors, dealers, private retailers**. Sales of fresh fruit and vegetables are carried out, usually through intermediaries distributors (from local and external markets) and dealers (the same way). Exports can be performed directly (large producers) and through wholesale trade companies.

Chain supporters and their functions

- **Sector production associations**. At the national level there is no industry association. Threre are subsectors asssociations, like association "Union of juice producers in Ukraine". Their strategy includes representing and lobbying for the interests of its members; provide support for export development by using its own available resources and combining these with external resources where possible.

- **Universities and research institutes** (horticulture and vegeculture). There is a middle level of interaction between the sector and educational and scientific institutions.

- **Chamber of Commerce of Ukraine**. The main task of the Ukrainian CCI - the creation of favourable conditions for entrepreneurship, promote the comprehensive development of scientific, technological and trade relations between Ukrainian businessmen and their foreign partners, represent the interests of its members on economic activity both in Ukraine and abroad.

- **Private consultants and advisors**. A large number of consulting firms and individual private counsellors are able to provide information and consulting support to businesses of fruit and vegetable industry.

- **European Business Association**. The most important function of the EBA is the collective defence of the members interests in central and local government bodies of Ukraine, foreign and international organizations.

Chain influencers and their functions

- **Ministry of Economic Development and Trade of Ukraine (**MEDTU) The Ministry is the main body in the system of central bodies of the executive power in formation and providing realization of state regulatory policy of economic and social development (business economics), regulation of price, industrial, investment, external economic policies, state trade policy, state regional policy, state entrepreneurship development policy, technical regulations and security of consumer rights as well as inter-agency coordination for economic and social cooperation of Ukraine with the European Union.

- **Ministry of Ecology & Natural Resources of Ukraine (MENRU)**. Ministry operates in the field of environmental protection, ecological safety, treatment of waste, hazardous chemicals, pesticides and agricultural chemicals and perform state ecological expertise. The Ministry is entitled in the area of atmospheric air, preservation of ozone layer, restoration and protection of flora and fauna, restoration and protection of lands, restoration and protection of water resources (surface, ground, seawaters), efficient usage of water resources. The Ministry ensures legal and regulatory governing of the water management and land reclamation, geological study and efficient usage of mineral resources, as well as performs state supervision on the fulfilment of the requirements of the environment legislation.

- **Ministry of Agrarian Policy and Food.** Ministry is the main body on the formulation and implementation of national agricultural policy, policy on agriculture and on food security, public policy in the fields of fisheries and fisheries, protection, use and reproduction of aquatic resources, regulation of fisheries and maritime security fleet vehicles fisheries, veterinary medicine, food safety in the areas of plant protection, protection of rights on varieties grown, land relations, survey and mapping, forestry and hunting, surveillance (monitoring) in agriculture.

- **Ministry of Finance of Ukraine (MFU).** Ministry of Finance is a principal authority among central executive authorities forming and implementing the financial, budget, tax and customs policy of the State (except for the administration of taxes, customs duties and sales tax and customs policies), policy in the area of state financial control, treasury maintenance of budget funds and accounting.

- **State Fiscal Service of Ukraine (SFSU).** The main objectives of SFSU are: implementation of state tax policy and in the civil customs, public policy in the fight against crimes in the application of tax and customs legislation implementation within the authority provided by law, control the flow to budgets and state funds taxes and fees customs and other charges, public policy administration single contribution and combating offenses during the application of the legislation on the payment of a single fee, state policy on control timeliness of payment in foreign currency statutory term compliance procedure of cash payments for goods (services) and the availability of licenses for economic activities subject to licensing under the law, trade patents.

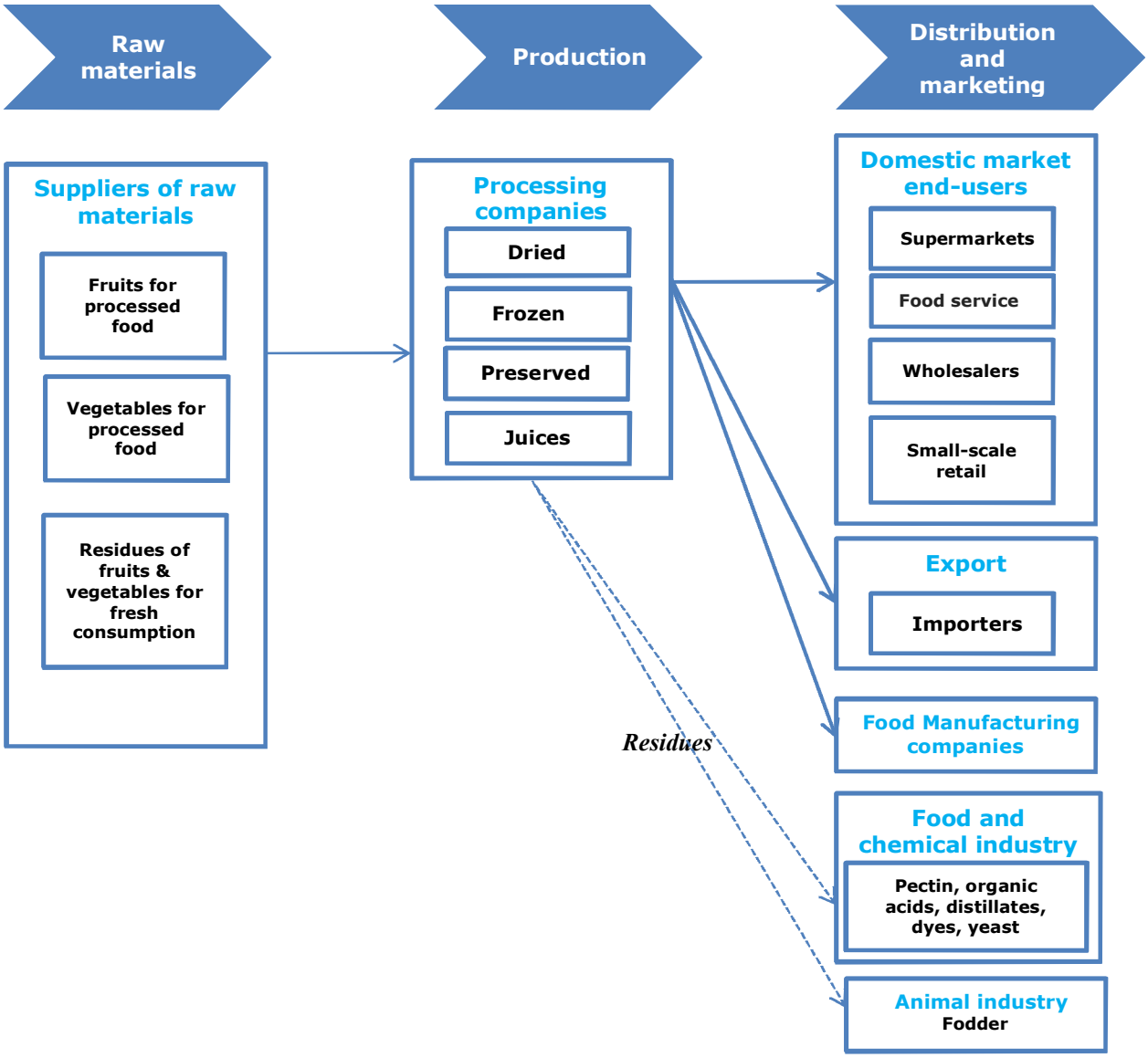
- **State Sanitary and Epidemiological Service of Ukraine.** This body monitors the conformity of fruit and vegetables and the raw materials used, as well as sanitary and epidemiological control at checkpoints across the state border.

- **Certification companies.** Provides a service for issuing certificates for compliance with product standards and requirements set by national and international legislation, as well as providing consulting services to bring the production and business processes in compliance with the standards.

- **Local authorities.** Local authorities can influence the business of local companies through the adoption of regulatory decisions and decisions related to the use of local resources, the distribution of which is within their competence.

The flow of products along the chain is described in Figure.

Figure 2.13 – Flow of products along the processed fruit and vegetables chain in Ukraine



2.5 Bottlenecks along the value chain

2.5.1 Market opportunities

The main market opportunities for Ukraine are:

- Ukraine is located nearby the EU, suggesting short transport time
- favourable climate conditions for majority of horticulture products and fertile lands
- low labour cost and unlikely significant wages increase in the short- and mid-term
- potential to develop EU/EFTA export markets (especially in the organic products sector) after entering into force DCFTA with EU
- opportunities for the manufacturing of baby food (fruit and vegetable puree)
- Ukraine can be a competitive producer and exporter of organic goods. The highly labour-intensive value chains of processed organic fruits could also generate significant socioeconomic benefits, particularly in rural communities.

The most demand on Ukrainian processed fruits and vegetables is on the segments, in which Ukraine demonstrated stable export increase: canned fruits and vegetables (CAGR of Ukrainian export to EU/EFTA in 2010-2014 – 23-63%), fruit and vegetable juices (9-22%), frozen vegetables (18%), frozen fruits (2%), jams, fruit jellies and fruit or nut puree and pastes (9%). Most of them demonstrated high growth rates durig last 5 years (Table 2.13).

Special attention should be paid to fruit and vegetable juices. Being the second-largest market in the world, Europe is an attractive market for exporting fruit juices . Europeans consume a great deal of fruit juice. Value-added chilled, functional and not-from-concentrate juices could benefit from the ongoing consumer health trend and demand for quality products.

Table 2.13 –EU/EFTA external import of some processed fruit and vegetables products in 2014 by main suppliers

Product	EU/EFTA external import		Main suppliers
	mln. EUR	CAGR in 2010-2014	
Dietetic food	10,0	28,2%	Turkey (46%), Mexico (22%), Ecuador (6%), Ukraine (0.03%)
Jams, fruit jellies, fruit purees and pastes or nut	120,8	20,3%	Turkey (60%), Serbia (5%), South Africa (5%), Ukraine (0.02%)
Canned fruits and vegetables	1241,1	3,0%	China (26%), Turkey (25%), Peru (17%), Ukraine (1%)
Frozen vegetables	311,3	-0,6%	China (40%), Turkey (11%), Egypt (8%), Ukraine (1%)
Frozen fruit	703,7	3,8%	Serbia (34%), Morocco (11%), China (8%), Ukraine (6%)
Fruit and vegetable juices (excluding tropical)	531,5	1,3%	Turkey (18%), Ecuador (10%), Argentina (9%), Ukraine (7%)

Source: Eurostat

2.5.2 Key bottlenecks, risks and opportunities along the value chain

Table 2.14 – Value Chain constraints and opportunities

Observed constraints in value chain and how they prohibit export	Critical[3] constraint? (Y/N)	Solvable in short term[4] (Y/N)	Which (donor) organisation is providing this solution? (CBI, or others)	How can this problem be solved?
Lack of knowledge on EU/EFTA market segments and market access requirements. Companies have insufficient knowledge about the European markets, what EU buyer and what market segment they can cater for.	Y	Y	CBI	Training is needed on market research, and market access requirements, and also existing technical, environmental, phytosanitary regulations and taxation in the EU as a whole and with features in individual countries.
Lack of (export) marketing skills In line with the constraint mentioned above. Due to a poor knowledge about the European markets, consumption culture and the needs of the EU market, combined with the lack of skills and experience in the field of marketing, existing companies struggle to attract new customers and increase their exports. The sales and marketing approach is not attractive to European buyers.	Y	Y	CBI	Training is needed on marketing, also providing with information about current EU market trends on fruit and vegetables consumption, a proactive service minded approach and the right communication with customers.
The lack of direct contacts between Ukrainian producers and European companies Producers do not possess enough knowledge and understanding about consumers and their needs in export markets	Y	Y	CBI	Participation in exhibitions, trade fairs and other similar events to establish contacts between Ukrainian producers and European consumers
Lack of necessary certifications to enter the EU market (ISO) A few large companies has adopted international quality standards (such as ISO 22000, HACCP). Smaller companies lack the implementation of such standards, due to lack of financing.	Y	Y	CBI	Training is needed on certification procedures. CBI can organize activities (training and trade fair participation) in cooperation with the stakeholders
Lack of internal financial resources and limited access to long-term loans Limited access to cheap credit resources (compared with neighbouring countries) which prevents the expansion of investment in assets and hinders the development of both horticulture and food processing.	Y	N		Existing incentive mechanisms need to be revised to facilitate access by SMEs, and if possible, priorities to be given to agricultural export producers. Fruit and vegetables associations need to take a stronger role in policy advocacy in this respect.
Lack of storage facilities, especially with new equipment and technology level	Y	N	CBI	CBI can organize activities (training and trade fair participation) in cooperation with the stakeholders to

[3] Critical means if the constraint is not resolved the programme outcome is not possible, or significantly reduced.
[4] Short term means that the constraint can be addressed within the duration of the programme.

Given the short shelf life of fruits and berries, availability of refrigeration capacity is a key factor for the development of this segment in Ukraine. The lack of sufficiently refrigerators and the need for additional packaging costs (for the products preservation during transportation over long distances) are constraining for growing berries and stone fruit crops.				promote cooperation between small producers in order to create new capacities. Thus the development the system of grants (or reimbursements) is needed to stimulate horticultural farms forming of farming cooperatives aimed for construction common refrigeration capacity.
Lack of refrigeration facilities in horticultural and vegetable farms. This affects the quality of products safety, and reduces the raw materials for the processing industry.	Y	N		Creation of products sales centres, development of post harvest and market infrastructure
Lack of state export promotion and low level of government support of producers in fresh fruit and vegetables sectors Lack of state export promotion in fresh fruit and vegetables sectors. The sector is hardly supported by the government.	Y	N		Compensation of export VAT to fixed agricultural tax payers.
Lack of a strong positive image and branding for Ukrainian fruit and vegetables sector	Y	Y	CBI	Building institutional capacity within sector associations and train a representative who will be able promote the Ukrainian fruit and vegetables sector in the relevant EU countries CBI can assist in defining a promotion strategy to promote the Ukrainian fruit and vegetables sector and companies.
Weak branch associations which could take a lead in resolving the issues of sector and lobby the interests of manufacturers The sector associations are small and fragmented thus are not able to address exporters' needs. Based on the experience of export to Russia, most companies 'wait' for clients to come, meaning that they lack export-marketing skills for positioning and promoting their product on European markets.	Y	Y	CBI	Existing associations have not sufficient capacity and financial means to promote the Ukrainian fruits and vegetables sector and can only provide limited relevant EU market information, assistance in defining export strategies or technical support. CBI can support the sector organisation through the use of its network in the EU fruit and vegetables sector as well as through Market intelligence. Besides that they can organise buyer missions and trade fair participation in cooperation with sector associations to create more cohesion between the individual members and attract new members.
Lack of awareness among stakeholders on CSR issues on the EU market	Y	N	CBI	CBI with cooperation of the interested BSOs and

(labour, safety, environmental and other social responsibilities) Without proper awareness of CSR issues (which are increasingly part of the buyer requirements in Europe), potential exporters cannot enter the market with success.				associations, information sharing activities should be conducted on specific CSR requirements relating to fruit and vegetable sector.
Low quality of raw materials for processing. Most processing plants provide raw materials caused by many small farmers and farmlands. Very often, the quality does not meet required standards.	Y	N		Development of the system of incentives for the development of raw orchards (fruits which are intended solely for processing)
Climate and natural risks (frost, hail, pests, disease) **are** still **one of the main obstacles to sustainable development** of the industry and negatively affect the accessibility of raw materials.	Y	N		Public assistance (concessional lending, privileges in VAT payment on the import of equipment, etc.) in the procurement hail-defence nets, irrigation systems, and so on.
The great level of labour inputs and the short afterharvest period berry and stone fruit compared with apples are obstacles to berries production	Y	N		Promotion of facilitate mechanization in berry production
Low level of production culture and pricing policy for organic products are the main obstacles to the organic production development	Y	N		Development of measures to regulate the prices of raw materials for organic production and signing long-term contracts between processors and gardeners
Unstable supply of fresh fruit and vegetable processing enterprises through lower prices (compared with the fresh fruits and berries for fresh consumption), and accordingly the reluctance of households to establish the raw orchards (fruits which are intended solely for processing). Absence of contractual agreements with food processing companies limits fruit cultivation attractiveness for farmers.	Y	N		Absence of contractual agreements with food processing companies limits fruit cultivation attractiveness for farmers Development of incentives for the development of raw orchards (fruits assigned exclusively for processing)
Lack of industrial capacities and raw materials base development for dried and frozen fruit and berries production. Poor production segment of dried fruits and frozen products in Ukraine in connection with the need for large investments in equipment (the purchase and creation of modern dryers and adoption of modern production skills)	Y	N		Policy measures elaboration for the development of the dried and frozen products production (concessional lending, VAT non-payment on the import of equipment, etc.)
Observed opportunities in value chain and how they benefit export	**Critical opportunity? (Y/N)**	**Short term benefit (Y/N)**	**Which (donor) organisation is benefiting from this**	**How can this opportunity be benefited from?**

			opportunity? (CBI, or others)	
Ukraine is located nearby the EU, suggesting short transport time	Y	Y	CBI	- Through promotion and image building of Ukraine
Favourable climate conditions for majority of horticulture products and fertile lands	Y	Y	CBI	- Through promotion and image building of Ukraine
Low labour cost and unlikely significant wages increase in the short- and mid-term	Y	Y	CBI	- Through promotion and image building of Ukraine - Marketing training
Potential to develop EU/EFTA export markets (especially in the organic products sector) after entering into force DCFTA with EU	Y	Y	CBI	- Through exhibiting on trade fairs in those markets, contact agents and contact with relevant sector organizations in target markets.
Opportunities for the manufacturing of baby food (fruit and vegetable puree)	Y	Y	CBI	- Through promotion and image building of Ukraine - Exhibit at the right fairs - Training on product development skills and marketing
Ukraine can be a competitive producer and exporter of organic goods, given favourable climatic conditions, fertile soils and an efficient agricultural sector. The highly labour-intensive value chains of processed organic fruits could also generate significant socioeconomic benefits, particularly in rural communities.	Y	Y	CBI	- Through promotion and image building of Ukraine - Exhibit at the right fairs - Training on product development skills and marketing
Observed Social Responsibility risks in value chain	**Critical risk? (Y/N)**	**Solvable in short term (Y/N)**	**Which (donor) organisation is benefiting from this opportunity? (CBI, or others)**	**How can this opportunity be benefited from?**
Growing demand from European buyers on working circumstances in producing countries.	Y	Y	CBI	CBI will link up as much as possible with existing local and/or international CSR initiatives in Ukraine

2.5.3 Main constraints in the value chain

The main constraints of fresh fruit and vegetable sector are:

1. Lack of knowledge on EU/EFTA market segments and market access requirements.
2. Lack of (export) marketing skills
3. The lack of direct contacts between Ukrainian producers and European companies
4. Lack of necessary certifications to enter the EU market (ISO)
5. Lack of internal financial resources and limited access to long-term loans
6. Lack of storage facilities, especially with new equipment and technology level
7. Fragmentation of producers and lack of cooperation between sector producers.
8. Lack of state export promotion and low level of government support of producers in fresh fruit and vegetables sectors

9. Weak branch associations which could take a lead in resolving the issues of sector and lobby the interests of manufacturers

2.6 Context information

2.6.1 Number of enterprises active in the chain and percentage of which is actively exporting

Most of the Ukraine's production of processed fruit and vegetables is consumed internally (Table 2.15). In terms of quantities, the Ukrainian exports around 66% of the production of frozen vegetables, 28% of fruit and vegetable juices and morethan half of frozen fruits.

