CASE Ukraine
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Analysis of Consequences for the EU-Ukraine FTA: Selected Sub-sectors of Agriculture

Prepared in the framework of Trade Sustainability Impact Assessment (TSIA) study carried out by international consortium of ECORYS and CASE Ukraine

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Summary
The paper presents analysis of selected sub-sectors of agriculture of Ukraine in the context of international integration. The study aims assessment of possible economic impact of Free Trade Agreement between the EU and Ukraine on domestic agriculture. This paper serves as a background for broader analysis that is been undertaken in the framework of TSIA Study project.

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1 Overall description of agriculture sector in Ukraine

Ukraine is endowed with natural resources which creates a good basis for the potential development of the agricultural sector. Over 40 million hectares of land could be used for crop production with more than 50% of the area consisting of high quality chernozem soils ('black earth'). The favourable resource environment defines the role of the sector within the Ukrainian economy.

At the aggregate level, agriculture is the fourth largest sector of the economy after manufacturing, transportation and trade in services. On average, the value-added from agriculture comprises more than 10% of GDP. The main output is created from grain, crops and vegetables in crop production plus meat and milk in animal production (see ***Table 1.1***). The majority of output is produced by the private sector; more than 60% of agri-production is supplied by rural households.

Agriculture is among profitable domestic economic activities (however, risky due to volatility of harvests). In 2006 about 71.2% of agri-enterprises had positive financial results. The volume of profits at the sector comprises 4.4% (2006) of total profits in economy. In crop production all activities had positive average financial results since 2000. At the same time animal production is still officially loss-making due to production inefficiency at the sector (World Bank 2004): the weight gains of cattle are below the level of breakeven point. Till 2005 pig and poultry breeding showed up positive results while beef and veal production still suffers significant losses.

Table 1.1 **Structure of gross agricultural production, y %**

	1990	**1995**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**
Gross agricultural production	100	100	100	100	100	100	100	100
Crop production	*50.2*	*56.7*	*60.4*	*61.6*	*59.9*	*57.7*	*64.4*	*62.7*
Grains	21.2	20.9	19.5	28.3	27.3	16.4	27.7	25.3
Industrial crops	7.3	7.7	6.7	5.5	6.0	7.5	6.2	7.5
Potatoes, vegetables, cucurbitaceous	10.5	16.6	25.5	21.3	20.4	25.3	23.4	22.9
Fruits, berries, grapes	3.8	3.7	4.2	3.0	3.1	4.7	3.9	4.1
Fodder crops	6.6	5.9	3.6	3.3	2.9	3.1	2.6	2.5
Other crop production	0.7	1.9	0.9	0.2	0.2	0.6	0.5	0.4
Animal production	*49.8*	*43.3*	*39.6*	*38.4*	*40.1*	*42.3*	*35.6*	*37.3*
Livestock and poultry breeding	29.0	21.3	19.2	18.6	19.3	19.4	16.2	17.2
Milk	15.4	16.9	15.0	14.5	15.0	16.4	13.7	13.7
Eggs	3.7	3.3	3.8	3.8	4.4	5.0	4.3	4.7
Wool	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Other animal production	1.6	1.7	1.5	1.5	1.3	1.5	1.4	1.6

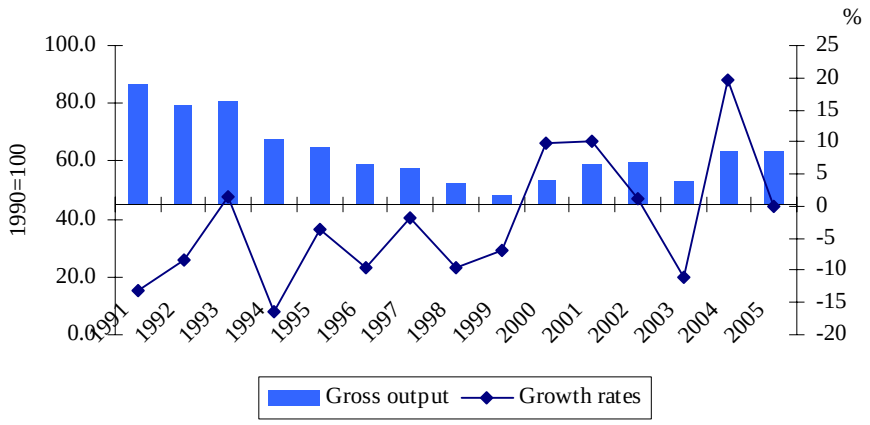
Sources: State Statistics Committee of Ukraine

Despite good potential, the sector was developing poorly during the transition period. The average dynamics of agricultural output for the last fifteen years were negative and amounted to -3.0% per year. Even in 2005 the volume of production of the sector was only 63.4% of 1990 production level (see ***Figure 1.1***). Among the major impediments for the development are poor production technology, the market inefficiency due to

monopoly of large traders, the absence of a land market and a moratorium for agriculture land sales.

Although performance of agriculture was rather weak, a large part of Ukrainian labor force is still engaged in the agri-production. The sector officially employs over 4.5 million people which is close to 20% of the employed population. Meanwhile in rural areas 10.7 million people (2006) reside that all are within the economically active age. Low productivity at the sector translates into low incomes. Large parts of rural inhabitants live beyond the poverty level (37% in 2001, World Bank 2004). Traditionally, rural wages were about two times lower than the average for Ukraine.