Producers of processed fruits and vegetables are active exporters. The highest level of enterprises actively exporting is in segment of frozen fruits (about 50%), fruit and vegetable juices (about 40%) and frozen vegetables (about 40%).

Table 2.15 –Number of enterprises active in the chain and percentage of which is actively exporting in 2014

Indicator	Number of producers, units	Production, tons	Export, tons	Export share in production, %	Estimated percentage of enterprises actively exporting
Fruit and vegetable juices		439 727	122 490	28%	-
Tomato juice	37	61743	11 749	19%	40%
Orange juice	10	37438	4 274	11%	50%
Grapefruit juice	5	3005	275	9%	20%
Pineapple juice	6	11938	32	0%	20%
Grape juice	9	533	405	76%	40%
Apple juice	73	214329	103 918	48%	40%
Mixtures of fruit and vegetable juices	38	246038	1 925	1%	25%
Other fruit and vegetable juices	39	110741	1 836	2%	20%
Vegetables, frozen	17	17722	11 702	66%	40%
Vegetables provisionally preserved	2	30	387	-	
Dried vegetables	5	556	39	7%	-
Beans, preserved otherwise than by vinegar or acetic acid, except prepared vegetable dishes	18	5852	1 646	28%	30%
Peas, preserved otherwise than by vinegar or acetic acid, except prepared vegetable dishes	18	17458	1 662	10%	30%
Other vegetables (except potatoes), preserved otherwise than by vinegar or acetic acid, except prepared vegetable dishes	92	120513	34 370	29%	25%
Vegetables (except potatoes), fruit, nuts and other edible parts of plants, prepared or preserved by vinegar or acetic acid	86	39913	14 384	36%	30%
Fruit and nuts, uncooked or cooked, frozen	20	7459*	20 923	281%	50%
Jams, fruit jellies and fruit or nut puree and pastes	74	59100	2 196	4%	20%
Nuts, groundnuts, roasted, salted or otherwise	55	23650	6 699	28%	20%

prepared					
Fruit and nuts, provisionally preserved, not for immediate consumption	1	85	0	0%	-
Other prepared, dried or preserved fruits and nuts	27	7327	7 522	103%	-
Potatoes, frozen	2	973	35	4%	-
Potatoes prepared or preserved	14	17924	8 308	46%	50%

** - data could be preliminary or suppressed by confidentiality reasons*

2.6.2 Value addition at each step of the value chain

In the value added structure of processed fruits and vegetables production the largest share accounted for the raw materials stage (40-50%).
The share of distribution (wholesale trade) is also significant (20-25%).

Table 2.16 –Value division between the value chain, %

Indicator	Raw materials production	Manufacturing	Distribution	Retail	Total added value
Processed fruit and vegetables	40-50	25-30	15-20	10-15	100
Approximate share of Ukraine, %	***90***	***100***	***0***	***0***	***-***

2.6.3 Currently exported volumes and amounts

Over the last 5 years the Ukraine has been constantly recording a trade surplus in processed fruit and vegetables, totalling 137 million EUR in 2014 (Table 2.17). However, if in volume terms the advantage was - times, while in value terms – only times, indicating that the products, imported to Ukraine was characterized by the high level of prices than export prices.

The Ukrainian total export value in 2014 of the selected products amounted to 378 million EUR or 455 thous. Tons (up by 5.5% and 2.1% yearly on average from 2010 respectively). Dynamics of export was unstable (maximum level - 432 mln. Euros in 2012, and the minimum - 304 mln. Euros in 2010).

Import volumes of processed fruit and vegetables in 2014 amounted to 241 million. EUR or 169 thous. Tons (up by 1.0%, value terms, while decreased by 4.0% in quantity terms respectively). Import shipments were also volatile (in 2010-2013 there was an annual increase to 329 million. Euros, while in 2014 the volume fell to 241 mln. Euros).

Table 2.17 –Ukrainian foreign trade of processed fruits and vegetables in 2010-2014, mln. EUR

Flow	Indicator	2010	2011	2012	2013	2014	CAGR, %
Export	Value, mln. Euro	304	336	432	431	378	5,5%
	Weight, thous. tons	418	388	455	422	455	2,1%
Import	Value, mln. Euro	232	268	299	329	241	1,0%
	Weight, thous. tons	199	225	201	220	169	-4,0%

Source: State Statistic Service of Ukraine

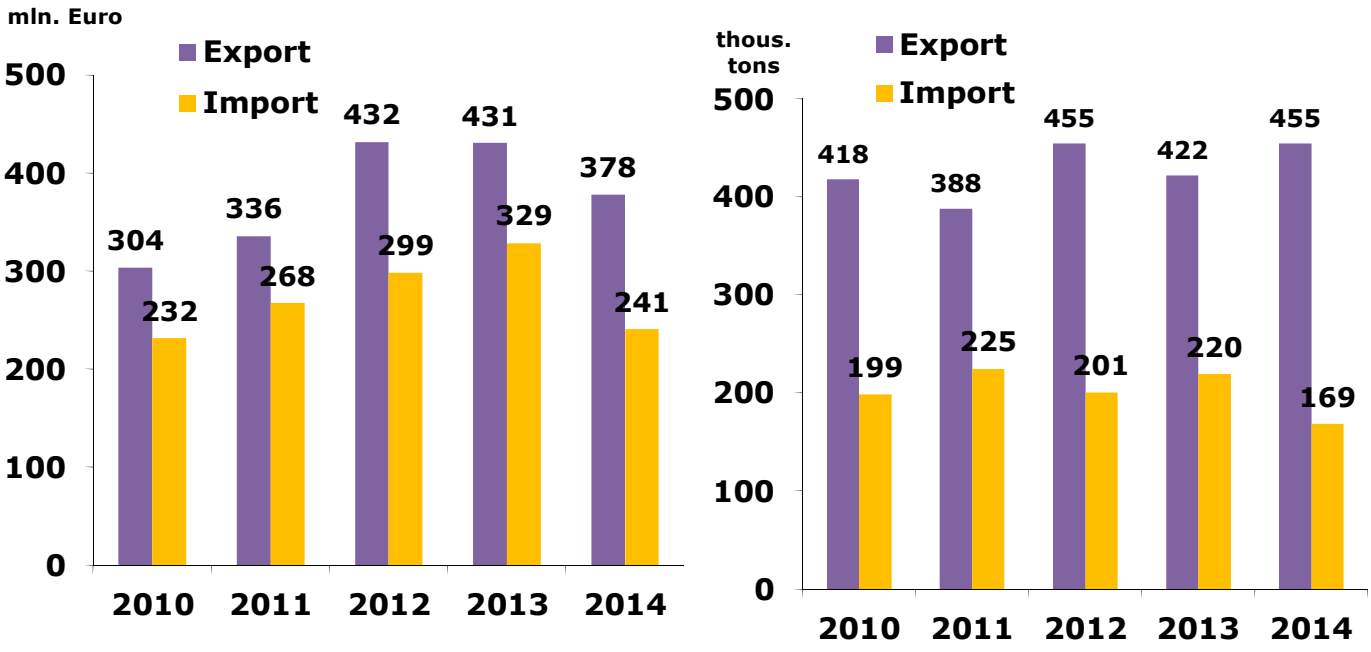


Figure 2.14 - Ukrainian foreign trade of processed fruits and vegetables in 2010-2014

The main sales markets of selected products were the EU/EFTA (198.5 mln. EUR or 52.6% in 2014), Russia (68.4 mln. EUR or 18.1%), Asia (52, 5 mln. EUR or 13.9%) and CIS (47.0 mln. EUR or 12.4%), which in 2014 accounted for 97% of exports.

In 2010-2014 there was a significant increase in exports to all regions (the largest to the EU/EFTA – with CAGR 22,0%), with the exception of Russia and America, where exports declined (CAGR -11,5% and -3.8% respectively).

In value terms, the largest increase occurred in the EU (+109 mln. EUR), and decrease to Russia (-43 mln. EUR).

Table 2.18 –Ukraine's export of processed fruit and vegetables by main destinations in 2010-2014

Indicator	Region	2010	2011	2012	2013	2014	CAGR, %
Value, 000 Euro	EU/EFTA	89 575	92 092	145 728	195 981	198 531	22,0%
	Russia	111 617	112 719	149 615	140 561	68 394	-11,5%
	Asia	51 763	71 849	68 111	29 257	52 505	0,4%
	CIS	43 326	50 402	53 121	52 695	46 974	2,0%
	Other	3 791	5 241	7 603	6 512	5 130	7,9%
	Africa	3 080	2 840	6 691	5 135	5 170	13,8%
	America	1 205	1 310	1 508	1 173	1 031	-3,8%
	TOTAL	**304 357**	**336 453**	**432 377**	**431 315**	**377 734**	**5,5%**
Weight, tons	EU/EFTA	123 082	77 919	142 700	150 622	181 802	10,2%
	Russia	147 242	118 062	143 721	143 859	68 987	-17,3%
	Asia	81 913	129 234	102 216	58 160	133 265	12,9%

	CIS	48 676	47 083	41 550	46 416	45 657	-1,6%
	Other	4 193	5 524	7 270	6 499	5 642	7,7%
	Africa	11 432	8 004	15 955	14 882	18 258	12,4%
	America	1 748	1 747	1 647	1 623	1 290	-7,3%
	TOTAL	**418 287**	**387 574**	**455 059**	**422 061**	**454 903**	**2,1%**

Source: State Statistic Service of Ukraine

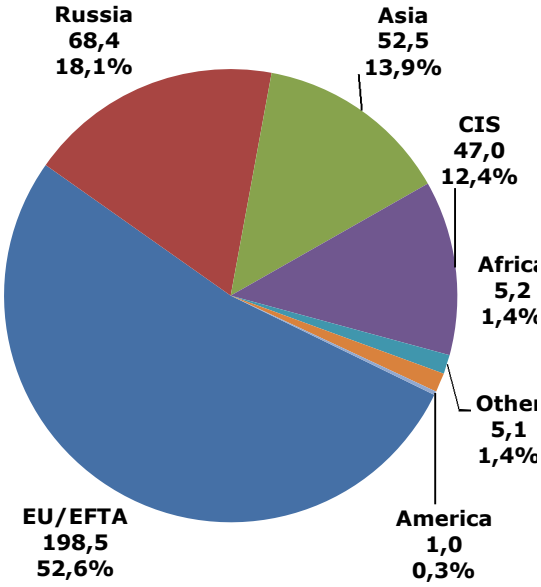


Figure 2.15 - Ukrainian export of processed fruits and vegetables in 2014, mln. EUR

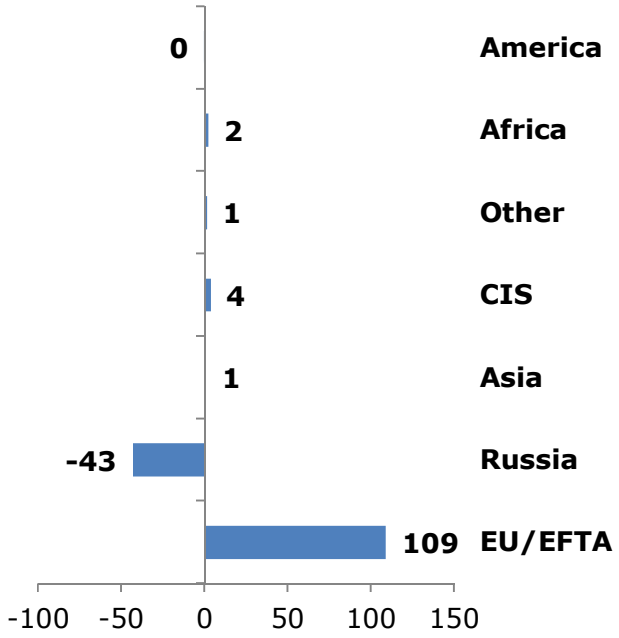


Figure 2.16 – Increase of Ukrainian processed fruits and vegetables export of in 2010-2014, mln. EUR

The main export product groups are fruit and vegetable juices (134.4 mln. EUR or 35.6% in 2014), canned fruits and vegetables (53.1 mln. EUR or 14.1%) and dried vegetables (47.9 mln. EUR or 12.7%), which in 2014 accounted for 62.4% of exports.

In 2010-2014 there was a significant exports increase of all product groups (the largest in the sector of fruit and vegetable juices and dried vegetables - CAGR 23.1% and 9.6% respectively).

Table 2.19 –Ukraine's export of processed fruits and vegetables by main product groups in 2010-2014

Indicator	Product group	2010	2011	2012	2013	2014	CAGR, %
Value, 000 Euro	Fruit and vegetable juices	58 594	56 315	135 112	180 747	134 400	23,1%
	Other processed and preserved fruit and vegetables	97 198	130 306	135 975	98 802	97 413	0,1%
	Canned fruit and vegetables	64 644	55 870	66 057	75 106	53 121	-4,8%
	Dried vegetables	33 192	45 171	51 268	34 148	47 909	9,6%

	Frozen fruits	41 017	40 768	35 947	34 982	35 917	-3,3%
	Frozen vegetables	7 064	5 261	5 798	5 469	7 456	1,4%
	Jams, fruit jellies and fruit or nut puree and pastes	2 649	2 763	2 219	2 061	1 520	-13,0%
	Total	**304 357**	**336 453**	**432 377**	**431 315**	**377 734**	**5,5%**
Weigh t, tons	Fruit and vegetable juices	85 721	57 652	108 416	144 385	124 415	9,8%
	Other processed and preserved fruit and vegetables	42 734	51 422	54 049	42 083	40 726	-1,2%
	Canned fruit and vegetables	94 486	76 167	83 498	92 659	59 584	-10,9%
	Dried vegetables	158 261	173 447	177 697	112 425	195 321	5,4%
	Frozen fruits	21 606	18 278	20 108	19 354	20 923	-0,8%
	Frozen vegetables	11 403	7 074	9 012	8 540	11 738	0,7%
	Jams, fruit jellies and fruit or nut puree and pastes	4 075	3 533	2 279	2 614	2 196	-14,3%
	Total	**418 287**	**387 574**	**455 059**	**422 061**	**454 903**	**2,1%**

Source: State Statistic Service of Ukraine

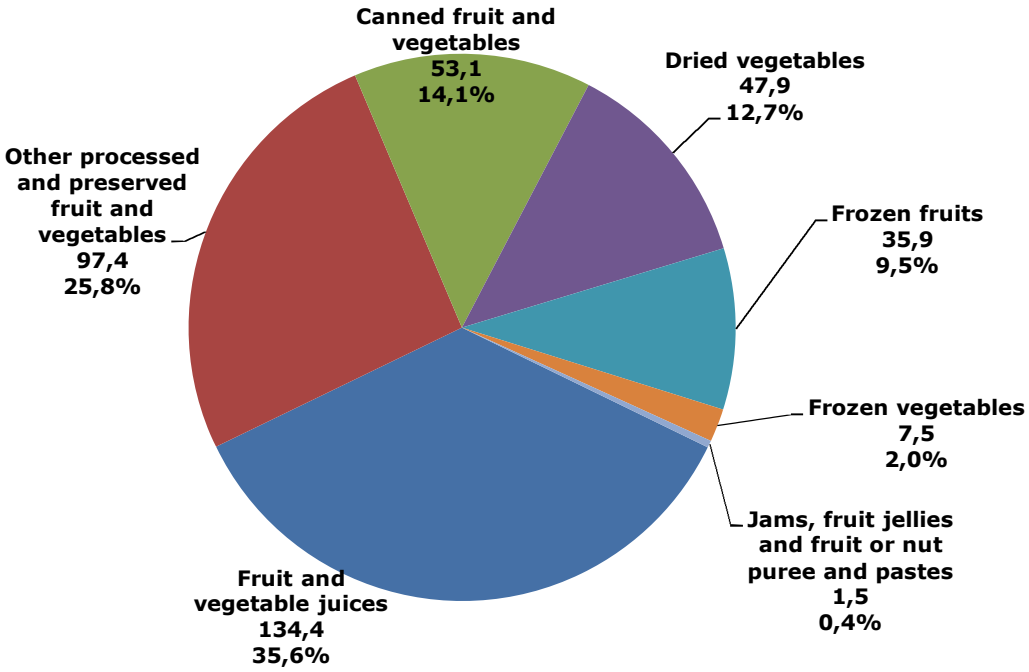


Figure 2.17 - Ukrainian export of processed fruits and vegetables by main product groups in 2014, mln. EUR

Ukraine's export of processed fruits and vegetables by main product groups and commodity items in 2010-2014 is shown in Table 2.20.