Figure 1.1 **Gross agriculture output, 1991-2005**



Source: State Statistics Committee of Ukraine

Agriculture constantly increases its involvement in foreign trade. After 1990 the role of agriculture in exports declined strongly while during recent years exporting capacities improved. In 2006, Ukraine exported 24.5% of gross output of the sector. Imports amounted to 16.5% of the sector output for the same period. However, the importance of agricultural products in the trade balance still is not very large. The total volume of agriculture exports constituted 12.2% of merchandise exports (1-24 HS) in 2006. Import volumes comprised only 7.0% of merchandise imports. The key export item is grain while fish and tobacco are the most significant imported products.

The agro-products trade with EU has slightly different structure. The EU accounts only for 26.2% and 36.9% (2006) of total agri-food exports and imports, respectively. The most tradable goods are: (i) exports - grains and cereals; oil seeds, animal or vegetable fats and oils; (ii) imports – meat and meat offal; fats and oils.

There is no any particular agreement between EU and Ukraine pertaining to agriculture. Only Memorandum of understanding in the field of agro-production was signed between the EC and the Ministry of agriculture of Ukraine (October 19, 2006). At the Action Plan agro-issues are mentioned in the context of SPS measures. In this field some progress was already achieved within implementation of WTO requirements according to “The agreement on the application of Sanitary and Phitosanitary measures”.

The EU requirements to SPS standards harmonization are more demanding versus the requests of WTO. The SPS WTO agreement concerns mainly the impediments for imports to Ukraine while the EU food safety acquis targets the exported products.

The major complaints related to domestic SPS system concerns non-transparent requirements (absence of scientific justification), mandatory standards and overlapping responsibilities of controlling institutions. These drawbacks are considered as non-tariff barriers for international trade. The impediments should be eliminated with harmonization of national legislation according to WTO obligations.

Another side of SPS issue is related to food safety of exported agro-products. At the moment Ukrainian animal products are forbidden for export to the EU (with exception for equine and honey). The ban for export could be eliminated only if Ukraine obtains status of "Third Country". The status is granted after passing a list of compulsory procedures, certification of veterinary laboratories according to the EU requirements and certification of the potential exporters. Most likely during FTA negotiations Ukraine will claim for extension on compliance with SPS standards since significant investments and time resources are essential for certification and successful completion of all other requested procedures.

2 Structure, organization, policies and issues per sub-sector

For analysis were selected the following sub-sectors:

1. Cereals and grains
2. Oil seeds
3. Sunflower oil
4. Meat and edible meat offal
5. Sugars and sugar confectionary
6. Fruits and berries
7. Beverages and spirits

The relative importance in terms of trade of these six sub-sectors is presented in Table 2 below.

Table 2.1 **Agricultural sub-sectors and their relative importance in terms of trade 2006**

	Description sub-sector item	Exports, USDx1000	% total exports	% group* exports	Imports, USDx1000	% total imports	% group* imports
02	Meat and edible meat offal	33,163.9	0.09%	0.70%	161,342.5	0.36%	5.10%
08	Edible fruit and nuts; peel of citrus fruits or melons and watermelons	151,545.5	0.39%	3.22%	267,925.6	0.59%	8.46%
10	Cereals	1,354,246.8	3.53%	28.73%	59,483.5	0.13%	1.88%
12	Oil seeds and oleaginous fruits; miscellaneous grains, seeds and fruit; industrial or medicinal plants; straw and fodder	314393	0.82%	6.67%	92756.6	0.21%	2.93%
15	Animal or vegetable fats and oils and their cleavage products; prepared edible fats; animal or vegetable waxes	971,400.5	2.53%	20.61%	191,088	0.42%	6.03%
17	Sugars and sugar confectionery	113,497.2	0.30%	2.41%	30,054.3	0.07%	0.95%
22	Beverages, spirits and vinegar	417,173.6	1.09%	8.85%	189,387.5	0.42%	5.98%

Group of 24 agriculture and food sector categories
Source: State Statistics Committee of Ukraine

2.1 Grains and cereals

Grains account for ¼ of gross agricultural production (on average) and occupy more than 50% of sown area. Wheat (49.2%), barley (23.6%) and maize for grain (18.9%) comprise more than 90% of grain production (2005). Crops yield did not exceed 30 centners per hectare (1995-2005) which is below the World's average level (see ***Figure 2.1.1***). However, grains harvesting is among the most profitable activities in agri-production, for 2000-2005 average level of profitability exceeded 30%. The value of grains crops was

extremely volatile during last fifteen years and was defined by cropping area and weather conditions. Since 1990 the volume of harvested grains reduced by 25.5% (till 2005). Still the collected harvest amounts to 1.6% (2005) of world crops (38.0 million tons). Ukraine is the sixth largest world producer of grains[1].

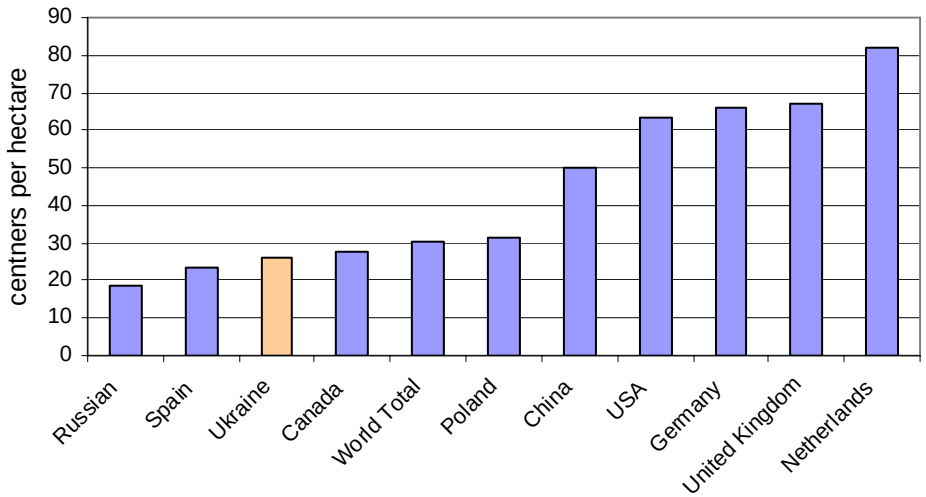
Collected grains are mainly allocated at the local market (see ***Table 2.1.1***). About 50% (on average) of available crops are consumed at the agriculture enterprises as fodders or sawing grains. More than 1/5 is exported (32.8% in 2005). Only 20-25% are allocated on consumption needs.

The major part of grains is produced by agriculture enterprises (more than 75% of output in 2005) while the role of households is rather limited.

Farmgate prices for grain products are almost 50% lower than at the international markets. In 2005 average domestic price for grain crops was about USD 85 per ton.

The grain market is regulated by the government. The key players on the market are independent traders, local administrations, Derzhreserv (state institution responsible for stabilization fund of grains) and "Khlib Ukrainy" (state company responsible for "collateral purchase" of grains). Local administrations, Derzhreserv and "Khlib Ukrainy" are expected to secure food safety of the country. Local authorities and Derzhreserv create reserve funds of grains at local and state level, respectively. Interventions from Derzhreserv also could be used for stabilization of grain prices. "Khlib Ukrainy" is the main channel for securing stable prices and intervening on grain market. The "collateral purchase" mechanism is exploited for stabilization needs. The scheme creates possibility for producers to receive payment for grains (state prices) as soon as crops are delivered on elevators. If the grains later could be marketed for higher prices, farmers are free to get the "collateral" with paying back the money. The "collateral" prices are perceived by farmers as minimum secure level of grain price.

Figure 2.1.1 **Grains yield, 2005**



Sources: State Statistics Committee of Ukraine

[1] After China, USA, Russia, France, Canada and Germany

Table 2.1.1 **Structure of grain balance (including products of grain processing)**

	1995	2000	2001	2002	2003	2004	2005
Output	97.3%	101.3%	120.1%	93.0%	72.8%	119.9%	98.6%
Change of inventories, end of the year	-2.2%	5.5%	21.4%	-6.6%	-13.6%	22.4%	-0.8%
Import	0.6%	4.2%	1.3%	0.4%	13.6%	2.5%	0.6%
Total resources, thnd. tons	**34887**	**24140**	**33055**	**41721**	**27797**	**34867**	**38556**
Export	2.3%	5.5%	16.9%	29.4%	14.2%	22.3%	32.8%
Fodders	53.1%	45.8%	42.3%	37.7%	41.9%	39.7%	35.8%
Sawing grains	13.2%	14.9%	12.3%	9.3%	11.6%	10.3%	8.5%
Loses and waste	3.5%	1.3%	1.1%	1.3%	0.9%	1.6%	1.0%
Processing on the non-food purposes	2.5%	0.4%	2.0%	2.1%	2.8%	3.3%	1.7%
Consumption	25.4%	32.1%	25.4%	20.2%	28.6%	22.8%	20.1%

Sources: State Statistics Committee of Ukraine

Upon WTO accession bound import tariff rates for cereals should be reduced to 5.82% till 2010 (group 10 HS). Specifically, the tariffs should be close to 12% for maize and barley, and 15% for wheat[2]. Currently Ukraine applies to the products combined tariff[3] which in ad valorem terms is close to 8.8% in average for the group (2006). According to the study of UNDP Blue Ribbon Analytical and Advisory Centre (BRAAC, 2007) high tariff level did not influence the volumes of grain production and the profits of agro-producers. Domestic prices for the key cereals (wheat, maize, barley) are much lower compared to the world market level. Therefore reduction of import tariffs should not have any significant impact on the sub-sector functioning.

The only concern with grains in the context of WTO accession is voluntarily interventions of the government to the exporting process. For securing domestic grain balance and keeping low prices the government rather often introduced export quota. Specifically, the instrument was applied during the last two years (2006-2007). It exist very high probability that Ukrainian authorities will continue the practice even after accession.

Ukrainian SPS standards applied to grains are recognized by world authorities. All major seaports have certified laboratories which provide sanitary documentation to the exported cereals. Domestic cereals are exported to many countries including the EU.

The FTA impact on the sub-sector should be positive. The product is competitive and do not have problems with SPS requirements compliance. However, the EU most likely will try to restrict the market expansion of Ukrainian grains by applying tariff rate quotas. Therefore, the magnitude of the positive effect will depend on the negotiation process.

2 According to UNDP Blue Ribbon Analytical and Advisory Centre, 2007

3 Tariff rates as of August 2007: Wheat – from 0% to 40EUR per ton; Rye – 20EUR per ton; Barley – 20EUR per ton; Oat – 20EUR per ton; Maize – from 0% to 25% (not less than 20EUR per ton in case of 25%); Rice – 5%; Sorghum – 2%; other cereals – 0.05 EUR per 1 kg.