Table 2.20 –Ukraine's export of processed fruits and vegetables by main product groups and commodity items in 2010-2014

Indicator	Group	Commodity item	CAGR in 2010-2014	2014							
				TOTAL	EU/ EFTA	Russia	CIS	Asia	Africa	America	Other
Value, 000 Euro	Fruit and vegetable juices	Apple juice	25,8%	**121 239**	101 009	15 633	4 125	160	0	5	306
		Tomato juice	7,5%	**4 740**	258	1 510	2 717	86	0	111	59
		Other fruit and vegetable juices	-10,7%	**1 264**	349	308	424	2	0	144	38
		Orange juice	-1,9%	**2 361**	82	873	962	16	0	1	427
		Mixtures of fruit and vegetable juices	-13,0%	**950**	211	71	585	40	0	22	21
		Grape juice	134,1%	**3 670**	3 660	0	7	0	0	0	2
		Grapefruit juice	-16,7%	**134**	8	11	91	0	0	0	24
		Pineapple juice	0,5%	**41**	1	0	40	0	0	0	0
		Total	23,1%	**134 400**	105 578	18 406	8 951	305	0	283	877
	Other processed and preserved fruit and vegetables	Groundnuts and nuts, shelled	-0,7%	**60 396**	30 184	1 058	3 986	23 857	337	0	974
		Potatoes prepared or preserved	2,3%	**23 141**	72	14 201	8 033	49	0	2	784
		Nuts, groundnuts, roasted, salted or otherwise prepared	-0,3%	**13 135**	812	2 723	8 339	265	0	87	908
		Vegetables provisionally preserved	22,3%	**726**	719	0	7	0	0	0	0
		Fruit and nuts, provisionally preserved, not for immediate consumption	-55,7%	**0**	0	0	0	0	0	0	0
		Fruit, nuts, fruit-peel and other parts of plants, preserved by sugar	-70,4%	**1**	1	0	0	0	0	1	0
		Homogenised food preparations and dietetic food	-34,2%	**14**	3	2	3	0	0	1	6
		Total	0,1%	**97 413**	31 790	17 984	20 369	24 172	337	91	2 671
	Canned fruit and vegetables	Other vegetables (except potatoes), preserved otherwise than by vinegar or acetic acid, except prepared vegetable dishes	0,1%	**27 952**	10 263	13 926	3 172	278	13	227	73
		Vegetables (except potatoes), fruit, nuts and other edible parts of plants, prepared or preserved by vinegar or acetic acid	-16,4%	**11 493**	1 489	8 190	1 383	121	2	291	16

		Other prepared, dried or preserved fruits and nuts	6,5%	**11 217**	881	1 574	8 612	6	0	11	133
		Beans, preserved otherwise than by vinegar or acetic acid, except prepared vegetable dishes	-13,6%	**1 388**	16	922	410	15	0	24	0
		Peas, preserved otherwise than by vinegar or acetic acid, except prepared vegetable dishes	-14,5%	**1 071**	48	206	778	19	0	18	1
		Total	-4,8%	**53 121**	12 697	24 818	14 354	440	16	571	224
	Dried vegetables	Peas, dry	6,5%	**38 998**	12 518	65	1 492	20 965	3 577	3	379
		Chick peas, dry	34,5%	**7 273**	137	0	69	6 367	646	0	53
		Beans, dry	21,9%	**539**	142	0	0	72	0	1	323
		Broad beans, dry	71,5%	**636**	27	0	0	76	533	0	0
		Dried vegetables	-5,6%	**283**	154	46	43	28	0	7	5
		Pulses (dried leguminous vegetables) n.e.c.	-	**63**	24	0	0	5	34	0	0
		Lentils, dry	258,3%	**117**	73	0	24	20	0	0	0
		Total	9,6%	**47 909**	13 075	111	1 628	27 534	4 789	11	761
	Frozen fruits	Fruit and nuts, uncooked or cooked, frozen	-3,3%	**35 917**	34 176	1 106	312	26	0	0	298
		Total	-3,3%	**35 917**	34 176	1 106	312	26	0	0	298
	Frozen vegetables	Vegetables, frozen	1,4%	**7 414**	1 194	5 684	501	23	0	1	10
		Potatoes, frozen	0,2%	**43**	1	6	28	0	0	0	7
		Total	1,4%	**7 456**	1 194	5 690	530	23	0	2	17
	Jams, fruit jellies and fruit or nut puree and pastes	Jams, fruit jellies and fruit or nut puree and pastes	-13,0%	**1 520**	22	278	831	7	27	73	282
		Total	-13,0%	**1 520**	22	278	831	7	27	73	282
	TOTAL		5,5%	**377 734**	198 531	68 394	46 974	52 505	5 170	1 031	5 130
Weight, tons	Fruit and vegetable juices	Apple juice	13,5%	**103 918**	83 643	13 684	5 888	225	0	11	467
		Tomato juice	6,3%	**11 749**	625	3 708	6 827	247	0	268	75
		Other fruit and vegetable juices	-17,5%	**1 836**	475	98	881	1	0	269	111

		Orange juice	-3,1%	**4 274**	117	1 785	1 571	18	0	1	783
		Mixtures of fruit and vegetable juices	-17,9%	**1 925**	326	140	1 285	73	0	46	54
		Grape juice	4,8%	**405**	389	0	11	0	0	1	4
		Grapefruit juice	-15,6%	**275**	14	18	200	0	0	0	43
		Pineapple juice	-14,0%	**32**	1	0	32	0	0	0	0
		Total	9,8%	**124 415**	85 590	19 433	16 695	564	0	596	1 537
	Other processed and preserved fruit and vegetables	Groundnuts and nuts, shelled	-2,7%	**25 318**	7 030	214	2 221	15 254	183	0	417
		Potatoes prepared or preserved	4,9%	**8 308**	28	5 728	2 282	13	0	0	258
		Nuts, groundnuts, roasted, salted or otherwise prepared	-1,8%	**6 699**	503	1 240	4 368	71	0	43	473
		Vegetables provisionally preserved	13,5%	**387**	377	0	10	0	0	0	0
		Fruit and nuts, provisionally preserved, not for immediate consumption	-70,4%	**0**	0	0	0	0	0	0	0
		Fruit, nuts, fruit-peel and other parts of plants, preserved by sugar	-68,5%	**1**	0	0	0	0	0	0	0
		Homogenised food preparations and dietetic food	-32,0%	**12**	2	0	2	0	0	1	7
		Total	-1,2%	**40 726**	7 940	7 182	8 883	15 339	183	44	1 154
	Canned fruit and vegetables	Other vegetables (except potatoes), preserved otherwise than by vinegar or acetic acid, except prepared vegetable dishes	-5,5%	**34 370**	11 952	17 969	3 846	334	12	204	53
		Vegetables (except potatoes), fruit, nuts and other edible parts of plants, prepared or preserved by vinegar or acetic acid	-20,4%	**14 384**	2 286	10 080	1 520	136	1	339	22
		Other prepared, dried or preserved fruits and nuts	-4,3%	**7 522**	372	2 001	5 065	1	0	8	74
		Beans, preserved otherwise than by vinegar or acetic acid, except prepared vegetable dishes	-15,6%	**1 646**	12	1 044	555	16	0	19	0
		Peas, preserved otherwise than by vinegar or acetic acid, except prepared vegetable dishes	-15,9%	**1 662**	99	244	1 271	24	0	22	1
		Total	-10,9%	**59 584**	14 722	31 339	12 257	511	13	592	150
	Dried	Peas, dry	1,9%	**165 385**	52 284	167	4 680	94 081	12 823	6	1 345

	vegetables	Chick peas, dry	60,6%	**25 399**	326	0	194	22 221	2 489	0	169
		Beans, dry	13,3%	**1 004**	307	2	0	70	0	1	624
		Broad beans, dry	67,9%	**3 046**	88	0	0	364	2 594	0	0
		Dried vegetables	-10,7%	**39**	16	6	6	10	0	0	0
		Pulses (dried leguminous vegetables) n.e.c.	-	**208**	61	0	0	27	120	0	0
		Lentils, dry	369,2%	**240**	158	0	38	44	0	0	0
		Total	5,4%	**195 321**	53 240	175	4 919	116 817	18 026	7	2 138
	Frozen fruits	Fruit and nuts, uncooked or cooked, frozen	-0,8%	**20 923**	19 133	964	613	18	0	0	196
		Total	-0,8%	**20 923**	19 133	964	613	18	0	0	196
	Frozen vegetables	Vegetables, frozen	0,7%	**11 702**	1 169	9 687	822	12	0	1	11
		Potatoes, frozen	-4,3%	**35**	0	2	27	0	0	0	6
		Total	0,7%	**11 738**	1 169	9 690	849	12	0	1	16
	Jams, fruit jellies and fruit or nut puree and pastes	Jams, fruit jellies and fruit or nut puree and pastes	-14,3%	**2 196**	9	205	1 442	4	36	50	450
		Total	-14,3%	**2 196**	9	205	1 442	4	36	50	450
	TOTAL		2,1%	**454 903**	181 802	68 987	45 657	133 265	18 258	1 290	5 642

Source: State Statistic Service of Ukraine

Ukraine's import of processed fruits and vegetables is shown in Appendix 2.

2.6.4 Trends in supply and demand

The main trends on Ukrainian processed fruit and vegetables market are:

- The Ukrainian market of processed fruit and vegetables is quite promising and has good potential of growth. Gradual denial of homemade canning, and the wide range of industrial analogues with low price and stable presence in the stores contribute to development of domestic manufacturing sector.
- The combination of these factors and the fact that present consumption makes only 1/3 of the recommended norm may result in considerable market growth.
- According to prognosis in coming years the market of canned peas, sweet corn, processed potatoes and tomatoes, frozen fruits and vegetables will continue growing, despite the decrease of production volumes by individual operators.
- There is a challenge for Ukrainian producers to conquer the market of neighbouring European countries, first of all, due to insufficient development of domestic raw material base, lack of experienced workforce and production capacities in these countries.
- The import of processed fruit and vegetables had been growing till 2013 and then again entered a downward trend (decrease by 27% to 241 million EUR in 2014). The import of processed fruit and vegetables prevails over the export: the negative foreign trade balance for this group of products totalled 137 million EUR.
- Gradually, the share of domestic canned fruits and vegetables in the market increases, forcing out the foreign products to leave the market. Ukraine imports mainly exotic canned fruits, juices and natural canned vegetables (canned peas, corn, mushrooms); exotic sauces, frozen potatoes; dried fruit and berries. The reduction of imported canned products is due to its high price, as well as sluggish consumer interest. However, the reduction is expected within the range 5-10% during coming years.
- As expected the growth of consumption in the sector will be modest - 3-8%. But this is inevitable because of the continuing urbanization of the population. Domestic manufacturers are increasing capacity and strengthen its market position. According to forecasts of market operators, in few years 'unbranded' will disappear from the market.

Demand for processed fruit and vegetable products in Europe, the industry's second largest market after North America, is expected to remain relatively stable over the five years to 2020.

The main trends on EU processed fruit and vegetables markets are:

- Opportunities for consumption of processed fruits and vegetables lie in consumption trends such as convenience and health.
- The market for frozen food products is currently expanding due to the fact that frozen products are cheaper than fresh produce.
- In Europe fruit is predominantly bought fresh, while vegetables are more often bought prepared or processed.
- Most of processed fruits and vegetables are not consumed by consumers, but used by the food processing industry. They are further processed as part of pizza, cookies and biscuits, ice creams, etcetera.
- The food processing industry needs a regular supply of – mostly high-quality – goods. It maintains close relations with importers, which are often based on long-term contracts or partnerships. Further processing of fruits and vegetables requires new

techniques and a high level of knowledge, giving the processor/ manufacturer a strong position within the supply chain.

- Dried and frozen fruit, dried vegetables, edible nuts, fruit juice concentrates and provisionally preserved fruits and vegetables are mainly used as ingredients for the food processing or manufacturing industry. Canned and frozen fruits and vegetables and edible nuts are (also) end products that are finished and packed at origin.
- Within Europe, most foods are sold in supermarkets. Retail buying power has increased over recent years, affecting the food processing industry since price wars led to the offering of premium brands at prices that compete with private labels.
- One of the biggest challenges for Europe over the next five years will be the ongoing decline in the consumption of (processed) fruit and vegetable products, linked to changing life styles and eating habits. With fast-paced lifestyles and increasing numbers of working women, consumers are increasingly seeking convenience, which is also reflected in the type of products they buy. Innovation is needed in order to meet the demands of changing lifestyles and consumer demand for more convenient fruit and vegetable products.
- The consumption of processed fruits and vegetables is affected by the ongoing consumer health trend. Consumers are increasingly aware of the health benefits of fruit and vegetable consumption. Since spending power may have decreased due to the economic crisis within Europe, they are more critical and seek out the most affordable healthy options for their budgets. Processed fruit and vegetables can play a role here. By freezing or canning shortly after harvest, fruits and vegetables are preserved at peak ripeness, retaining most of their nutrients and vitamins. In addition, demand for products with healthy ingredients such as anti-oxidants (i.e., 'superfoods') has increased.
- Consumers are increasingly concerned about where products originate, and how they are produced. They demand more sustainable (i.e. socially and environmentally responsible) food products from retailers. Fruit and vegetables are the most important category of sustainable food products that are purchased by consumers, with shares of between 15 and 36% in total organic sales in the four largest EU markets.
- The share of organic production of fruit and vegetables in Europe is relatively large (up to 10% in 2012 for nut trees). Countries with the largest organic fruit production areas are the Mediterranean countries: Italy, Spain and Greece. In addition, for organic vegetables, Italy is again the country with the largest area by far, followed by Germany and France. A proportion of these fresh fruits and vegetables are processed into processed fruit and vegetables.

2.6.5 Social Responsibility risk level in the chain

CSR has become one of the pillars of the Dutch policy for development cooperation, in particular labour conditions.

Ukrainian manufacturers do not always comply with social standards based on the conventions of the International Labour Organization (ILO) and the United Nations' Universal Declaration of Human Rights. There are some risks of excessive use of natural resources, employment under minimum wages, excessive working hours and risks of non-compliance with local and/or international environmental regulations.
However, the risk level is not significant and it is under control of the State Committee for Industrial Safety, Labour Protection and Mining Supervision and other controlling authorities.

CBI can play a constructive and proactive role in assisting the governmental institutions and the implementation in the fruit and vegetable sector through the sector organization and the manufacturers.

Current Social Responsibility Risk Index is shown in Figure.

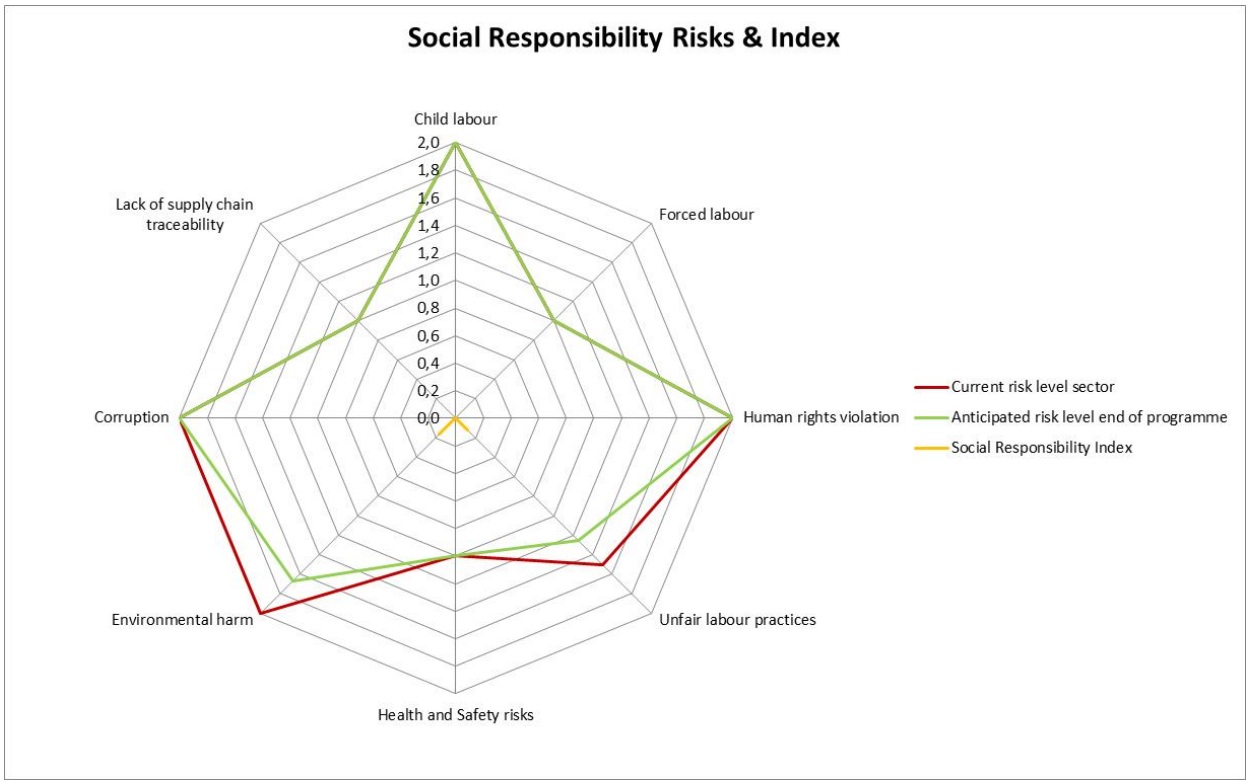


Figure 2.18 - Social Responsibility Risk Score & Index Ukraine

2.7 Recommendations for intervention

2.7.1 Potential improvement of export and social responsibility

Taking into account market opportunities (see section 2.5) and interviews with industry experts the Ukraine's potential for export growth to EU/EFTA markets by product group is presented in the table below.

Table 2.21 –EU/EFTA's and Ukraine's foreign trade statistics in 2014, potential for Ukraine's export growth to EU/EFTA, million EUR

Group	Subgroup	EU/EFTA external import		UA export to EU/EFTA		UA share in external import	Growth potential, million EUR by 2017
		mln. EUR	CAGR in 2010-2014	mln. EUR	CAGR in 2010-2014		
Canned fruit and vegetables	Other prepared, dried or preserved fruits and nuts	5 408,6	3,0%	1	23,2%	0,0%	**+0,7**
	Other vegetables (except potatoes), preserved otherwise than by vinegar or acetic acid, except prepared vegetable dishes	925,9	2,4%	11,3	63,2%	1,2%	**+21,4**
	Vegetables (except potatoes), fruit, nuts and other edible parts of plants, prepared or preserved by vinegar or acetic acid	289,7	4,2%	0,8	45,0%	0,3%	**+1,1**
Fruit and vegetable juices	Other fruit and vegetable juices	335,2	1,5%	0,4	8,6%	0,1%	**+0,1**
	Apple juice	171,5	0,4%	37,5	18,2%	21,9%	**+20,5**
	Mixtures of fruit and vegetable juices	12,1	-2,0%	0,2	22,3%	1,3%	**+0,1**
Frozen vegetables	Vegetables, frozen	313,3	-0,6%	2,3	18,2%	0,7%	**+1,3**
Frozen fruits	Fruit and nuts, uncooked or cooked, frozen	703,6	3,8%	43,7	1,9%	6,2%	**+2,5**
Jams, fruit jellies and fruit or nut puree and pastes	Jams, fruit jellies and fruit or nut puree and pastes	119,6	20,0%	0	9,2%	0,0%	**+1,0**
TOTAL above mentioned		**8 279,5**		**97,2**			**+48,7**

Source: Eurostat, State Statistic Service of Ukraine

2.7.2 Recommendation towards CBI

We would recommend CBI to further develop a programme for intervention in the processed fruits and vegetables value chain in Ukraine. According to our estimates, there are possibilities to raise export of the sector's products to EU/EFTA by 48.7 mln EUR (by 50%) during next 2-3 years due to CBI support. Thus, access to European markets will be able to partially replace the loss of markets by Ukrainian producers in Russia and CIS countries and to compensate sharp decline in domestic demand.

The main areas of intervention, in which CBI can play a role, in order to realize sustainable export growth to Europe, are:

- Exposure to European opportunities and sourcing needs, through matchmaking and trade promotion activities.
- Specific and up-to-date development and provision of EU market information.
- Capacity building in areas of export marketing, production technologies and CSR.

Processed fruits and vegetables sector can be supported through a number of interventions, as follows:

- exposure and connexion to European opportunities and sourcing needs, e.g. through partnering with associations such as FRUCOM (European Federation of the Trade in Dried Fruit, Edible Nuts, Processed Fruit & Vegetables, Processed Fishery Products, Spices and Honey), PROFEL (European Association of Fruit and Vegetable Processing Industries), European Fruit Juice Association (AIJN) and similar ones in Europe.
- development, regularly update and provision of EU/EFTA market intelligence information;
- capacity building in areas of export marketing and CSR.
- assistance in certification procedures for Ukrainain producers.