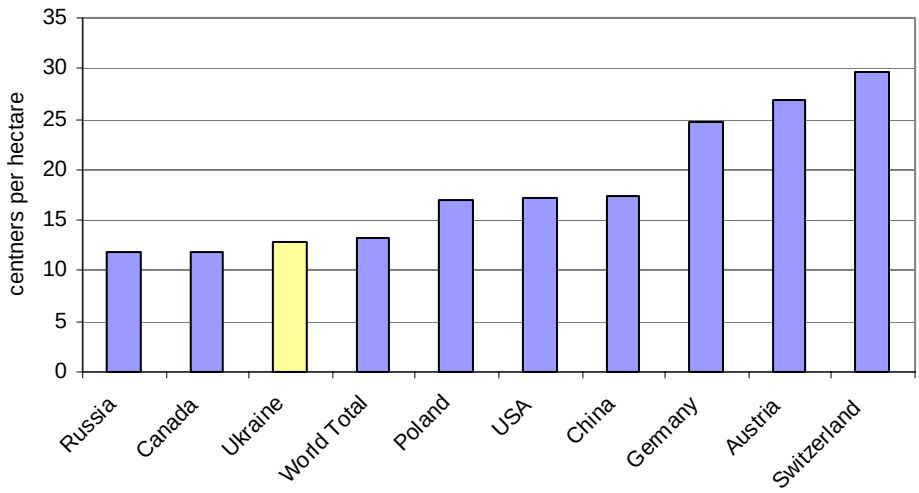
2.2 Oil seeds and sunflower-seed oil

Oil seeds do not take any significant share in the structure of agriculture gross output although oil planting keeps about 17.0% of sawn area. Sunflowers comprise about 80% of oilseeds. Despite low output share, oil seeds' farming (sunflowers) is the most profitable activity in domestic agriculture. During 2000-2005 sunflowers were generating more than 50% of profits on average. Due to high profitability oilseeds were the only crops that increased output since 1990 (by 83% till 2005). Even so the yield of domestic oil harvesting is below the world level (see ***Figure 2.2.1***) and amounts to 12.9 centners per hectare (2005). The sub-sector is strongly involved in international trade; about 40% (2005) output is exported. Ukraine is the second largest exporter of oil seeds (sunflowers) in the world (after Argentine); however, the share of world market is insignificant 0.01% (2005). Low farmgate prices for the product (about twice less of world average, USD 160 per ton, 2005) is one of the main reasons for relatively significant export volumes. Agro-enterprises produce almost 80% of domestic oil seeds.

Cheap oilseeds were one of the main reasons of stagnation at sunflower oil processing sub-sector. Exporting of seeds was much more profitable than supply for domestic oil producers. Only in 1999 the government introduced 17% export tariffs for preventing excessive outflow of resources. That measure created favorable environment for the sub-sector development. Protective import tariff of 500EUR per ton (1997-2004) also contributed to upward dynamics of sunflower oil processing.

Ukrainian sunflower oil processing plants produce about 1.3-1.5 million tons of oil per year. More than 50% of produced oil is exported. About ¾ of total output is concentrated at large producing enterprises. The major player on the market are Cargill, Bunge and several Ukrainian companies like "KMT" group, Kernel group etc.

Figure 2.2.1 **Sunflower yield, 2005**



Sources: State Statistics Committee of Ukraine

Upon WTO accession import tariffs for oil seeds will be 12.36% till the end of adaptation period (2010). Specifically for sunflower seeds the tariff should be 15% (BRAAC, 2007) which was already set up (2005) at this level[4]. Domestic prices for sunflower seeds are much lower than world level; moreover, internal supply of the seeds is enough for covering domestic consumption (oil seeds are exported). Therefore, reduction of import tariffs should not have any impact on output of sunflower seeds and the level of profits at the sub-sector (BRAAC, 2007).

Sunflower oil is an exception from the general rule of 20% maximum bound rate. Ukraine will keep 30% import tariffs for protection of producers[5]. The proposed rate should be enough for securing high internal demand for domestically produced oil.

Additionally, export tariff for sunflower seeds should also guarantee stable development of oil producers. Oil plants will preserve comparative advantage in terms of cheaper input resource although the export tariff will be reduced gradually to 10% (from 17%) during six years upon accession.

Certification of oil seeds and sunflower oil complies with international SPS standards. The EU imports the product without any restrictions.

Reduction of import tariffs for oil seeds within FTA should not affect output and the level of profits at the sub-sector. The product is highly competitive by price and will remain an exporting item. Much more attention will be put to the export tariffs. The EU most likely will insist on reduction of the rates. Even so, domestic oil producers will have enough resources for processing.

The impact on sunflower oil producers will be positive. However, we could not expect that the effect will be strong since the EU import tariffs are already low. Reduction of Ukrainian import tariffs will not create any competition on internal market due to low domestic prices. Although at the WTO agreement the sub-sector is strongly protected there is no reason to claim the product as exclusion for FTA. Sunflower oil processing plants are highly competitive; moreover, the EU has much interest in importing Ukrainian sunflower oil.

2.3 Meat and edible meat offal

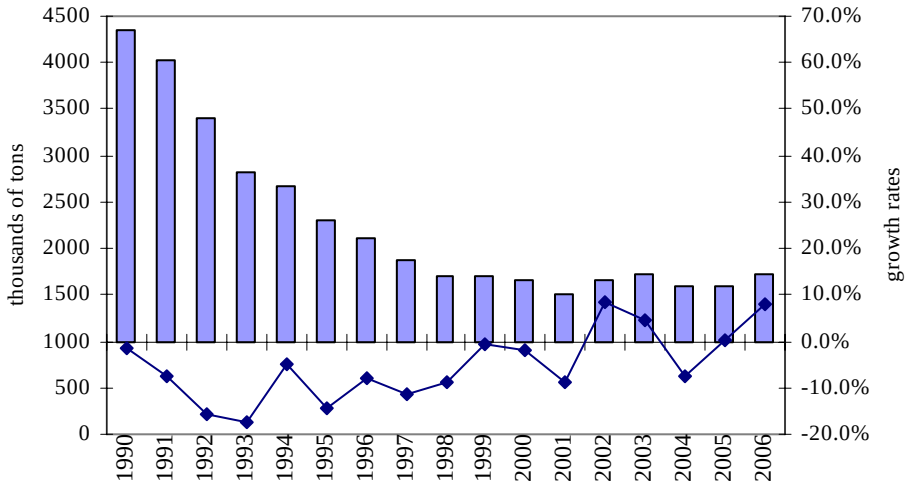
Livestock and poultry breeding is one of the key sub-sectors which accounts for 17.2% (2005) of gross agriculture production. In contrast to grains and other crops, the key role in meat output belongs to households (63.2% in 2005) while enterprises' share dropped drastically during the transformation period (from 71.1% in 1990 to 36.8% in 2005). Meat sub-sector underwent considerable decline during 90-s (see ***Figure 2.3.1***) mainly due to strong slump in domestic incomes. Only recently meat production demonstrated

[4] Tariff rates for oil seeds: soya-bean – 0%; peanuts – 0-5%; sunflower seeds - 15% (0% for sowing seeds); other oil seeds – 10-20%

[5] Currently, Ukraine charges 0.8EUR per 1 kg import tariff for sunflower oil (edible).

recovering tendency; first positive dynamics was observed in 2002 (+8.6%). Poultry breeding was one of the key driving forces for the sub-sector upturn due to much cheaper chicken meat versus beef and pork. Moreover, production time span at the poultry breeding is much shorter (3 months) versus pig-breeding (up to one year) and cattle breeding (1-3 years). Therefore, chicken production reacted promptly on demand recovery. According to official statistics meat production still remains loss-making (-25.0% on beef and veal, -32.1% on mutton and goat, 2005). Only pork and poultry production managed to reach positive financial results during recent years[6]. At the same time sector experts claim high profits in all areas of agro-production. Negative official financial results are observed due to poor accountability at the sector. Households do not report to the statistics committee while they are the main producers of meat (especially, pork and beef).

Figure 2.3.1 **Meat production, 1990-2006**



Sources: State Statistics Committee of Ukraine

Meat processing also slumped in line with demand during 90-s. Till 2006 only 50% of plants were still operating (64 out of 123). Part of the old processing capacities was substituted with new small local factories. Even so only 15-40% of operating capacities are engaged in production (BIZPRO 2006). The sub-sector started recovering after strengthening of household income. In 2000-2006 meat processing of all products showed up two-digit growth. The meat and meat products output consist of poultry (52%, 2005), beef (27.8%) and pork (14%). Important, the share of poultry production grew only recently. In 2000 chicken meat output was still 6.7%. The markets of beef and pork production are deconcentrated while 70% of poultry are produced by four largest processing factories (2004). More than 80% (2005) of all meat products are provided by domestic producers.

Exports of meat products take more than 7% on average in meat balance (see ***Table 2.3.1***). Only in 2005 the exporting volume decreased strongly due to trade conflict with

[6] Pork production showed +14.9% of profits only in 2005 which is the first positive financial results since 1990. Poultry production started making profits in 2003.

Russia. Beef is the main item (more than 70%) of Ukrainian meat exports. Meat products (15.9%, 2005) and pork (8.6%) are the next two largest exporting items. The CIS countries are the main markets for Ukrainian meat. Export of animal products to the EU is forbidden (except equine and honey) due to incompliance of SPS standards with the EU requirements.

Imports of meat increased during the recent years mainly due to improvement of household incomes and resumption of American chickens imports (was forbidden for importing till the end of 2003). In 2005 the share of meat imports in balance reached 16.8%. Poultry used to account for 80% of total meat imports[7]. Relatively high domestic prices for chicken meat stand behind significant poultry import volumes. Pork is the next largest item of imports (13.6%, 2004).

Table 2.3.1 **Structure of meat balance (including sub-products and row fat)**

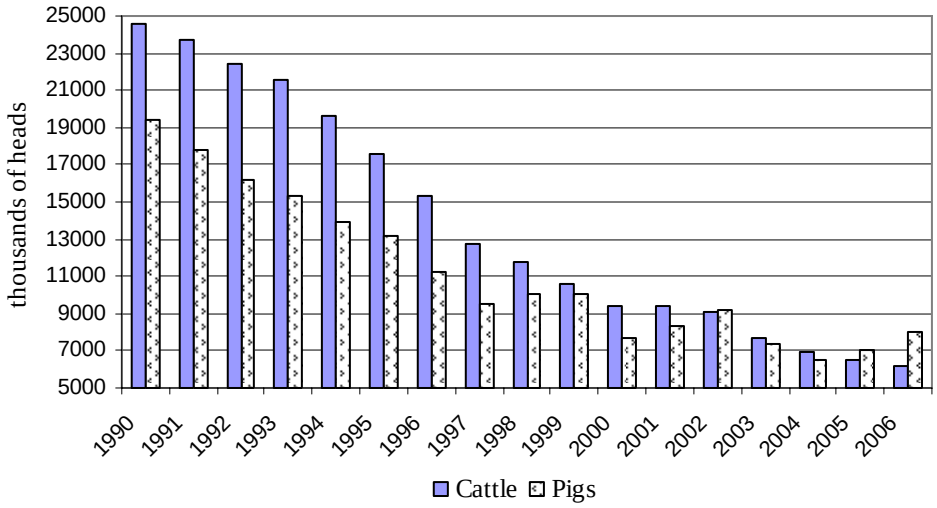
	1995	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**
Output	99.7%	93.3%	93.8%	97.7%	93.7%	82.1%	82.6%
Change of stocks at the end of year	0.5%	-4.6%	-0.9%	0.6%	0.4%	0.8%	-0.6%
Import	0.8%	2.1%	5.3%	4.9%	6.7%	18.8%	16.8%
Total resources, thnd. tons	**2302**	**1783**	**1618**	**1723**	**1841**	**1950**	**1933**
Export	8.0%	8.6%	6.1%	8.5%	10.0%	5.6%	4.2%
Non-food purposes (on the fodder, loses and wastes, etc.)	5.0%	0.5%	0.4%	0.4%	0.4%	0.7%	0.4%
Consumption	87.0%	90.4%	93.5%	91.1%	89.6%	93.7%	95.4%