2.7.3 Risk analysis

Table 2.22 –Risk assessment

Risk (general or specific)	Possible impact on proposed CBI intervention	Level	Influence	Mitigation strategy
Specific risk: EU buyer doesn't accept manufacturers timeline to achieve compliance standard	This will have a direct impact on the follow up of the CBI programme, as it won't benefit export to the EU	3	3	CBI has to focus on the most important compliance that can be achieved with little investment. Therefor manufacturer can show their willingness to comply
Specific risk: manufacturers won't get access to competitive financing in the near future	This will have direct impact on the CBI programme as manufacturer can't invest in necessary upgrading or improvements to be able to change price focus or to achieve compliance standard	5	3	CBI has to focus on setting up the programme for manufacturers in a way they that they can start up and then improve/upgrade along the way because of higher profits they will start making. So basically by self-financing
Specific risk: implementation of other donor program(s) in the sector	Other donor program(s) may duplicate CBI efforts	1	2	CBI has to constantly monitor other donors' activities and coordinate its actions with them
General risk: resumption of active hostilities by Russia in eastern Ukraine	Violation of economic links between the companies in the value chain, especially in eastern Ukraine, a further reduction in domestic demand, as a result - the bankruptcy of some enterprises involved in the programme	2	4	The risk is beyond control of CBI and there is no mitigation strategy

Risk level: 1=Rare; 2=Unlikely; 3=Possible; 4=Likely; 5=Almost certain.
Influence: 1=Negligible; 2=Minor; 3=Moderate; 4=Major; 5=Severe.

6 REGULATORY AND INSTITUTIONAL FRAMEWORK

6.1 Export of Ukrainian Products to the EU: Regulatory Framework of Discovered Problems

I. Common Impediments for all Value-Added Chains Selected

The fieldwork showed that there are certain problems, which impede normal export operations of Ukrainian producers. These problems are also common for the selected value-added chains. The most crucial problems are the following:

- Value-added tax ("VAT") refund;
- Export revenue sale rule;
- Deficiencies of customs procedures;
- Insufficient functioning of the electronic payment system.

Given that recently Ukraine's application to join the WTO Government Procurement Agreement was approved by the WTO's Committee on Government Procurement[17], additionally we will analyze legislative provisions that might prevent Ukrainian producers/exporters from access to a global procurement market. This section concludes with recommendations concerning improvement of the regulatory environment.

VAT Refund Problem

VAT refund is the most painful problem for Ukrainian business. The irregularities with VAT refund creates unpredictable and unsecure business environment and significantly discourages foreign investors to deal with the Ukrainian economy.

The State Fiscal Service explains the problem with VAT refund in Ukraine in the following way. The debt of the Ukrainian government exceeds 20 billion UAH, and this debt is constantly increasing. There is a limit for VAT refund for each month and the overall annual limit of refund is envisaged in the State Budget of Ukraine for 2015 (58 billion UAH). The State Fiscal Service of Ukraine is in charge of the VAT refund administration and cannot increase the monthly and annual limits[18].

In the end of 2014 the tax system of Ukraine was modified by adoption of the Law of Ukraine No.71-VIII dated 28.12.2015 "*Amending the Tax Code of Ukraine and other legislative acts of Ukraine as to the tax reform*" (effective since 01.01.2015). Among other things, a few changes were introduced concerning the VAT.

From the 1 January 2015 all VAT reports, according to Article 49.4 of the *Tax Code of Ukraine*, shall be submitted solely in the electronic format given that respective entities shall have an electronic signature. Pursuant to Article 181.1 of the *Tax Code of Ukraine*, the obligation to register as VAT payer concerns those entities, which annual revenue from export/import operations exceeds 1 billion UAH (without VAT).

[17] Ukraine to join WTO's Government Procurement Agreement https://www.wto.org/english/news_e/news15_e/gpro_11nov15_e.htm

[18] For more information please see the interview of the Head of the State Fiscal Service of Ukraine - <http://www.rbc.ua/ukr/news/problemy-vozvratom-nds-obuslovleny-limitom-1435670575.html>

The rules regarding taxable basis were also amended. According to Article 188.1 of the *Tax Code of Ukraine* the taxable basis is determined by the transaction value. However, such basis cannot be lower certain benchmarks, i.e.:

1) for the supply of goods/services – not lower than the purchase price of such goods/services;
2) for supply of own manufactured goods/services - not lower than their costs of production;
3) for the supply of fixed assets - not lower than book (residual) value according to the accounting, established at the beginning of the reporting (tax) period during which such operations are carried out (in the absence of accounting of fixed assets - based on the regular price).

In addition, the electronic system of VAT administration was established. During February – July 2015 it operated in a test mode. According to Article 200.4 of the *Tax Code of Ukraine* VAT payers, which have negative VAT in the declaration (given the absence of the tax debt) can choose any of the two options:

1) either to claim VAT refund from the budget in the amount of VAT paid to suppliers (or to the budget in case of import operations) in the previous and current fiscal reporting periods; or
2) to allocate negative VAT to the amount of tax credit for the next fiscal period.

The difficulties with VAT refund and exorbitant debts of the Ukrainian government are known problems of the fiscal system of Ukraine. Recently, the Ministry of Finance of Ukraine presented the model of the 2016 tax reform of Ukraine[1]. It is suggested to leave the same level of VAT tax (20%) and provide additional budget allocations (20 billion UAH) to refund existing debts.

Cancelation or Simplification of Export Revenue Sale Rule

A major problem for all entities involved in export operations is current Ukrainian rules on export revenue sale. In accordance with a Decree of the National Bank of Ukraine No. 581 dated 03.09.2015 (effective till 05.12.2015) payments for export and import transactions of goods shall be made in a period not exceeding 90 days. It is highly possible that so-called '90-day rule' will be extended after the 5th of December 2015 for the next 3-month period.

Then 75% of revenues in foreign currency referred to above shall be subject to compulsory sale on the interbank currency market of Ukraine, including directly to the National Bank of Ukraine. The remaining foreign exchange revenue shall remain at disposal of residents and non-residents and are used by them in accordance with the rules of currency regulation.

The revenue sale rule significantly impedes exports operations of Ukrainian producers. For instance, very often the terms of cooperation with European distributors provide for 120-day period of payment. The adherence to such conditions contravenes the provisions of Ukrainian legislation. Thus, generally accepted terms of cooperation in the EU become

unacceptable for Ukrainian producers as it significantly complicates ordinary course of business. On the one hand, such stringent regulation is necessary to prevent the outflow of foreign currency from Ukraine.

Thus, it is highly recommended to cancel the '90-day rule' or to simplify it by extending the period of payment or broadening the list of exceptions.

The rule of obligatory sale of 50% of export revenue sale was introduced in 2012 for 6-month period. Then this rule has been repeatedly extended. In August 2014, the respective requirement increased to 100% of export revenue, and on 22 September 2014 the National Bank of Ukraine decided to reduce the amount to 75% of revenue in foreign currency.
This problem has been impeding the normal business operation for long period of time. Any predictions as to cancelation or simplification of the export revenue sale rule are unfeasible.

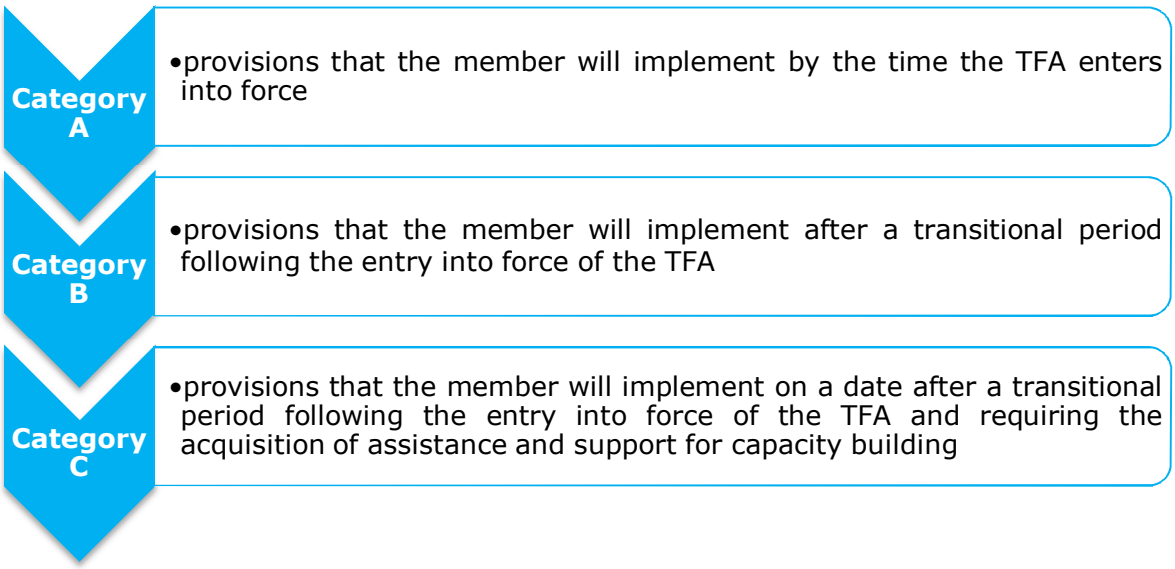
Deficiencies of Customs Procedures

Another common problem for selected value-added chains is the customs procedures upon export and import operations. Among other things producers mentioned long and unpredictable customs clearance procedures as well as red tape and bribery upon clearance of goods. In this respect it should be mentioned that in general the Ukrainian customs legislation is consistent with international obligations of Ukraine. However, practical implementation of the customs legislation creates numerous obstacles and problems for exporters and importers (i.e., unreasonable delays, artificial increase of the value of goods imported, bribery, etc.).

In order to eradicate corruption and increase transparency, Ukraine acceded to the *WTO Trade Facilitation Agreement*. On 20 October 2015, the draft Law on the ratification of the Protocol amending the Marrakesh agreement establishing the World Trade Organization was supported by the Parliament of Ukraine with aim to ensure implementation by Ukraine of internal procedures necessary for the entry into force of the Trade Facilitation Agreement ("**TFA**").

TFA provides for expedite movement, release and clearance of goods (including goods in transit). It also sets out provisions for customs cooperation[19]. Upon accession to the TFA, a member must categorize each provision of the TFA (categories A, B, C) and notify other WTO members of these categorizations.

[19] For more information please see the WTO website - <https://www.wto.org/english/tratop_e/tradfa_e/tradfa_e.htm>



On 14 August 2014 Ukraine notified the WTO Preparatory Committee on the provisions of the TFA, which it designated to the Category A. These measures are the following[20]:

Art. 1.1	Publication
Art. 1.2	Information Available Through Internet☐
Art. 7.1	Pre-arrival Processing☐
Art. 7.4	Risk Management (except for Art. 7.4.1, Art.7.4.2, Art.7.4.3)
Art. 7.7	Trade Facilitation Measures for Authorized Operators☐
Art. 7.8	Expedited Shipments☐
Art. 7.9	Perishable Goods (except for Art. 7.9.1, Art.7.9.2)☐
Art. 8	Border Agency Cooperation☐
Art. 9	Movement of Goods under Customs Control Intended for Import
Art. 10.8	Rejected Goods (except for Art. 10.8.2)☐
Art. 10.9	Temporary Admission of Goods/Inward and Outward Processing
Art. 11	Freedom of Transit (except for Art.11.3, Art.11.4, Art.11.5, Art.11.6, Art.11.7, Art.11.8, Art.11.10)

Given the aforesaid, Ukraine has to implement the above wide range of important provisions upon the TFA entry into force (importantly, the TFA will enter into force once two-thirds of the WTO membership has formally accepted the TFA). The implementation of these provisions will improve the legislative environment and increase the credibility of the customs authorities in Ukraine.

Another framework for the improvement of customs procedures is the *Association*

Ukraine's accession to the TFA is a telltale sign of Ukraine's readiness to fight against illegitimate and corrupted practices of customs authorities.

[20] The full text of communication is available here - <https://docs.wto.org/dol2fe/Pages/FE_Search/FE_S_S006.aspx?Query=@Symbol=%20wt/pctf/n/*%20and%20%20@Symbol=%20ukr&Language=ENGLISH&Context=FomerScriptedSearch&languageUIChanged=true#>

Agreement between the EU and Ukraine[21], which contains a separate chapter that seeks to enhance cooperation in customs and customs-related matters and to simplify customs requirements and formalities and prevent fraud.

Article 75 of the Association Agreement stipulates that "the Parties acknowledge the importance of customs and trade facilitation matters in the evolving bilateral trade environment".

Ukraine committed that its respective trade and customs legislation shall be stable and comprehensive, and that provisions and procedures shall be proportionate, transparent, predictable, non-discriminatory and impartial. In accordance with Article 76 of the Association Agreement Ukraine and the EU agreed to, *inter alia*:

1) apply a single administrative document for the purposes of customs declarations;
2) apply modern customs techniques, including risk assessment, post clearance controls and company audit methods in order to simplify and facilitate the entry and release of goods;
3) without prejudice to the application of objective risk-assessment criteria, ensure the non-discriminatory application of requirements and procedures applicable to imports, exports and goods in transit;
4) apply the international instruments applicable in the field of customs and trade including those developed by the World Customs Organization (Framework of Standards to Secure and Facilitate Global Trade of 2005, Istanbul Convention on temporary admission of 1990, HS Convention) of 1983, the WTO (e.g. on Valuation), the UN (TIR Convention of 1975, 1982 Convention on harmonization of frontier controls of goods), as well as EC guidelines such as the Customs Blueprints;
5) take the necessary measures to reflect and implement the provisions of the Revised Kyoto Convention on the Simplification and Harmonization of Customs Procedures of 1973;
6) provide for advance binding rulings on tariff classification and rules of origin;
7) introduce and apply simplified procedures for authorized traders according to objective and non-discriminatory criteria;
8) apply transparent, non-discriminatory and proportionate rules in respect of the licensing of customs brokers.

In addition, the Association Agreement contains provisions related to (1) the relations with business community (transparency, publication of respective notices, consultation mechanism, cooperation between operators and relevant administrations, etc.); (2) fees and charges upon customs valuation; (3) customs cooperation and mutual administrative assistance in customs matters. Moreover, Annex XV to the Chapter 5 ("Approximation of the customs legislation") contains the list of the EU legislative acts with which the Ukrainian legislation shall be aligned within established timeframe.

To ensure the fulfillment of all stipulated arrangement Article 83 of the Association Agreement provides for the establishment of the Customs Sub-Committee. It is stated

[21] The full text and annexes is available here - <http://eeas.europa.eu/ukraine/docs/association_agreement_ukraine_2014_en.pdf>

that the function of the Customs Sub-Committee shall include regular consultations and monitoring of implementation and administration of the Chapter 5 of the Part IV of the Association Agreement, including the issues of customs cooperation, cross-border customs cooperation and management, technical assistance, rules of origin, and trade facilitation, as well as mutual administrative assistance in customs matters.

Meanwhile, Ukraine undertakes certain actions to eliminate discrepancies in the customs sphere. For instance, recently Cabinet of Ministers of Ukraine adopted a Decree No.724 dated 16.09.2015 (effective since 23.09.2015) "*On the use of indicative customs values in the risk management system*". The State Fiscal Service of Ukraine elaborated the list of the indicative prices based on the last 6-month period data. Such indicative prices are used in the risk management system and are not obligatory minimum prices (which are prohibited by the WTO rules). Later on the State Fiscal Service issued clarifications that indicative prices are used solely to analyze, identify and evaluate the risks of submitting false information about the customs value of goods, including the incorrect determination of the customs value of goods.

Moreover, in the beginning of November 2015 the Head of Odessa Customs Office signed a Decree according to which only the first method of the customs clearance (transaction value method) shall be used for goods from 30 countries (*inter alia*, the EU, the US, Japan, Israel, etc.) upon submission of the certificate of origin. Such step is deemed as a proof of trust to business.

Therefore, the lists of obligations under the TFA and the Association Agreements are long-term. However, among short-term key priorities might be singled out the following:

1) improvement of customs risk-analysis system by using post audits results;
2) introduction of a risk-analysis system by the veterinary, phytosanitary and other control authorities at the border similarly to those used by the customs authorities;
3) development of the customs post audit as a trade-facilitation tool;
4) implementation of the Authorized Economic Operator in Ukraine;
5) development and implementation of the "Single Window" concept.

To ensure equitable and transparent customs procedures, a lot of painful work has to be done to eradicate corruption, bureaucracy and fraud.

Notably, the improvement of the customs procedures requires legislative amendments, institutional reforms and, most importantly, change of 'entrepreneurial consciousness'.

Insufficient functioning of the electronic payment system

One of the most effective ways of marketing the product is e-commerce and sales *via* Internet. The most popular platforms for international sales are eBay and Amazon. However, Ukrainian producers cannot sale goods via these platforms due to the regulatory restrictions. Primarily, the on-line payment system *PayPal*, commonly used for purchases and sales on eBay and Amazon, does not function in Ukraine. Ukrainian customers can only make payments *via PayPal*, but not receive payments or cash them

in. In fact, in case of sales of goods on eBay and Amazon Ukrainian producers cannot receive money for such transactions. Traditionally, in order to receive payments the entity must have a bank account. Each payment must be proved by a contact, invoice and act of acceptance. All revenues in foreign currency is subject to currency control and mandatory export revenue sales rule.

The National Bank of Ukraine has already undertaken certain steps to facilitate the use of electronic means of payment in Ukraine. Moreover, the National Bank of Ukraine continues to implement the action plan on implementation of the *Comprehensive Program of Ukraine's financial sector development* by 2020[22].

Certain innovations were introduced by the National Bank of Ukraine by the Decree No.480 dated 24.07.2015 "*On amendments of some legislative acts of the National Bank of Ukraine*" and by the Decree No.481 dated 24.07.2015 "*On amendments of some legislative acts of the National Bank of Ukraine for transactions with electronic money*".
The Decree No. 480 clarified how such systems of on-line payment as *PayPal*, *ApplePay* и *GoogleWallet* may be included in the Register of the payment systems. By the Decree No.481 the National Bank created legal conditions for on-line payments to non-resident traders and receipt of on-line payments from non-residents. Hopefully, these changes will expedite the establishment of well-known on-line payments systems on the Ukrainian market.

Participation in Governmental Procurement

On 11th of November 2015 Ukraine's accession terms to the WTO Government Procurement Agreement ("**GPA**") were approved. Thus, upon completion of the internal ratification procedures Ukraine will accede to this plurilateral agreement providing Ukrainian companies with a chance to access global procurement market. Currently 45 WTO members are current by the GPA (counting 28 EU member-states)[23].
For selected value-added chains access to a global procurement market is of paramount importance. However, there are certain legislative requirements that might prevent Ukrainian producers from participating in government procurement abroad.
Two main problems are VAT refund and export revenue sale rule (please see paragraphs 1.1 and 1.2 above).

Another important problem is a requirement to obtain an individual license to deposit currency on accounts abroad, which is often necessary to participate in the government procurement abroad. According to the Decree of the National Bank of Ukraine No.485 dated 14.10.2005 such individual licenses are issued by the National Bank of Ukraine. The respective request might be considered up to 25 working days. Moreover, the National Bank of Ukraine may require additional documents, which could make the procedure of obtaining the license even longer. Finally, the National Bank of Ukraine may reject the application for a license if it considers that to issue such license is simply unreasonable.