Sources: State Statistics Committee of Ukraine

The government supports meat producers due to the loss-making status of the sub-sector. According to OECD estimates percentage PSE to poultry amounted to 43% (2003) and 11% for beef. Tax exemptions (VAT and 0% of profit tax) compose the main source of the state support. Mainly speaking almost all VAT charged on agriculture product sale is left for agrarians. Special regime of agriculture taxation includes four types of tax exemptions: (i) VAT charged on sales of agriculture products stays on special accounts to be used for the acquisition of materials and technical resources for production purposes; (ii) VAT charged on sales of meat and dairy products by processing plants is returned to primary producers (no payments to budget); (iii) VAT charged on sales of meat and dairy product by farmers stays in the farm accounts to be used for livestock support; (iv) sale of milk and meat product is taxed at a zero VAT rate thus farmers has right to claim VAT credit.

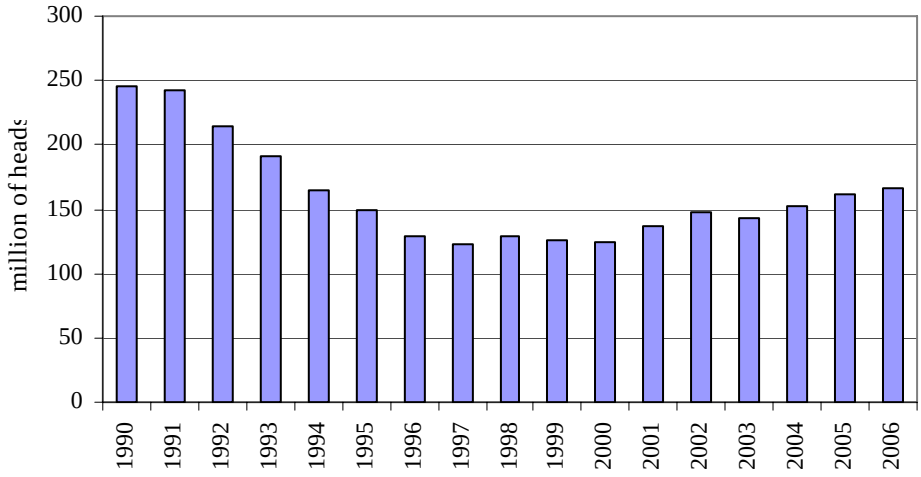
[7] In 2005 import of poultry meat was only 50% of total meat import. One of the main reasons for drastic change in structure of import is abolition of tax privileges for free economic zone (Special Economic Zones (SEZ) and Territories of Priority Development (TPD)). The importers at SEZ and TPD were exempt from VAT and import duties, for some case even from income tax.

Figure 2.3.2 **Livestock, end of the year, 1990-2006**



Sources: State Statistics Committee of Ukraine

Figure 2.3.3 **Poultry, end of the year, 1990-2006**



Sources: State Statistics Committee of Ukraine

Within WTO average bound import tariff for meat and meat products will be 12.99% (12% for beef, pork and poultry) till 2010. The rate will decrease almost twice compared to current rate 21.52% in ad valorem terms[8]. Lower protection level will create losses at

8 Beef – 10% (not less than 0.6EUR per 1 kg); pork – 10% (not less than 0.6EUR per 1 kg); sub-products of cattle, pigs etc. – 0.5 EUR per 1 kg; poultry – 10% (not lees than 0.4 EUR per 1 kg); poultry (processed) – 30% (not lees than 1.5 EUR per 1 kg); other meat sub-products – 10%; fat and processed sub-products – 0.5EUR per 1 kg.

the sub-sector. Specifically, poultry breeding will have to compete strongly with cheaper import chickens i.e. some reduction in domestic poultry production is expected. Compliance with SPS requirements also should contribute to the sub-sector contraction. Cattle and pig breeding are more competitive. Domestic beef is cheaper than imported. Moreover, it is the main meat exporting item. Therefore, beef production will be not affected with tariff reduction. Pork prices are close to the world level. Decrease in tariffs should attract significant inflow of imported pork. However, local producers will not be affected strongly since domestic pork is in different marketing segment than imported. Ukrainian pork is mainly fresh meat (produced by households); while imported belongs to frozen products (BRAAC, 2007).

One important issue with meat production is government support. Currently, the sub-sector is strongly subsidized with various schemes (direct payments and tax exemptions). Reduction of the support volume will have negative consequences for the sub-sector performance. Basically, the volume of support was not still agreed with the Working Party members. However, the discussed (minimum) value of subsidies exceeds the currently needed level (for all agriculture activities). Moreover, significant part of support comes through tax exemptions which are not considered for calculation of aggregate measure of support (AMS) and are not subject of negotiations. Therefore, in mid-term future government support will not be restricted by WTO and subsequently will not affect meat production.