[22] The text of the Program is available here - <http://www.bank.gov.ua/doccatalog/document?id=18563297>

[23] More information about GPA can be found here - <https://www.wto.org/english/news_e/news15_e/gpro_11nov15_e.htm>

Therefore, to simplify the access to global procurement market it is necessary to amend the Decree of the National Bank of Ukraine No.485.

Another potential impediment is the need to obtain a certificate proving the absence of arrears (indebtedness) of taxes and other official payment, which might also be necessary to participate in foreign bids. Pursuant to the Decree of the Ministry of income and charges of Ukraine No. 567 dated 10.10.2013 such certificate is valid only 10 days upon issuance. Such short term of validity is unacceptable given that the bids procedures usually last longer.

In addition, according to the Decree of the National Bank of Ukraine No.597 dated 30.12.2003, to make a payment to non-resident, if the sum exceeds 50,000 euro, is conditional upon receipt of the certificate from State Enterprise National Research and Information Center for Monitoring International Commodity Markets. Such requirement seems to be abundant.

Thus, the Decree No. 567 dated 10.10.2013 should be amended.

Other complications concern the term during which physical persons can stay in the territory of other state. For instance, article 101 of the Association Agreement stipulates that "the entry and temporary stay of natural persons within the Party concerned shall be for a cumulative period of not more than six months or, in the case of Luxembourg, twenty-five weeks in any twelve month period or for the duration of the contract, whichever is less".

Therefore, the formal accession to the GPA will not automatically provide Ukrainian companies with an opportunity to access procurement market of 45 WTO Members. Only upon completion of domestic 'homework' such hypothetical opportunity might become a reality.

Thus, 6-month temporary stay of contractual services suppliers may not be sufficient to perform contractual obligations. The same problem may occur with foreign contractual services suppliers performing services in Ukraine.

Specific problems of textile industry

The fieldwork discovered that textile industry of Ukraine is interested in cheaper raw materials. It was suggested that one way to make imported raw materials cheaper is to lower the import duties on raw materials. Notably, the textile industry is concerned with the import duties on leather.

Currently the hides, skins and leather are subject to the import duties established by the effective Law of Ukraine *"On Customs Tariff of Ukraine"* No. 584-VII dated 19.09.2013.The rates of the duties are different according to the origin of the products and degree of their processing. Below there are certain selected codes of the Ukrainian Classification of Goods for Foreign Economic Activities ("UCGFEA") for leather.

Code	Title	Duty rates			Additional basic units of measure
		Preferential	Incentive	Full	
4101	Raw hides and skins of bovine (including buffalo) or equine animals (fresh, or salted, dried, limed, pickled or otherwise preserved, but not tanned, parchment-dressed or further prepared), whether or not dehaired or split.		0%	0%	pce
4102	Raw skins of sheep or lambs (fresh, or salted, dried, limed, pickled or otherwise preserved, but not tanned, parchment dressed or further prepared), whether or not with wool on or split, other than those excluded by Note 1 (c) to this Chapter.		0%	0%	pce
4104	Tanned or crust hides and skins of bovine (including buffalo) or equine animals, without hair on, whether or not split, but not further prepared.		3%	3%	pce
4107	Leather further prepared after tanning or crusting, including parchment-dressed leather, of bovine (including buffalo) or equine animals, without hair on, whether or not split, other than leather of heading 41.14.		3%	3%	m^2
4114	Chamois (including combination chamois) leather; patent leather and patent laminated leather; metallized leather.		5%	5%	pce/m^2
	Composition leather with a basis of leather or leather fiber, in slabs, sheets or strip, whether or not in rolls; parings and other waste of leather or of composition leather, not suitable for the manufacture of leather articles; leather dust, powder and flour.		10%	10%	

Therefore, current applied rates of import duties are relatively low. Moreover, according to the Tariff schedules of Ukraine attached to the Annex 1A of Title IV of the Association Agreement some import duty rates for hides, skins and leather shall remain the same and some shall be changed to 0% during the indicated transitional period. Hereinafter follows the representative collation of the duty rates from the Tariff schedules of Ukraine:

CN 2008	Description	Base rate	Transitional period
4101	Raw hides and skins of bovine (including buffalo) or equine animals (fresh, or salted, dried, limed, pickled or otherwise preserved, but not tanned, parchment-dressed or further prepared), whether or not dehaired or split.	0%	0
4103	Other raw hides and skins (fresh, or salted, dried, limed, pickled or otherwise preserved, but not tanned, parchment-dressed or further prepared), whether or not dehaired or split, other than those excluded by note 1(b) or 1 (c) to this chapter:	3%	0
4104 41 51 00	Whole hides and skins, of a unit surface area exceeding 28 square feet (2,6 m^2)	3%	3
4107 12 99 00	Equine leather	3%	3
4107 99 10 00	Bovine (including buffalo) leather	3%	3
4114 10	Chamois (including combination chamois) leather	5%	0
4115	Composition leather with a basis of leather or leather fibre, in slabs, sheets or strip, whether or not in rolls; parings and other waste of leather or of composition leather, not suitable for the manufacture of leather articles; leather dust, powder and flour.	10%	0

It is questionable whether the elimination of import duties on leather will make Ukrainian textile producers better off. The devaluation of the national currency of Ukraine made imported raw materials extremely expensive. The abolition of any import duties will lead to the decrease of budget revenues and requires consultations between the industry concerned and the Government of Ukraine.

Moreover, from 1 January 2016 Ukraine will cancel the import surcharge, which has been applied to almost all imported products since 25 February 2015 for balance of payment purposes. The cancelation of the import surcharge will make imported products cheaper.

Additionally, the textile industry (as well as representatives of horticulture and vegetable growing) accentuates the need for the government to elaborate the programs of support in the form of special tax exemptions for the suppliers of raw materials, VAT cancellation for certain producers, price support and conclusion on long-term agreements, etc.

It is worth mentioning that Ukraine as a WTO member shall staunchly adhere to the *WTO Agreement on Subsidies and Countervailing Measures* (the "**SCM Agreement**"). Pursuant to SCM Art.1.1 a measure has to be a 1) financial contribution by a government or price/income support; 2) that confers a benefit and 3) is specific in order to be a subsidy covered by the SCM Agreement. Any export contingent or import substitution subsidies are prohibited. Other specific subsidies are actionable (i.e. they could be challenged in the WTO or countervailed). Article 5(c) of the SCM Agreement states that no Member should cause, through the use of any subsidy, adverse effects to the interests of other Members, for example serious prejudice to the interests of another Member. Article 6 of the SCM Agreement explains what can be considered as "serious prejudice".

The subsidization of agricultural products is subject to separate rules. In providing domestic support to the agricultural sector, the annual amount of support shall not exceed the total aggregate measures of support (total AMS), stipulated by Section I of Part IV of the Ukraine's Schedule (3,043.4 million UAH).

Specific problems of horticulture and vegetable growing

Representatives of horticulture and vegetable growing industries pointed out the problem with certification of pesticide, i.e. due to the complicated procedure of certification and state registration Ukrainian industries have limited access to pesticides and even certified in the EU additives must be registered in Ukraine.

The issues of importation, production, conservation and usage of pesticides is regulated by the Law of Ukraine *"On Pesticides and Agrochemicals"* No. 86/95-BP dated 02.03.1995 (the **"Pesticide Law**") and a number of other regulatory acts (the Resolutions of the Cabinet of Ministers of Ukraine).

According to Article 4 of the *Pesticide Law*, the importation of pesticides (except those for conduct of state examination and scientific research), production (with the same exception), trade in pesticides and their usage is prohibited prior to the state registration. In the version of the *Pesticide Law* prior to 12 February 2015, there was established that the state registration is a basis for conduct of certification of pesticides (Article 7, paragraph 9) and of technical facilities of usage of pesticides (Article 8, paragraph 6) for the purposes of the state registration. Moreover, pursuant to Article 10, paragraph 5, there was explicitly stated that the certification of pesticides on conformity with the requirements of state standards and other regulatory documents shall be conducted within the Ukrainian State Certification System (UkrSEPRO).

On 12 February 2015, according to the adoption of the Law of Ukraine *"On Amendments to some Legislative Acts of Ukraine Regarding Facilitation of Conditions of Doing Business (Deregulation)"* No.19-VIII dated 12.02.2015, all the mentioned provisions were excluded. Therefore, pesticides are not subject to the mandatory state certification and they may be certified voluntary.

According to the effective Law of Ukraine *"On Confirmation of Conformity"* No. 2406-III dated 17.05.2001 and the effective Decree of the Cabinet of Ministers of Ukraine *"On*

Standardization and Certification" No.46-93 dated 10.05.1993 the certification in Ukraine, both voluntary and mandatory, shall be conducted by the certification bodies, authorized by the central executive state authority on standardization and certification which is the Ministry of Economic Development and Trade of Ukraine.

Pursuant to the Law of Ukraine "*On technical regulations and conformity assessment"* No. 124-VIII dated 15.01.2015, which shall come into force on 10.02.2016, the certification shall be divided into voluntary certification and certification required by the technical regulations. Such authorities, as authorized conformity assessment authorities, recognized independent organizations and accredited laboratories of producers, shall conduct both types of certification. All types of conformity assessment authorities will require accreditation and authorization by the Ministry of Economic Development and Trade of Ukraine, as the central executive body authorized to designate the conformity assessment authorities.

Another problem relates to the operation of organic products in Ukraine and price policy of organic products. The issues related to the production of organic products in Ukraine are regulated by the Law of Ukraine *"On Production and Circulation of the Organic Agricultural Products and Raw Materials"* No. 425-VII dated 03.09.2013 (the "**Organic Products Law**"). The "production of the organic products" is defined as the production without usage of chemical fertilizers, pesticides, GMO, conservants, etc. on each production phase. The "organic products" and "organic raw materials" are defined as products and raw materials obtained as a result of the certified production according to the requirements of the *Organic Products Law* (definitions provided according to Article 1 of the *Organic Products Law*). The production of organic products in Ukraine is subject to the certification and state registration.

According to Article 24 of the *Organic Products Law*, the certification is conducted as a result of the conformity assessment procedures. Upon the application of the entity on switch to the production of organic products, the certification auditor, acting pursuant to the Law of Ukraine *"On Confirmation of Conformity"* No. 2406-III dated 17.05.2001, conducts the assessment of production conformity with the requirements of the state standards and draws up the report. The conformity assessment authorities take the decision on the basis of this report whether to grant the applicant the conformity certificate or to deny the application on the basis of the exhaustive list of reasons set forth in Article 24.

Pursuant to Article 13 of the *Organic Products Law*, the producers, which obtained the conformity certificate, shall be placed into the Register of producers of organic products (raw materials). The producers, which are not placed into this register, do not have the right to produce organic products and raw materials.

Pursuant to Article 24, paragraph 7 of the *Organic Products Law*, obtaining of the conformity certificate grants the right to label the products. According to Article 29 of the *Organic Products Law* labeling and usage of the state logotype is mandatory. The state logotype must consist of the note *"organic product"* and the relevant graphic image. The usage of private logotypes is also permitted.

Pursuant to Article 29 paragraph 7, the usage of notes *"organic", "biodynamic', "biological", "ecofriendly",* other notes with prefixes *"bio-"* and *"eco-"* is prohibited. The imported organic products labeled with the mentioned notes should be marked as *"organic products"* in the Ukrainian translation.

According to the effective Order of the Ministry of Agrarian Policy and Food of Ukraine *"On Approval of the Action Plan on Approximation of the Legislation of Ukraine with the Law of European Union in Agricultural Sector"* No. 15 dated 19.01.2015, the adoption of the new version of the Law shall be provided until December 2017.

Additionally, in September 2015, the new Law on Food Safety entered into force (No.1602 – VII effective from 20.09.2015). It is based on the principle "from farm to fork" and introduces all basic EU standards applicable to the cycle of production, processing and distribution of agricultural food (e.g., the principles of HACCP, responsibility of business operators, traceability).

Therefore, the legislation of Ukraine contains a detailed provisions related to the production and marketing of the organic products. However, there are no state programs of price policy support for the organic products. Therefore, it is highly important to incentivize producers to use organic raw materials for production and conclude long-term contracts. Given the existed legislative framework, such incentives might be provided by the Government of Ukraine upon elaboration of the respective support programs. Meanwhile, such programs should be elaborated given the existing provisions of the GATT and SCM Agreement, as the price support might constitute a subsidy. Article XVI of GATT 1994 regards a subsidy as any form of income or price support, which operates directly or indirectly to increase exports of any product from, or to reduce imports of any product into country's territory. In *China-GOES* the panel found that the term "price support" only captures government measures that set or target a given price[24]. Price support includes direct government intervention in the market with the design to fix the price of a good at a particular level[25]. Therefore, any governmental programs should be designed carefully given the existing WTO obligations of Ukraine.

Export Promotion and harmonization of legislation

Despite favorable natural resources, Ukraine does not fully take advantage of its agricultural and industrial potential. In order to promote exports of Ukrainian products (including selected value-added chains) the following steps should be undertaken:

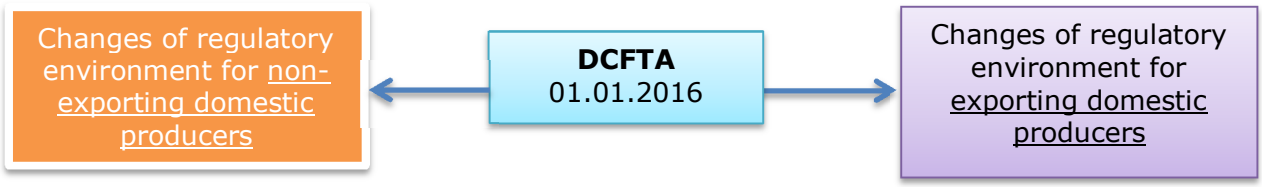
- Elaboration of the national export strategy;
- Deregulation and delegation of certain state functions to self-regulated organizations (e.g., monitoring the quality and safety of certain agricultural products);
- Cancelation or simplification of export revenue sale rule;
- Improvement of the existing VAT refund procedures for exporters;
- Amendment of the domestic legislation of Ukraine to ensure the access to global procurement market upon Ukraine's accession to the GPA;
- Eradication of corruption and other irregularities in the practice of customs authorities of Ukraine;
- Elaboration of the support programs within the framework of the WTO obligations of Ukraine (including consultations concerning the temporary elimination of import duties on certain raw materials);
- Harmonization of the Ukrainian legislation with the European standards.

[24] See Panel Report, *China — Countervailing and Anti-Dumping Duties on Grain Oriented Flat-rolled Electrical Steel from the United States*, para. 7.84.

[25] Ibid., para. 7.85.

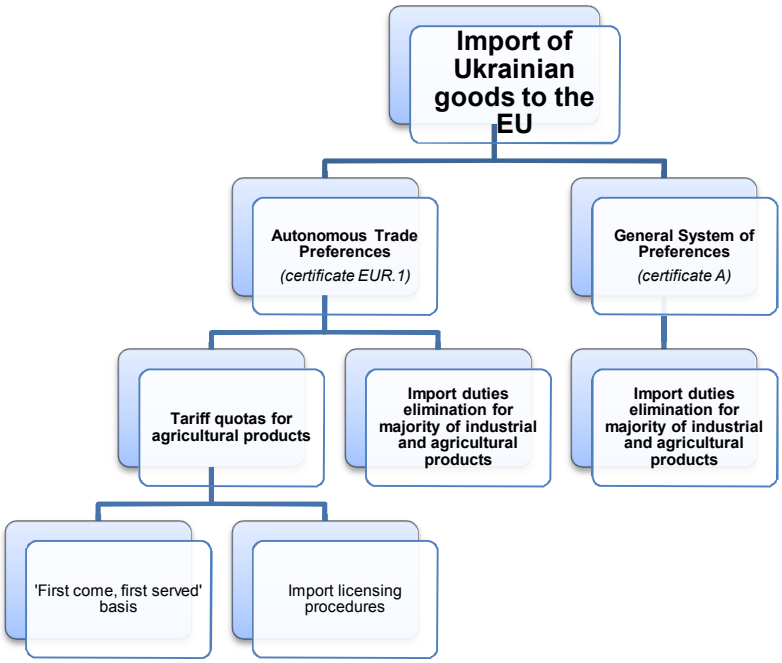
Notably, as of 1 January 2016, the Association Agreement between the EU and Ukraine will finally take effect. Besides the tariff reduction, the Association Agreement provides for a roadmap on vitally needed domestic reforms that have to be implemented in order to ensure security, stability and prosperity of Ukraine. In the scopes of economic dimension, the Association Agreement envisages a sharp timescale for approximation of legal environment towards modernizing the economy and improvement of investment climate in Ukraine.

The Association Agreement implementation requires for the transformation in such sectors as customs cooperation and trade facilitation; rules of origin; trade relations in the energy sector, establishment and investment of services, recognition, capital movements and payments; competition policy; IP rights, government procurement, trade and sustainable development, transparency, dispute settlement, etc. Effective *Deep and Comprehensive Free Trade Area* between Ukraine and the EU ("**DCFTA**") will change the ordinary business patterns of exporting and non-exporting enterprises. The Association Agreement concerns all and sundry. Thus, its effect will be pertinent also for enterprises not engaged in export activities.

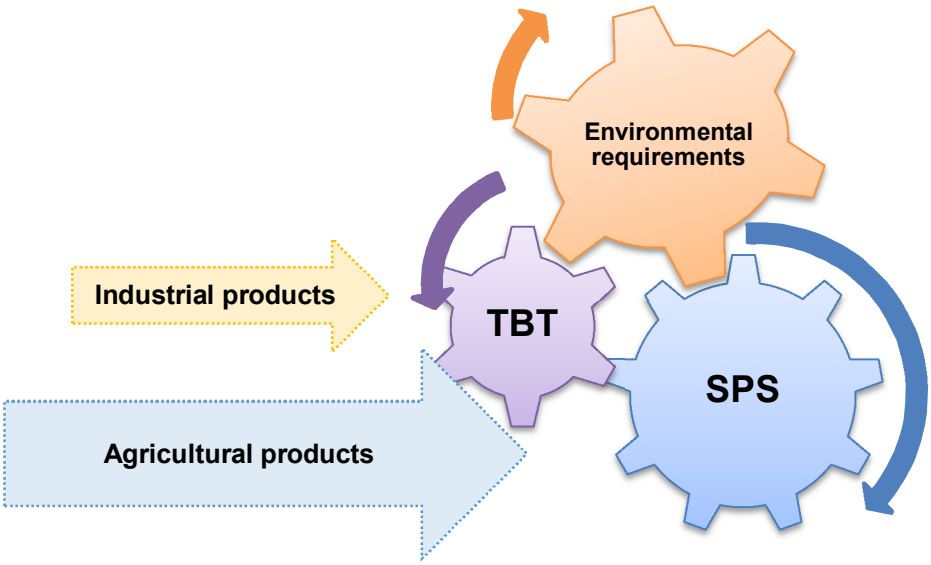


The main problem, which closes the EU markets to the majority of Ukrainian industrial and agricultural goods, is non-tariff barriers. This issue is of paramount importance for the elected value-added chains.