In general it is expected positive impact of FTA on the meat producers. However, the effect will be not immediate. It will take several years to get status of third country and get permission for exporting animal products. Moreover, liberalization should spur restructuring of the sector and improvement of investment climate. Most likely new owners will replace inefficient producers since the competition at the area will increase.

Poultry breeding should benefit from FTA. The effect will be immediate after authorization of Ukrainian chickens export. Domestic poultry is highly competitive by price and quality versus the EU chickens. The main obstacle for expansion is inconsistency in SPS standards. The key players at the sub-sector have modern producing capacities so there should be no problems with enterprise certification.

Pig-breeding will be also affected positively; however, significant investments are necessary for improving competitiveness of the sub-sector. Already there were created several modernized enterprises which could compete on the EU market. However, the majority of farms are outdated at the moment. Trade liberalization should create good stimulus for investments in pork production due to restructuring. The sub-sector should become highly competitive till the date of potential authorization of the animal products export to the EU.

In short-run the impact of FTA on cattle breeding is ambiguous. On the one side the beef production is very competitive by price and quality, on the other, domestic production is very weak and the sub-sector will need 3-5 years to cope with potential demand from the EU. There is no reason to expect strong competition at the market after trade liberalization since domestic products will be still cheaper. In mid-term perspective the sub-sector will benefit from FTA. Possibilities for exporting to the EU should attract

investments and in several years Ukraine will be ready to supply beef on European market.

- SPS measure in meat and meat producing sub-sector

The SPS standards are the major non-tariff barrier (NTB) for meat producing sub-sector. Both exports and imports are affected with inconsistency in standards, regulating mechanisms and controlling procedures.

High certification expenses and overlapping responsibilities of controlling institutions significantly increase costs of importing. Obviously, SPS gives trading advantage to domestic producers on local market. Ukraine already singed WTO Agreement on SPS measures thus committed to harmonize domestic SPS system according to the principles of adequacy, justification and non discrimination. The country already made a big progress in this field so far (harmonization of legislation, certification of some laboratories etc.); however, still lots of efforts and investments are requested. By the end of adaptation period (within WTO) non-tariff barriers related to SPS for meat importers will be equivalent to those at trading partners i.e. will not be considered as barriers.

The major expected effects from the SPS standards harmonization (within WTO) are (i) improvement of access to the local market; (ii) reformation of SPS system and, subsequently, improvement of products quality at the market; (iii) reduction of poultry meat output due to strengthening of competition after elimination of NTBs.

Compliance with WTO SPS requirements will not necessarily lead to improvement of the meat and meat products exports. WTO aims protection of free trade (prevention of SPS abuse) rather than health and quality. Therefore, meeting WTO requirements will have main consequences for domestic meat market.

For development of exporting possibilities meat producers have to improve safety standards and invest heavily in quality of the products. Currently Ukrainian animal products are forbidden for exports to the EU. Equine and honey are the exception from the rule. For being eligible for agro-products export "Third Country Status" should be obtained. The status is granted after a standard procedure of the EU which includes (i) a residue monitoring, (ii) answering standard EU questionnaires on veterinary standards and procedures (IER, 2006). Recently some progress was achieved in this direction. On February 12, 2007, EC included eggs and milk in residue monitoring plan. After standard procedures these products could be allowed for exporting to the EU market.

Requirement for compliance with the EU food safety and food traceability standards most likely will be a part of FTA agreement. We expect that controlling and standardization requirements will meet no objection from Ukrainian side. Moreover, the authorities will put much effort on fulfillment of their obligation. However, the reaction of meat processing plants is not clear. Most likely the majority of meat producers will not be able to afford costly modernization and certification of their products in the nearest future. Moreover, the highly competitive EU market could discourage some Ukrainian meat producers at this stage of their development. Therefore we do not expect immediate effect of food safety requirements fulfillment although the process is inevitable.

2.4 Sugars and sugar confectionary

Production of sugar beets is not very important sub-sector in terms of gross output. Even so Ukraine produces 6.4% (2005) of world sugar beets. The plant is cultivated on 2.4% (2005) of domestic sawn area. And due to low cropping yield (about twice less then world average level) the sub-sector profitability fluctuates around zero. Drop in demand for sugar during transformation period stipulated for decrease in sugar beet outputs by 65% (till 2005 versus 1990). About 80% of beets are produced by agro-enterprises. Export of sugar beets is negligible (5% of output) although the farmgate price for the products is among the lowest in the world. Almost all harvested sugar beets (90% in 2005) are processed on domestic sugar-mills.

Domestic capacities on sugar production exceed 4.0 mln. tons. However, the majority of sugar-mills have outdated equipment what is the main reason for high production costs and, subsequently, poor competitiveness on external markets. Ukrainian sugar are among the most expensive in the world, as of mid of July 2007 internal sugar price was 475 USD per ton what is 50% higher than prices at London commodity exchange (316 USD per ton, July 19, 2007).

The total number of sugar mills equals to 192 while only 119 of enterprises were producing sugar in 2006. Given modernization of production capacities Ukraine will need only 60-80 sugar mills for processing domestically harvested sugar beets (BIZPRO, 2006).

Domestic sugar market is rather deconcentrated. One company has more than 10% of market share (Ukrainian Food Company, 13.4% in 2006), two companies possess 5-10% of market (Ukrros, 8.6%; Astra-Kyiv, 6.2%). The rest 70% of the market are operated by small companies.

Internal needs for sugar in Ukraine estimated on the level of 1.8-2.0 million tons. About 2/3 of internal demand comes from household consumption while the rest is used for industrial needs (mainly for production of confectionaries).