In this respect, DCFTA provides for a completely new approach towards the technical regulations ("**TBT**") and sanitary and phytosanitary measures ("**SPS**"). This new approach has to ensure the appropriate level of consumers' protection without placing the excessive regulatory burden on business. It is important to note that new regulatory environment in TBT and SPS realms will affect not only exporters but also all domestic producers. Upon completion of the process of legislative alignment, all products will have to be produced according to new rules irrespective of their final destination (domestic or foreign market).



In this respect the list of the EU TBT and SPS legislation to be adopted by Ukraine is defined in Annexes III-V to the Association Agreement. In particular, after the Association Agreement enters into force, the EU and Ukraine shall add an *Agreement on Conformity Assessment and Acceptance of Industrial Products* (ACAA) as a Protocol to the Association Agreement. The ACAA is a type of a bilateral Mutual Recognition Agreement that will aim to align the legislative system and infrastructure of Ukraine with those of the EU and provide the Ukrainian industries an easier access to conformity assessment. As to the SPS regime, not later than three months after the entry into force of the Association Agreement, Ukraine shall submit to the SPS Sub-Committee a comprehensive strategy for the implementation of the SPS regulation. Thus, the Association Agreement calls for the introduction of the comprehensive SPS standards, applicable through the whole food supply chain "from farm to fork".



The timescale in which the domestic laws have to be approximated was outlined in the Action Plan for the Implementation of the Association Agreement for 2014-2017 approved by the Regulation of the Cabinet of Ministers of Ukraine No.847 dated 17 September 2014.

6.2 Export of Ukrainian Products to the EU: Institutional Framework

Both desk research and field study of the issue provide with the following structure of institutional framework for export promotion, which is common for all the selected value chains:

1. Ministry for Foreign Affairs of Ukraine (MFA) – Council of Exporters at the MFA - economic units within the diplomatic missions of Ukraine abroad.
2. Ministry for Economic Development and Trade (MEDT) – Council of Exporters at the MEDT – bilateral intergovernmental commissions – bilateral business councils – trade representations abroad (pending on approval of the President of Ukraine, are expected in early 2016) – SE "Derzhzovnishinform".
3. Ukrainian Chamber of Commerce and Industry (national level) and regional Chambers of Commerce and Industries (regional level).
4. Departments for External Economic Activities of Regional State Administrations (regional level).
5. Customs Service and its regional and local branches.
6. Export Credit Agency (perspective institutional set up).
7. Mission of the European Union in Ukraine.
8. EU Import Promotion Institutions.
9. Other donors, which support export promotion in Ukraine (USAID, World Bank).
10. Profile Industry Associations.

Main problem with the given structure is that it is not a hierarchical one, but rather loose. Each of the institution performs it role quite autonomously with some overlapping of the functions by the ministries.

6.2.1 Description of major functions of the listed institutions, responsible for export promotion in Ukraine and their practical role

1. Ministry of Foreign Affairs of Ukraine (MFA) – Council of Exporters at the MFA - economic units within the diplomatic missions of Ukraine abroad

Under current Ukrainian legislation MFA plays a pivotal role in export promotion of Ukraine. The Ministry enjoys a leading coordination role in external relations (economic and trade relations included) and participates in implementation of foreign economic policy of Ukraine. In year 2010 trade and economic missions of Ukraine (governmental foreign representation offices for external economic activity of Ukraine, which fell under the competence of the Ministry for Economic Development and Trade) were abolished. Instead, economic units of diplomatic missions of Ukraine abroad were enriched with the personnel of trade and economic missions, who stayed there by the end of their posting abroad. With a view of strict limits on spending of state budget of Ukraine, there have been a number of non-replacements of rotated

diplomats and specialists within diplomatic missions. A lot of them have been taken at the expense of the then personnel of trade and economic missions. As a result nowadays there is a significant shortage of economic specialists in diplomatic missions abroad, who could deal with export promotion.

Moreover, given the nature of diplomatic work, there are strict limitations under Vienna Convention of 1961 for commercial activities of the staff of diplomatic missions. Therefore, this institutional element has very narrow scope of possible involvement into commercial activity and export promotion of Ukrainian companies abroad, limited to predominantly informative functions on general opportunities for export, inter alia international trade shows and exhibitions.

The MFA has also established a Council of Exporters, which includes major exporting companies of Ukraine. The Council sits regularly (every 4-6 months) and discusses problems, which impede exports. However the nature of that institution is more of recommendatory character. It issues recommended actions but has limited opportunity to influence export policy at a governmental level.

2. *Ministry for Economic Development and Trade (MEDT) – Council of Exporters at the MEDT – bilateral intergovernmental commissions – bilateral business councils – trade representations abroad (pending on approval of the President of Ukraine are expected in early 2016) – SE "Derzhzovnishinform"*

In comparison to the MFA the MEDT has more competence in defining external economic policy. According to the definition of its functions the MEDT is responsible for formulation and actual implementation of external economic policy.
On the other hand, with the abolition of trade and economic missions in 2010, the MEDT has lost their instrument to perform these functions abroad. Current level of cooperation between the MFA and the MEDT is rather insufficient and should be substantially improved.

In November 2014 the Government of Ukraine introduced a position of Trade Representative of Ukraine - Deputy Minister for Economy and Trade. Establishment of this position has helped the foreign trade and economic policy of Ukraine to be better articulated at a governmental level. Yet, an absence of mechanisms to execute respective MEDT decisions abroad substantially limits the efficiency of MEDT in that sphere.

In November 2015 the Prime-Minister of Ukraine called for an establishment of governmental trade representation offices (TRO) abroad, which would fall under the auspices of the MEDT. It is expected that first 7 such TROs should be set up in the nearest future in the countries and regions of most active and perspective export activity of Ukraine. Brussels (as EU capital) is also listed there. It is expected that such TROs should be dealing with issues of commercial diplomacy and export promotion, thus, effectively overcoming shortages of similar activity performed by the economic units of diplomatic missions. However, the decision is still pending on the position of the President of Ukraine.

In early 2015 the MEDT has also set up a respective Council of Exporters, which slightly varies in its composition from the similar structure of the MFA. Issues that MEDT brings forward to its Council of Exporters are of more applied nature (in comparison to those of the MFA). However, its decisions reflect the same custom of recommendations and, therefore, have limited effect onto general policy of export promotion.

The MEDT has also another two types of instruments of export promotion in its arsenal. These are – intergovernmental economic commissions (IEC) and bilateral business councils (BBC). IECs and BBCs are established with almost all the partner-countries of Ukraine. They should meet every 4-6 months and discuss trade and economic issues of bilateral interest. Ukrainian delegations for these events usually are comprised of both officials and businessmen (existing or potential exporters to a country). Meanwhile, given strict state budget limitations for 2014-2015, these types of export promotion activities have been substantially reduced in Ukraine, with some of IEC and BBC being frozen.

Yet, real practical export promotion effect from IEC and BBC activities has been minor, according to assessment of business, which participated in these formats. IEC and BBC meetings have been rather of official protocol nature with small practical component. Real problems of export activity had been rarely discussed in practical terms there and the business had minor influence over an agenda and conclusive documents of such meetings.

The MEDT is also responsible for facilitating participation of Ukrainian companies in international trade shows and exhibitions. Yet, for the same reason of limited state budget spending on these types of activities, this particular instrument of export promotion is substantially under-used for the time being.

One of the strengths of the MEDT is quite good general informative component on export opportunities. Its structural unit – state enterprise "Derzhzovnishinform" - provides with general overview of markets and trends in export-import activity. It also produces market analysis and research on certain product lines (both, as general papers and individual research made upon request). On the other hand, this information is not sufficient enough for a Ukrainian company to design a proper market penetration strategy.

3. Ukrainian Chamber of Commerce and Industry (national level) and regional Chambers of Commerce and Industries (regional level)

Ukrainian Chamber of Commerce and Industry (UCCI) is another institution, which is aimed at facilitation of export activity of the Ukrainian companies. UCCI has rather developed structure of regional representation in Ukraine (each oblast'/region has its own chamber of commerce and industry (RCCI)). It also has a number of individual representatives of UCCI abroad, which are not properly institutionalized, but rather formally presented by physical persons.

Despite quiet wide scope of competence on export promotion, UCCI has limited budget available to perform these functions effectively. Membership in UCCI is not

compulsory for the Ukrainian companies, so that many of them (predominantly, large business) do not participate in UCCI. Major clients of UCCI and RCCI are SMEs, who are widely using information on international exhibition and trade shows, as well as participate in different seminars and other education programs on export development.

On the other hand, UCCI and RCCIs are rather weak in proper expertise on certain export markets and could hardly be seen as solid source for initial market analysis in order to design a proper market penetration strategy for a company.

4. Departments for External Economic Activities of Regional State Administrations (regional level)

Problem with this type of institutional component for export promotion is that the structure and functions are not unified among the regional state administrations in Ukraine. In some regions (f.e. L'vivska oblast') there is a special Department of External Economic Activity, which covers both issues of export promotion and foreign investments. In others (for instance, Vynnytskaya oblast') there is a general Department on Commerce and Pricing, which also covers export/import activity, but this element is rather under-developed there.

In most cases, companies turn to these structures in order to get a letter on visa support, if they travel on business abroad, then for real assistance in export promotion.

5. Customs Service and its regional and local branches

Custom Service of Ukraine is placed here within the institutional structure of export, because it is an important element for facilitating export activity. By its nature, this institution has nothing to do with export promotion, but rather with streamlining and simplifying administrative procedures for goods and services once they cross the border of Ukraine.

Yet, at present time, the activity of this institution and its regional and local branches creates rather more obstacles for Ukrainian export than facilitates it (a more detailed description of imperfections of modern customs services in Ukraine is given in Chapter on Regulatory Framework).

6. Export Credit Agency (perspective institutional set up)

Perspective establishment of an export credit agency (ECA) in Ukraine is considered as an effective tool to stimulate export activity in Ukraine, especially those of SMEs. According to assessments of PriceWaterhouseCoopers Ltd, it is expected that upon setting up of the ECA in Ukraine, export activity will raise on 1,27%.

In November 2015 a draft law on ECA was passed in first reading. It is expected that all necessary legislative procedures will have been completed by early 2016 and the Agency will eventually be set up in first half of 2016.

7. Mission of the European Union in Ukraine

This institution is considered as one, which indirectly, but could stimulate export activity of Ukrainian companies to the EU. It performs informative, consultative and educational functions for Ukrainian companies, providing them with the information on general EU practices, rules and requirements.

On the other hand, Ukrainian companies find this information of a very general nature, which does not help them to design a clear cut strategy of market penetration and to find proper business-partner in EU. Suggested EU web-sites are considered as being quiet clumsy and non-friendly to user. Moreover, absence of respective information in Ukrainian or Russian language makes it much more difficult for Ukrainian companies to use respective EU web-resources.

8. EU Import Promotion Institutions

Most of Ukrainian companies do not know anything about activities of EU Import Promotion Institutions, which operate in Ukraine. Consequently, there has been minor knowledge about opportunities to enter EU market with the help of these instruments.

In best cases, economic and commercial missions of some EU member-states (or linked to them bilateral chambers of commerce) are quiet noticeably presented in Ukraine and therefore, efficient in facilitating trade promotion (e.g. Bureau of Delegate of German Economy in Ukraine). Yet, their activity is under-sufficient in terms of proper promotion of EU market opportunities for Ukrainian companies on a large scale.

9. Other donors, which support export promotion in Ukraine (USAID, World Bank)

There are a number of international donor institutions and technical assistance offices of European countries in Ukraine, which have some running projects on export promotion. For instance, as part of the long-standing Export Development Project, the World Bank, working through local banks, provides long-term foreign currency financing to Ukrainian exporters, which is especially important during times of financial crisis.

There are a few other sectoral projects aimed at export facilitation (e.g. project of ecology-friendly diary products of Ukraine for Swiss market, supported by Swiss Cooperation Bureau in Ukraine). Yet, these projects of applied nature are very limited in numbers.

Most of trade promotion technical assistance projects in Ukraine aimed at policy development at a national level (alike current USAID-WNISEF project on National Export Strategy of Ukraine or previous SIDA projects on WTO and trade liberalization).

It has been identified that there is a substantial demand from the Ukrainian companies (especially SMEs) for more applied practical technical assistance projects on export promotion.

10.Profile Industry Associations

It has been discovered during the field study that professional industry associations in the selected 5 value chains play minor role in assisting profile companies in their export promotion. Being institutionally weak, these industry associations are predominantly non-attractive for the companies to join, as they cannot provide with explicit value added from their membership. As an illustration, in Association of Footwear Industry there are just around 20 members, while the industry is represented by more than 1500 enterprises.

In most cases individual companies are not interested to join industry associations, sticking to the principle of "autonomous self-existence". They openly admit that they do not see any use in joining such associations and prefer to act on their own.

On the other hand, during discussions over the first draft of this report the companies have expressed their interest in getting united into respective associations, which could be efficient and pro-active in promoting their good at the EU market. They admitted they are lacking proper institutional and administrative knowledge, but would be keen to get educated and would welcome repetive assistance from the profile EU institutions.

On a broader scale of different industries in Ukraine and their respective associations we may conclude that their BSOs are in most cases of purely nominal nature or they have been established in order to serve interests of particular company(ies), which take a lead in activities of these associations.

6.2.2 Specific problem in Ukrainian export legacy

The study has revealed the following typical challenges, which affect strong performance of Ukrainian companies, while undertaking their export activities.

1.2.1 Reliance on state and public institutions of export promotion as onto main actors, responsible for efficient export positioning of Ukrainian companies abroad;

1.2.2. Low personal responsibility of companies, who want to export, for their proper export strategy

It was customized in soviet Ukraine that state and government were in charge of all export-import activity of the country, providing with proper institutional support. For 24 years of Ukraine's independence quiet large number of companies (especially, SMEs in regions and rural areas) still have not developed strong perception that they themselves are in charge of their export strategy and should act rather independently, without relying on governmental bodies to do major part of export promotion on their behalf.

This explains certain inertia in approach of quite a lot of SMEs, which would potentially like to do export activity, but do not know from where to start. This is equally true for a number of those companies, who do export, but would like to raise proportion of their export in total sales. Such companies often complain on scarce information resources and low activity of the governmental institutions to support them. The problem lies, however, in differences in perception of major functions of governmental and public institutions in export promotion. Most of the companies would like to have not general, but tailor made information on potential export markets with proper analysis of marketing and recommendations for export development strategy in the interested field or with regard to a potentially interesting country or region. Moreover, they would often expect such services to be provided by the government on a pro-bono basis. They could hardly accept the idea that governmental and public institutions are not designed to do that, as these services are of commercial nature; or, at least, that these services should be paid for at a market competitive price.

The mentioned above approach is also responsible for low practical interest of a number of companies to look into opportunities suggested by the UA-EU DC FTA. Major excuse, which the companies have, refers to a statement that "nobody expects us there" or "we are not able to perform at EU market competitively". For some product lines this could be true, but false for the other. At least, we can qualify their approach as "passive" rather than "pro-active".

An important thing, which is needed, is to change the described negative paradigm of thinking of Ukrainian companies, wishing to enhance their export activity, especially onto the EU market.

However, during the discussions of the first draft of the report, some of the companies expressed their firm resolution to go ahead with their export activity despite minor support from the government and BSOs. Their major statement was "please,do not create obstacles; let us do our job by ourselves". It should be noed, however, that proportion of the companies with similar approach is quite low, but increasing.

6.2.3 Main problems that Ukrainian exporters experience while accessing EU markets

Research on all the five selected value chains, as well as more broad study of SMEs, who export or are potentially interested to export, revealed certain common problems, which affect their export performance. These could be grouped into the following main categories:

1) Adequate self-presentation of a company

- Language barrier (a lot of companies experience difficulties in foreign languages, even with English);
- Proper presentation of their product lines, including proper web-sites in English.

2) Financial means to support export promotion

- Lack of funding to undertake trade-missions and to participate in international trade-shows;
- Absence of instruments for financial support (affordable credits, insurance and guarantees to export contracts).

3) Information asymmetry

- Information access to main counterparts in the EU;
- Lack of knowledge of EU regulations and standards;
- Absence of information on existing market niches in the EU;
- No clear vision of an algorithm on how to enter EU market.

4) Regulatory constraints

- Value-added tax ("VAT") refund;
- Export revenue sale rule;
- Deficiencies of customs procedures.

5) Policy component

- Lack of coherent export strategy on national level and on industry level, which would help to identify a priority list of product lines and perspective markets.

It can be seen from the list above, that categories 2).-3). could be partially solved with the help of respective institutions, both Ukrainian and foreign.

Problems of category 1). could also be partially solvable with the help of respective training programs and coaching (possibly, via targeted technical assistance projects).

Categories 4).-5). fall under direct responsibility of Ukrainian authorities and require respective regulatory changes.

It should be noted that in significant number of cases Ukrainian companies tend to blame Ukrainian governmental institutions for the failure to provide them with proper services to support their export activity (a narrative for that is partially explained in sub-Section 1.2).

The main problem identified by Ukrainian companies with regard to efficiency of the institutions of export promotion in Ukraine relates to low practical assistance in finding new markets and customers.

6.2.4 Perspective Instruments to Facilitate Export Promotion in Ukraine (non-regulatory component)

Interviews undertaken for the research have identified the following instruments, which are considered to be effective tools for the immediate and short-term perspective of export promotion of Ukrainian goods to the EU**:**

I.Web-resources

1) User-friendly and simple EU-UA AA portal (interactive web-site) with an option of commercial enquiry point;
2) Modernized and enriched web-site of "Derzhzovnishinform";
3) Modernized and user-friendly MEDT web-site on export opportunities;
4) Development of e-commerce and international trade via Internet.

II. Activities

1) Sponsored participation in trade shows and international trade fairs;
2) Sectoral or industry trade missions of Ukrainian companies abroad;
3) Sectoral or industry investment missions to Ukraine;
4) Assistance in obtaining EU certification for Ukrainian goods;
5) Assistance in setting up pro-active Industry Associations to promote exports to the EU.

III. Educational and training programs

1) "Consultant" and coaching missions to Ukraine (sectoral or industry consultants on EU market opportunities for Ukrainian companies);
2) Educational seminars, which encourage direct B2B contacts with EU partners;
3) Educational seminars on "step-by-step" EU market penetration strategy;
4) Educational seminars on proper international self-presentation of a company.

APPENDIXES

Appendix 1

Ukrainian import of fresh fruits and vegetables

Fresh fruits and vegetables imports from EU/EFTA amounted to approximately 45.0% of the total value of Ukrainian imports in 2014. Other key exporter was Asia (87.8 mln. EUR or 44.0%). Together, these regions account for almost 89% of imports.

In 2010-2014 there was the significant import increase from Asia and EU/EFTA (CAGR 7.6% and 3.2% respectively), while import from CIS and Russia decreased (CAGR 12.0% and 21.5% respectively).

In value terms, the largest increase occurred from Asia (+22 mln. EUR) and EU/EFTA (+11 mln. EUR).

Table 1.1

Ukraine's import of fresh fruits and vegetables by main destinations in 2010-2014*

Indicator	Region	2010	2011	2012	2013	2014	CAGR, %
Value, 000 Euro	EU/EFTA	79 195	69 654	126 256	91 313	89 887	3,2%
	Asia	65 500	60 168	112 065	122 920	87 838	7,6%
	CIS	11 386	7 806	18 880	19 587	6 813	-12,0%
	Other	7 987	4 852	11 085	14 673	7 367	-2,0%
	Africa	6 453	6 819	4 892	6 064	4 713	-7,6%
	America	1 886	2 018	3 905	4 973	2 866	11,0%
	Russia	256	133	44	46	97	-21,5%
	TOTAL	**172 661**	**151 451**	**277 127**	**259 576**	**199 582**	**3,7%**
Weight, tons	EU/EFTA	144 328	129 920	130 394	87 785	127 733	-3,0%
	Asia	108 835	126 277	112 154	112 685	97 629	-2,7%
	CIS	24 860	14 685	16 663	17 550	7 516	-25,8%
	Other	19 782	11 169	11 518	14 869	9 770	-16,2%
	Africa	19 745	18 775	4 886	5 956	6 938	-23,0%
	America	2 008	2 653	3 414	3 763	2 177	2,0%
	Russia	1 185	298	20	81	322	-27,8%
	TOTAL	**320 743**	**303 778**	**279 049**	**242 690**	**252 085**	**-5,8%**

Source: State Statistic Service of Ukraine
** - excluding apples, pears and tropical fruits*

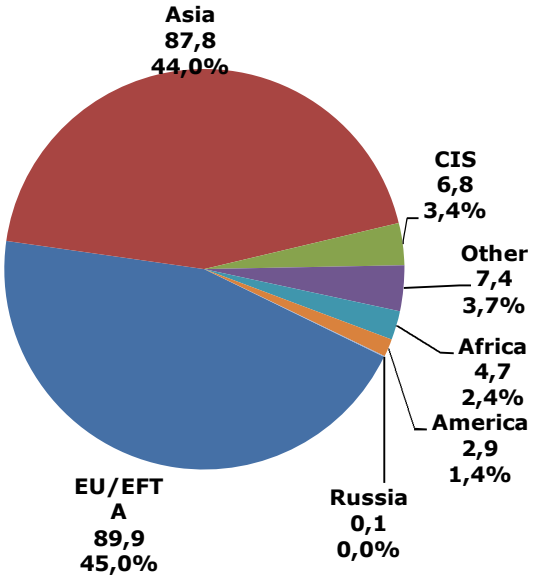


Figure 1.1- Ukrainian import of fresh fruits and vegetables in 2014, mln. EUR

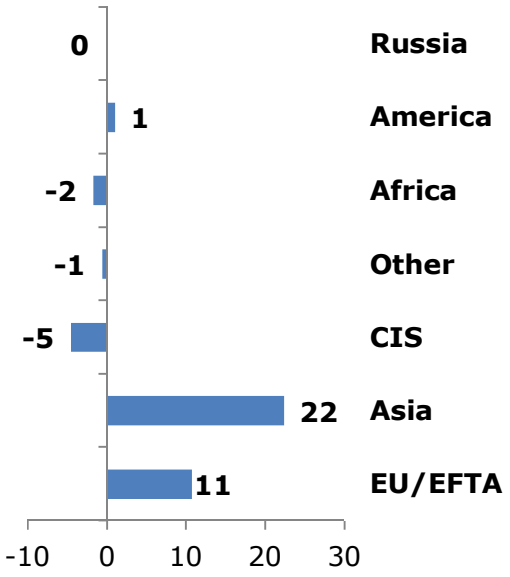


Figure 1.2– Increase of Ukrainian import of fresh fruits and vegetables in 2010-2014, mln. EUR

The main export product groups are tomatoes (41.5 mln. EUR or 20.9% in 2014), tree and bush fruits (33.4 mln. EUR or 16.7%), nectarines (32.1 mln. EUR or 16.1%) and grapes (21.5 mln. EUR or 10.8%) which in 2014 accounted for 65% of imports.

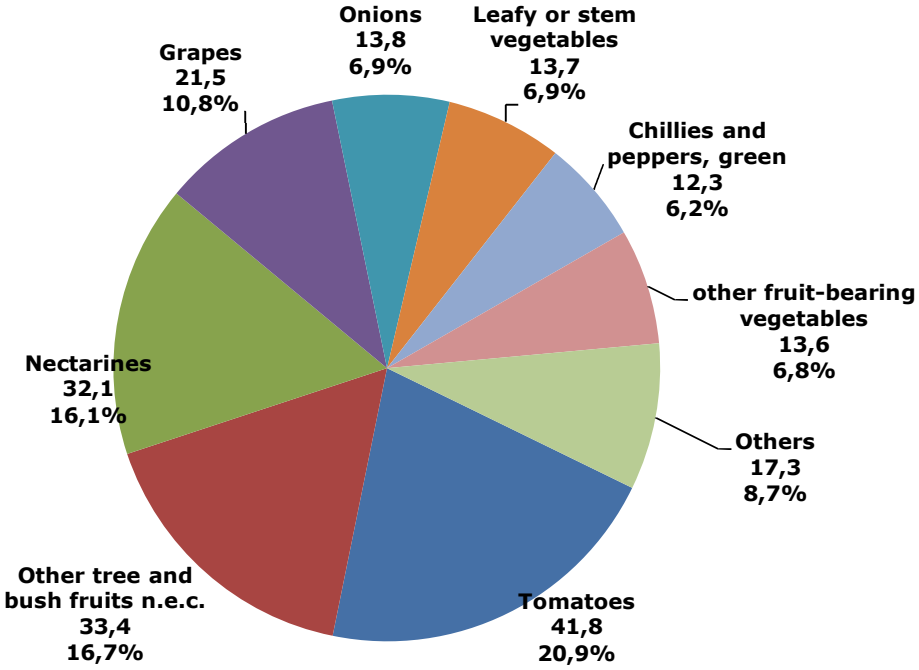


Figure 1.3- Ukrainian import of fresh fruits and vegetables by main product groups in 2014, mln. EUR

In 2010-2014 there was a significant exports increase of a majority of product groups (the largest in the sector of leafy or stem vegetables and fruit-bearing

vegetables- CAGR 10.4% and 9.4% respectively), while the CAGR of mushrooms and melons decreased (-68.1% and -16.9% respectively).

Table 1.2

Ukraine's import of fresh fruits and vegetables by main product groups in 2010-2014*

Indicator	Region	2010	2011	2012	2013	2014	CAGR, %
Value, 000 Euro	Other fruit-bearing vegetables	45 685	45 788	77 352	93 081	65 443	9,4%
	Stone fruits	33 259	25 399	72 391	35 037	36 673	2,5%
	Other tree and bush fruits n.e.c.	24 099	23 037	56 206	63 001	33 408	8,5%
	Root, bulb or tuberous vegetables	23 217	13 784	6 428	9 256	17 430	-6,9%
	Grapes	28 105	20 384	46 846	36 708	21 529	-6,4%
	Leafy or stem vegetables	9 246	10 032	9 569	14 961	13 713	10,4%
	Potatoes and other edible roots and tubers with high starch or inulin content	6 663	11 269	4 603	3 800	9 317	8,7%
	Berries and the fruits of the genus vaccinium	1 125	1 006	2 590	2 186	999	-2,9%
	Vegetables, fresh, n.e.c.	255	489	722	1 114	857	35,5%
	Melons	415	208	357	419	198	-16,9%
	Mushrooms and truffles	580	44	62	9	6	-68,1%
	Green leguminous vegetables	12	12	1	2	10	-5,4%
	Total	172 661	151 451	277 127	259 576	199 582	3,7%
Weight, tons	Other fruit-bearing vegetables	71 861	82 044	75 126	80 760	68 485	-1,2%
	Stone fruits	42 971	46 465	84 415	42 410	48 181	2,9%
	Other tree and bush fruits n.e.c.	34 264	39 660	46 137	50 374	28 543	-4,5%
	Root, bulb or tuberous vegetables	82 118	46 382	9 982	12 908	39 388	-16,8%
	Grapes	38 849	39 134	43 900	33 808	24 143	-11,2%
	Leafy or stem vegetables	28 672	24 526	10 840	14 953	20 056	-8,5%
	Potatoes and other edible roots and tubers with high starch or inulin content	19 404	23 847	6 272	5 180	21 840	3,0%
	Berries and the	809	795	1 386	1 145	566	-8,5%

Indicator	Region	2010	2011	2012	2013	2014	CAGR, %
	fruits of the genus vaccinium						
	Vegetables, fresh, n.e.c.	271	545	585	833	655	24,7%
	Melons	562	320	341	315	221	-20,8%
	Mushrooms and truffles	946	50	64	3	2	-79,1%
	Green leguminous vegetables	15	10	1	2	5	-22,8%
	Total	320 743	303 778	279 049	242 690	252 085	-5,8%

Source: State Statistic Service of Ukraine
** - excluding apples, pears and tropical fruits*

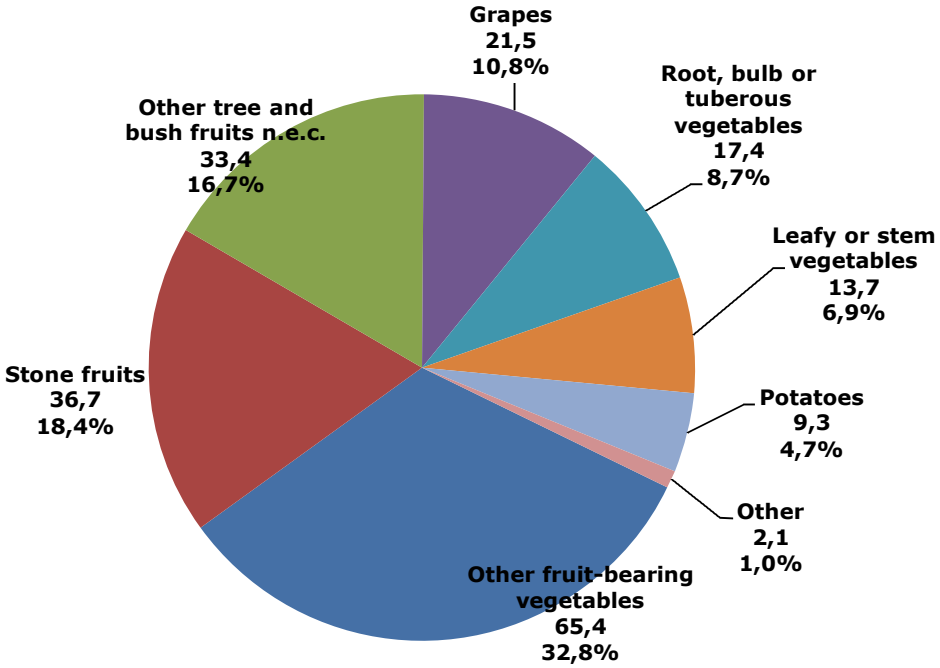


Figure 1.4- Ukrainian import of fresh fruits and vegetables by main product groups in 2014, mln. EUR

Table 1.3

Ukraine's import of fresh fruits and vegetables by main product groups and commodity items in 2010-2014*

Indicator	Group	Commodity item	CAGR in 2010-2014	2014							
				TOTAL	EU/ EFTA	Russia	CIS	Asia	Africa	America	Other
Value, 000 Euro	Other fruit-bearing vegetables	Tomatoes	8,8%	**41 811**	7 770			33 414	613	0	14
		Cucumbers and gherkins	5,3%	**10 005**	329			9 668		0	8
		Chillies and peppers, green (only capsicum)	15,8%	**12 289**	6 842			5 433	14	0	
		Eggplants (aubergines)	11,4%	**1 337**	1 097			234	7		
		Total	9,4%	**65 443**	16 037			48 749	634	0	22
	Stone fruits	Nectarines	2,6%	**32 142**	29 432		282	708	2	3	1 716
		Apricots	-0,9%	**1 990**	1 310			242	1		437
		Sloes	4,3%	**2 221**	1 834		292	13	47	2	32
		Cherries	4,9%	**319**	270			32		7	11
		Total	2,5%	**36 673**	32 845		574	996	50	13	2 196
	Other tree and bush fruits n.e.c.	Other tree and bush fruits n.e.c.	8,5%	**33 408**	12 849		5 328	13 058	373	710	1 091
	Root, bulb or tuberous vegetables	Onions	2,6%	**13 770**	8 551	3	16	3 316	1 861	11	12
		Garlic	-10,1%	**2 801**	73			2 657	71	0	
		Carrots and turnips	-50,9%	**260**	167			93	0	0	
		Other root, bulb or tuberous vegetables (without high starch or inulin content)	-30,1%	**442**	174			267	1		
		Leeks and other alliaceous vegetables	-3,2%	**156**	151			5	0		
		Total	-6,9%	**17 430**	9 116	3	16	6 338	1 934	11	12
	Grapes	Other grapes, fresh	-6,4%	**21 529**	2 910		525	15 224	925	1 921	24
		Total	-6,4%	**21 529**	2 910		525	15 224	925	1 921	24
	Leafy or stem vegetables	Cabbages	-7,5%	**3 240**	1 231	14			1		1 995
		Artichokes	21,8%	**5 097**	666		306	2 120	13	2	1 992
		Lettuce	20,1%	**3 210**	3 205		3	1			
		Cauliflowers and broccoli	15,7%	**1 597**	1 571			25			1

Indicator	Group	Commodity item	CAGR in 2010-2014	2014							
				TOTAL	EU/ EFTA	Russia	CIS	Asia	Africa	America	Other
		Chicory	117,0%	**340**	340			0			
		Asparagus	-0,3%	**60**	3			5		52	
		Spinach	158,5%	**167**	167						
		Total	10,4%	**13 713**	7 184	14	309	2 151	13	54	3 988
	Potatoes and other edible roots and tubers with high starch or inulin content	Potatoes	8,8%	**9 317**	7 420	80	15	1 018	744	4	35
		Sweet potatoes	-0,7%	**0**				0		0	
		Other edible roots and tubers with high starch or inulin content	-100,0%								
		Total	8,7%	**9 317**	7 420	80	15	1 018	744	4	35
	Berries and the fruits of the genus vaccinium	Strawberries	-5,8%	**779**	699			44	33	2	
		Raspberries	-2,3%	**87**	46				3	38	
		Other berries, the fruits of the genus vaccinium n.e.c.	34,0%	**133**	100				3	31	
		Total	-2,9%	**999**	845			44	39	71	
	Vegetables, fresh, n.e.c.	Vegetables, fresh, n.e.c.	35,5%	**857**	644			213			
		Total	35,5%	**857**	644			213			
	Melons	Watermelons	-24,8%	**74**	11			37	0	25	
		Other melons	-9,2%	**124**	15		46	5	1	56	
		Total	-16,9%	**198**	27		46	43	1	81	
	Mushrooms and truffles	Mushrooms and truffles	-68,1%	**6**	3			3			
		Total	-68,1%	**6**	3			3			
	Green leguminous vegetables	Beans, green	-33,0%	**1**				1	0	0	
		Peas, green	7,2%	**8**	6				0	2	
		Other green leguminous vegetables	-	**0**				0			
		Total	-5,4%	**10**	6			1	1	2	
	TOTAL		3,7%	**199 582**	89 887	97	6 813	87 838	4 713	2 866	7 367

Indicator	Group	Commodity item	CAGR in 2010-2014	2014							
				TOTAL	EU/ EFTA	Russia	CIS	Asia	Africa	America	Other
Weight, tons	Other fruit-bearing vegetables	Tomatoes	-1,4%	**45 435**	7 607			37 254	556	0	17
		Cucumbers and gherkins	-6,4%	**10 830**	350			10 472		0	8
		Chillies and peppers, green (only capsicum)	7,0%	**11 063**	6 057			4 994	12	0	
		Eggplants (aubergines)	0,1%	**1 157**	944			213	0		
		Total	-1,2%	**68 485**	14 958			52 933	569	0	25
	Stone fruits	Nectarines	2,4%	**41 984**	38 282		385	1 035	2	4	2 276
		Apricots	-1,4%	**2 582**	1 638			362	1		581
		Sloes	14,4%	**2 928**	2 387		423	19	55	3	41
		Cherries	23,8%	**686**	640			31		6	9
		Total	2,9%	**48 181**	42 947		808	1 447	58	14	2 908
	Other tree and bush fruits n.e.c.	Other tree and bush fruits n.e.c.	-4,5%	**28 543**	10 033		5 625	10 380	281	478	1 745
		Total	-4,5%	**28 543**	10 033		5 625	10 380	281	478	1 745
	Root, bulb or tuberous vegetables	Onions	-5,5%	**33 397**	23 687	20	77	5 519	4 054	13	27
		Garlic	-20,9%	**4 236**	44			4 095	96	0	
		Carrots and turnips	-54,5%	**865**	700			165	0	0	
		Other root, bulb or tuberous vegetables	-47,3%	**710**	245			464	1		
		Leeks and other alliaceous vegetables	7,7%	**179**	176			4	0		
		Total	-16,8%	**39 388**	24 852	20	77	10 247	4 152	13	27
	Grapes	Other grapes, fresh	-11,2%	**24 143**	2 670		649	18 561	724	1 518	20
		Total	-11,2%	**24 143**	2 670		649	18 561	724	1 518	20
	Leafy or stem vegetables	Cabbages	-18,3%	**9 858**	6 766	29			1		3 062
		Artichokes	5,8%	**5 155**	642		217	2 348	12	2	1 934
		Lettuce	26,6%	**2 987**	2 985		2	1			
		Cauliflowers and broccoli	7,4%	**1 604**	1 580			23			1
		Chicory	111,1%	**266**	266			0			
		Asparagus	1,0%	**53**	3			4		46	

Indicator	Group	Commodity item	CAGR in 2010-2014	2014							
				TOTAL	EU/ EFTA	Russia	CIS	Asia	Africa	America	Other
		Spinach	99,5%	**133**	133						
		Total	-8,5%	**20 056**	12 374	29	219	2 376	13	48	4 997
	Potatoes and other edible roots and tubers	Potatoes	3,0%	**21 840**	18 906	273	41	1 446	1 120	5	48
		Sweet potatoes	-28,0%	**0**				0		0	
		Other edible roots and tubers with high starch or inulin content	-100,0%								
		Total	3,0%	**21 840**	18 906	273	41	1 446	1 120	6	48
	Berries and the fruits of the genus vaccinium	Strawberries	-11,7%	**425**	376			32	16	1	
		Raspberries	-7,8%	**51**	27				2	22	
		Other berries, the fruits of the genus vaccinium n.e.c.	24,4%	**90**	71				2	17	
		Total	-8,5%	**566**	474			32	19	41	
	Vegetables, fresh, n.e.c.	Vegetables, fresh, n.e.c.	24,7%	**655**	493			163			
		Total	24,7%	**655**	493			163			
	Melons	Watermelons	-32,2%	**65**	10			36	0	18	
		Other melons	-11,5%	**157**	13		96	5	1	40	
		Total	-20,8%	**221**	23		96	42	1	59	
	Mushrooms and truffles	Mushrooms and truffles	-79,1%	**2**	0			1			
		Total	-79,1%	**2**	0			1			
	Green leguminous vegetables	Beans, green	-41,5%	**1**				1	0	0	
		Peas, green	-3,5%	**4**	2				0	2	
		Other green leguminous vegetables	-	**0**				0			
		Total	-22,8%	**5**	2			1	1	2	
	TOTAL		-5,8%	**252 085**	127 733	322	7 516	97 629	6 938	2 177	9 770

Source: State Statistic Service of Ukraine
** - excluding apples, pears and tropical fruits*

Appendix 2

Ukrainian import of processed fruits and vegetables

Imports from EU/EFTA amounted to approximately 38.1% of the total value of Ukrainian imports in 2014. Other key exporters were Asia (88.8 mln. EUR or 36.9%), America (27.5 mln. EUR or 11.4%) and Russia (19.2 mln. EUR or 8.0%).

In 2010-2014 there was the significant import increase from Russia (CAGR 22,9%), while from other countries growth rates were not sufficient (America and EU/EFTA –CAGR 1.7% and 0.6% respectively) At the same time import from CIS and Asia decreased (CAGR 22,9%).

In value terms, the largest increase occurred from the Russia (+11 mln. EUR), and decrease from Asia and CIS (-3 mln. EUR both).

Table 2.1

Ukraine's import of processed fruits and vegetables by main destinations in 2010-2014

Indicator	Region	2010	2011	2012	2013	2014	CAGR, %
Value, 000 Euro	Asia	91 420	109 903	122 380	132 554	88 751	-0,7%
	EU/EFTA	89 447	97 784	106 021	108 105	91 686	0,6%
	America	25 644	28 649	35 055	36 007	27 462	1,7%
	Russia	8 399	10 131	14 701	31 435	19 177	22,9%
	CIS	12 888	16 375	13 215	12 804	9 985	-6,2%
	Other	3 166	4 015	6 310	6 859	2 737	-3,6%
	Africa	682	1 121	1 701	1 304	1 030	10,8%
	TOTAL	**231 646**	**267 978**	**299 383**	**329 068**	**240 829**	**1,0%**
Weight, tons	Asia	72 415	90 242	73 067	82 199	58 225	-5,3%
	EU/EFTA	84 524	85 306	81 455	84 449	72 084	-3,9%
	America	15 996	19 336	18 068	17 009	16 668	1,0%
	Russia	7 332	9 110	10 467	19 317	10 798	10,2%
	CIS	16 527	17 870	13 402	13 934	9 269	-13,5%
	Other	1 318	2 083	2 490	2 240	898	-9,1%
	Africa	599	1 527	1 598	976	812	7,9%
	TOTAL	**198 711**	**225 474**	**200 547**	**220 124**	**168 754**	**-4,0%**

Source: State Statistic Service of Ukraine

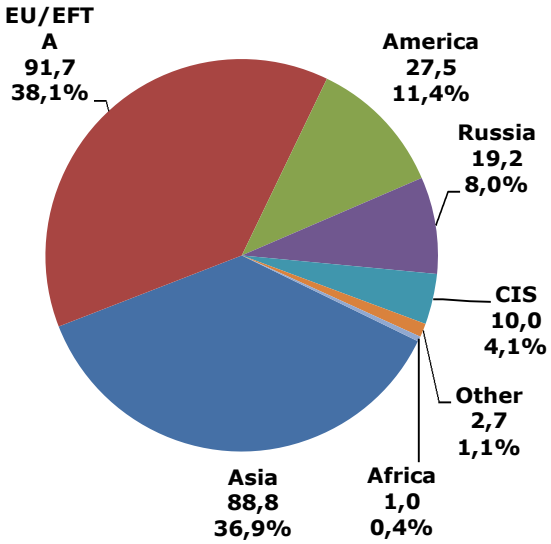


Figure 2.1 - Ukrainian import of processed fruits and vegetables in 2014, mln. EUR

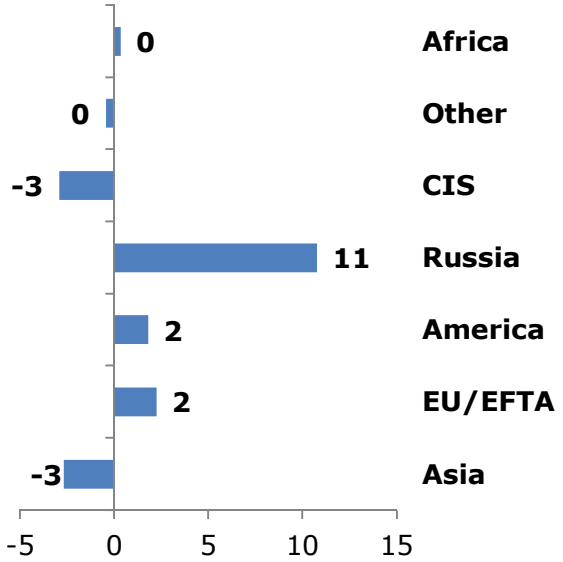


Figure 2.2 – Increase of Ukrainian processed fruits and vegetables import in 2010-2014, mln. EUR

The main export product groups are processed and preserved fruits and vegetables (172.5 mln. EUR or 45.7% in 2014), fruit and vegetable juices (134.4 mln. EUR or 35.6%), which in 2014 accounted for 81.3% of exports.

In 2010-2014 there was a significant exports increase of all product groups (the largest in the sector of fruit and vegetable juices - CAGR 23.1%), with the exception of Other processed and preserved fruit and vegetables (CAGR -2.6%).

Table 2.2

Ukraine's import of processed fruits and vegetables by main product groups in 2010-2014

Indicator	Region	2010	2011	2012	2013	2014	CAGR, %
Value, 000 Euro	Canned fruit and vegetables	78 096	95 383	115 031	135 602	98 166	5,9%
	Other processed and preserved fruit and vegetables	65 286	78 796	91 828	97 144	69 644	1,6%
	Fruit and vegetable juices	55 990	56 194	53 502	52 373	36 572	-10,1%
	Frozen vegetables	12 009	14 568	15 277	17 198	15 043	5,8%
	Dried vegetables	8 176	10 022	10 322	11 680	10 716	7,0%
	Jams, fruit jellies and fruit or nut puree and pastes	7 931	8 206	7 550	8 854	6 878	-3,5%

Indicator	Region	2010	2011	2012	2013	2014	CAGR, %
	Frozen fruits	4 157	4 810	5 872	6 216	3 810	-2,2%
	Total	**231 646**	**267 978**	**299 383**	**329 068**	**240 829**	**1,0%**
Weight, tons	Canned fruit and vegetables	99 087	120 442	108 980	121 244	87 675	-3,0%
	Other processed and preserved fruit and vegetables	24 524	25 946	25 572	28 470	22 564	-2,1%
	Fruit and vegetable juices	41 005	37 120	30 704	31 385	23 630	-12,9%
	Frozen vegetables	16 379	19 741	19 571	21 283	19 276	4,2%
	Dried vegetables	4 256	5 916	4 973	5 679	5 361	5,9%
	Jams, fruit jellies and fruit or nut puree and pastes	7 965	10 719	5 404	6 224	6 154	-6,2%
	Frozen fruits	5 495	5 591	5 343	5 838	4 093	-7,1%
	Total	**198 711**	**225 474**	**200 547**	**220 124**	**168 754**	**-4,0%**

Source: State Statistic Service of Ukraine

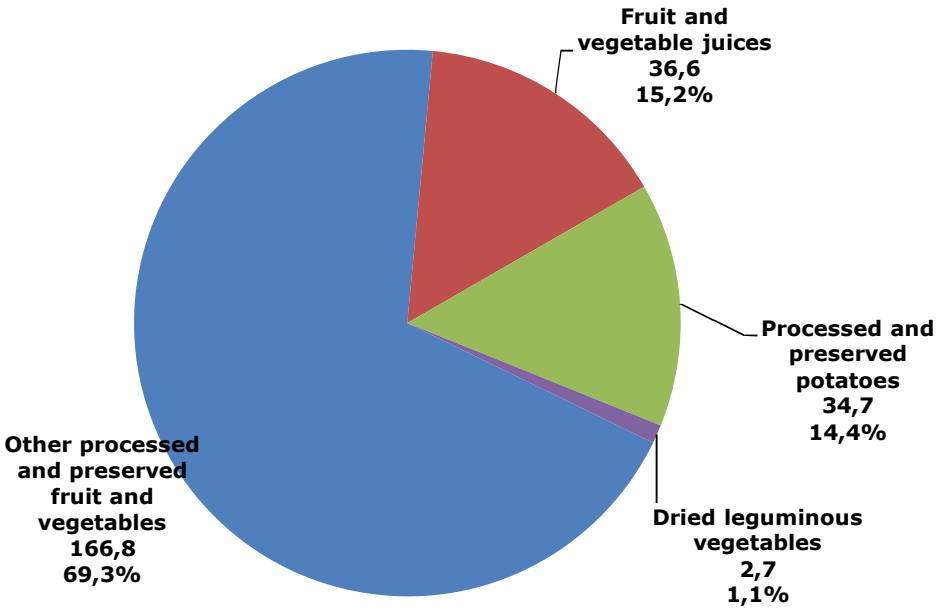


Figure 2.3 - Ukrainian import of processed fruits and vegetables by main product groups in 2014, mln. EUR

Table 2.3

Ukraine's import of processed fruits and vegetables by main product groups and commodity items in 2010-2014

Indicator	Group	Commodity item	CAGR in 2010-2014	2014							
				TOTAL	EU/ EFTA	Russia	CIS	Asia	Africa	America	Other
Value, 000 Euro	Canned fruit and vegetables	Other prepared, dried or preserved fruits and nuts	3,7%	**49 306**	5 965	776	6 165	30 587	183	5 558	72
		Other vegetables (except potatoes), preserved otherwise than by vinegar or acetic acid, except prepared vegetable dishes	12,8%	**39 803**	19 947	1 684	375	12 442	30	5 297	28
		Vegetables (except potatoes), fruit, nuts and other edible parts of plants, prepared or preserved by vinegar or acetic acid	-2,0%	**5 195**	1 322	109	312	3 419	7	22	4
		Peas, preserved otherwise than by vinegar or acetic acid, except prepared vegetable dishes	-9,4%	**3 225**	2 926	41	0	257	0	0	1
		Beans, preserved otherwise than by vinegar or acetic acid, except prepared vegetable dishes	11,4%	**638**	289	344	0	5	0	0	0
		Total	5,9%	**98 166**	30 449	2 954	6 852	46 710	220	10 876	105
	Other processed and preserved fruit and vegetables	Nuts, groundnuts, roasted, salted or otherwise prepared	-1,7%	**28 145**	4 831	175	38	22 289	0	743	70
		Potatoes prepared or preserved	12,6%	**24 196**	14 547	9 027	520	86	0	0	15
		Groundnuts and nuts, shelled	-3,4%	**13 548**	389	0	103	8 058	8	2 767	2 222
		Homogenised food preparations and dietetic food	-0,8%	**2 633**	1 701	677	193	8	0	30	24
		Fruit, nuts, fruit-peel and other parts of plants, preserved by sugar	4,2%	**609**	214	4	0	327	0	60	4
		Fruit and nuts, provisionally preserved, not for immediate consumption	-33,1%	**185**	45	0	0	140	0	0	0
		Vegetables provisionally preserved	-1,7%	**327**	22	0	0	305	0	0	0
		Total	1,6%	**69 644**	21 748	9 883	855	31 214	8	3 600	2 335
	Fruit and vegetable juices	Orange juice	-6,8%	**12 647**	1 670	101	7	52	0	10 814	2
		Other fruit and vegetable juices	-7,5%	**6 823**	4 246	480	288	1 366	0	202	240
		Mixtures of fruit and vegetable juices	-7,7%	**7 129**	3 512	2 441	731	408	0	36	1
		Grape juice	-11,4%	**3 789**	3 319	0	0	344	0	125	1

Indicator	Group	Commodity item	CAGR in 2010-2014	2014							
				TOTAL	EU/ EFTA	Russia	CIS	Asia	Africa	America	Other
		Apple juice	-19,6%	**2 963**	335	2 253	249	125	0	0	1
		Pineapple juice	-21,2%	**1 907**	1 242	17	6	616	0	26	0
		Grapefruit juice	-9,0%	**1 239**	974	43	3	194	0	26	0
		Tomato juice	-0,4%	**76**	50	14	5	1	0	0	6
		Total	-10,1%	**36 572**	15 348	5 349	1 289	3 106	0	11 229	251
	Frozen vegetables	Potatoes, frozen	6,5%	**10 551**	10 551	0	0	0	0	0	0
		Vegetables, frozen	4,2%	**4 492**	4 323	38	78	52	0	1	0
		Total	5,8%	**15 043**	14 873	38	78	52	0	1	0
	Dried vegetables	Dried vegetables	3,7%	**8 007**	1 978	247	25	4 473	435	848	1
		Peas, dry	24,1%	**1 244**	1 232	3	0	9	0	0	0
		Beans, dry	28,2%	**1 084**	51	0	518	60	173	283	0
		Lentils, dry	13,1%	**369**	6	81	0	174	0	108	0
		Chick peas, dry	-44,4%	**8**	1	1	0	0	0	7	0
		Pulses (dried leguminous vegetables) n.e.c.	-32,7%	**3**	0	0	3	0	0	0	0
		Broad beans, dry	-24,8%	**1**	1	0	0	0	0	0	0
		Total	7,0%	**10 716**	3 268	332	546	4 715	608	1 246	2
	Jams, fruit jellies and fruit or nut puree and pastes	Jams, fruit jellies and fruit or nut puree and pastes	-3,5%	**6 878**	3 462	604	334	2 154	60	251	12
		Total	-3,5%	**6 878**	3 462	604	334	2 154	60	251	12
	Frozen fruits	Fruit and nuts, uncooked or cooked, frozen	-2,2%	**3 810**	2 537	16	32	802	133	258	32
		Total	-2,2%	**3 810**	2 537	16	32	802	133	258	32
	TOTAL		1,0%	**240 829**	91 686	19 177	9 985	88 751	1 030	27 462	2 737
Weight, tons	Canned fruit and vegetables	Other prepared, dried or preserved fruits and nuts	-3,0%	**36 128**	3 687	259	3 672	25 215	128	3 110	57
		Other vegetables (except potatoes), preserved otherwise than by vinegar or acetic acid,	1,2%	**41 152**	19 869	1 320	593	13 559	55	5 715	43

Indicator	Group	Commodity item	CAGR in 2010-2014	2014							
				TOTAL	EU/ EFTA	Russia	CIS	Asia	Africa	America	Other
		except prepared vegetable dishes									
		Vegetables (except potatoes), fruit, nuts and other edible parts of plants, prepared or preserved by vinegar or acetic acid	-13,2%	**6 483**	965	115	278	5 106	2	13	5
		Peas, preserved otherwise than by vinegar or acetic acid, except prepared vegetable dishes	-17,3%	**3 354**	2 933	54	0	366	0	0	1
		Beans, preserved otherwise than by vinegar or acetic acid, except prepared vegetable dishes	3,4%	**559**	311	243	0	4	0	0	0
		Total	-3,0%	**87 675**	27 764	1 991	4 543	44 251	184	8 838	105
	Other processed and preserved fruit and vegetables	Nuts, groundnuts, roasted, salted or otherwise prepared	-2,8%	**6 286**	1 870	75	32	4 118	0	186	6
		Potatoes prepared or preserved	7,1%	**10 788**	6 629	3 470	600	88	0	0	1
		Groundnuts and nuts, shelled	-3,6%	**3 008**	55	0	20	1 836	2	446	649
		Homogenised food preparations and dietetic food	-7,5%	**1 343**	692	331	305	3	0	6	7
		Fruit, nuts, fruit-peel and other parts of plants, preserved by sugar	3,9%	**383**	77	1	0	289	0	16	0
		Fruit and nuts, provisionally preserved, not for immediate consumption	-51,8%	**129**	96	0	0	33	0	0	0
		Vegetables provisionally preserved	-15,8%	**626**	40	0	0	586	0	0	0
		Total	-2,1%	**22 564**	9 459	3 877	957	6 953	2	654	663
	Fruit and vegetable juices	Orange juice	-9,8%	**7 113**	737	122	10	38	0	6 204	2
		Other fruit and vegetable juices	-10,8%	**2 827**	1 238	338	555	562	0	36	98
		Mixtures of fruit and vegetable juices	-2,5%	**6 065**	2 165	1 915	1 679	294	0	12	1
		Grape juice	-17,0%	**2 614**	2 256	0	0	268	0	89	1
		Apple juice	-27,4%	**2 477**	208	1 779	398	91	0	0	1
		Pineapple juice	-14,9%	**1 658**	1 081	22	8	540	0	8	0
		Grapefruit juice	-13,1%	**785**	604	41	6	122	0	12	0
		Tomato juice	-3,3%	**91**	42	28	10	3	0	0	8
		Total	-12,9%	**23 630**	8 330	4 245	2 666	1 918	0	6 360	111

Indicator	Group	Commodity item	CAGR in 2010-2014	2014							
				TOTAL	EU/ EFTA	Russia	CIS	Asia	Africa	America	Other
	Frozen vegetables	Potatoes, frozen	5,3%	**13 577**	13 577	0	0	0	0	0	0
		Vegetables, frozen	1,6%	**5 699**	5 476	35	158	30	0	1	0
		Total	4,2%	**19 276**	19 053	35	158	30	0	1	0
	Dried vegetables	Dried vegetables	-1,7%	**2 971**	372	59	17	2 202	262	59	0
		Peas, dry	27,6%	**1 207**	1 195	4	0	8	0	0	0
		Beans, dry	20,8%	**800**	50	0	334	29	195	192	0
		Lentils, dry	27,8%	**375**	4	118	0	143	0	111	0
		Chick peas, dry	-52,7%	**4**	0	0	0	0	0	3	0
		Pulses (dried leguminous vegetables) n.e.c.	-36,0%	**4**	0	0	4	0	0	0	0
		Broad beans, dry	-39,2%	**0**	0	0	0	0	0	0	0
		Total	5,9%	**5 361**	1 621	180	355	2 382	457	365	0
	Jams, fruit jellies and fruit or nut puree and pastes	Jams, fruit jellies and fruit or nut puree and pastes	-6,2%	**6 154**	2 856	465	568	1 915	75	269	5
		Total	-6,2%	**6 154**	2 856	465	568	1 915	75	269	5
	Frozen fruits	Fruit and nuts, uncooked or cooked, frozen	-7,1%	**4 093**	3 001	5	22	777	94	180	14
		Total	-7,1%	**4 093**	3 001	5	22	777	94	180	14
	TOTAL		-4,0%	**168 754**	72 084	10 798	9 269	58 225	812	16 668	898

Source: State Statistic Service of Ukraine