In confectionary sub-sector sugar plays the key role for sugar confectionary production. The sub-sector consumes about 0.3 million ton of sugar every year. The component accounts for almost 2/3 of production costs. Sugar confectionary comprises more than 20% of total confectionaries. The development of the sub-sector is extremely volatile due to it strong dependency on sugar market. Frequent sugar crisis lead to drastic reduction in sugar confectionary output. The area is concentrated enough, two larges companies occupy almost 40% of the market (Roshen 20.4%, 2004; ABK 18.9%, 2004). Large share of the products are exported, about ¼ of sugar confectionary were marketed abroad in 2004. Import of the product is negligible. 90% of the market belongs to domestic producers. Sugar confectionary reports 8-12% of profitability (BIZPRO, 2006). Modest level of profits should be attributed to high sugar prices.

According to WTO agreements Ukraine will move from current combined tariff rate[9] (27.81% in ad valorem value (group 17 HS) and 50% for sugar specifically) towards tariff rate quota (TRQ) for sugar and reduced import rates for sugar confectionaries. TRQ was agreed on the level of 260 thousand tons for raw sugar with 2% tariff rate from the year of WTO accession. For exceeding volume of sugar current 50% of import tariff will be preserved. Till 2010 the average tariff rate in ad valorem terms will equal to 13.06% (group 17 HS). Therefore, TRQ will be a significant reduction of protective measure compared to the currently applied combined tariffs. Most likely some inefficient sugar-mills will have to stop production. Even so the domestic sugar market remains highly protected. Ukrainian government considers this support as essential due to social importance of the sugar sub-sector. In case of deeper liberalization increase of unemployment is expected due to bankruptcy of sugar-mills.

Tariff rate quota will be distributed fairly and transparently among trading partners ensuring full compliance with WTO on import licensing procedures (it will be based on import performance of applicants and auctioning will no longer be applied for distribution of TRQ).

Confectionary import tariffs should be converted from specific (current) tariffs to ad valorem and reduced to 13.06% (group 17 HS). Although the rates will be decreased, the confectionaries should not suffer any losses since products are diversified and highly competitive by quality and by price.

We believe that sugar will be an exception from trade liberalization between EU and Ukraine. During WTO negotiation the Ministry of agriculture of Ukraine kept very hard position on sugar quota and tariff level. Similar situation is expected during FTA negotiations. Moreover, there is no reason to put the product for negotiations since none of the parties will benefit from liberalization of the market. The price level for the product is about the same level in Ukraine and the EU.

Import tariffs for sugar confectionaries most likely will be reduced. The confectionary production should not be damaged with inflow of imports since Ukrainian products are very competitive by price and quality; moreover, confectionaries are very diversified, perfect substitutes are rare. Therefore, we expect improvement of assortments rather than tough competition on the market.

2.5 Edible fruits and nuts, citrus fruits, water melons

Fruits and berries comprise 4.1% of gross agriculture output (2005) and occupy about 1% of cropping area. The output of the products decreased during transition period by 42% (in 2005 versus 1990). Apples, pears, plums and cherries account for more than 70% of the sub-sector's output. Cropping of fruits is a profitable activity (+12.7%, 2005) due to one of the highest yield in the world. Domestic fruit prices are among the lowest in the

9 Sugar (from sugar beet) – 50% but not less than 0.3 EUR per 1 kg; lactose, fructose etc. – 0.3EUR per 1 kg; treacle – 0.8 EUR per 1 kg; sugar confectionaries – 1EUR per 1 kg.

world; however, European products (polish apples) are still much cheaper. Households are the major suppliers of domestic fruits and berries (88.2%, 2005) while enterprise production of fruits is subdued by imported products. More than ¾ of fruits and berries are produced domestically (see ***Table 2.5.1***; however, large share of products are imported 31.9% (2005). Export is also significant (11.3%, 2005). Internal consumption accounts for 64.9% (2005).

Table 2.5.1 **Structure of fruits, berries and grapes balance (including canned and dried products counted as fresh)**

	1995	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**
Output	92.6%	101.1%	82.9%	84.6%	91.2%	85.5%	79.1%
Change of inventories	4.7%	10.3%	-3.2%	0.9%	5.4%	-0.4%	11.0%
Import	12.1%	9.2%	14.0%	16.2%	14.2%	14.0%	31.9%
Total resources, thnd. tons	**2544**	**1944**	**1740**	**1855**	**2414**	**2349**	**2696**
Export	1.2%	4.5%	6.6%	7.6%	8.7%	8.9%	11.3%
Fodders	2.8%	2.4%	1.9%	2.2%	1.9%	1.9%	2.3%
Loses and wastes	5.6%	1.7%	3.7%	1.8%	3.7%	3.0%	4.7%
Processing on the wine	22.7%	17.3%	13.8%	14.5%	20.3%	17.8%	16.7%
Consumption	67.6%	74.0%	74.0%	74.0%	65.5%	68.4%	64.9%

Sources: State Statistics Committee of Ukraine

Import tariffs for fruits (group 08 HS) were already reduced to average 10.4% in ad valorem terms (2005)[10] which is close to the target WTO level of 10.07%. The sub-sector will not be affected by WTO accession since imported products are not planted in Ukraine. At the same time the domestically produced apples, pears, plums and cherries are very competitive by price. To large extent fruits are planted as by-product in small households and are consumed for households' own needs. Thus production is not very sensitive to changes in import tariffs, does not request too much labour efforts and is mainly defined by weather conditions.

There are no any specific problems with SPS standards related to fruits. Certificates provided by Ukrainian laboratories are internationally recognized.

Liberalization of the market within FTA will not have any significant impact on household fruits production since Ukrainian fruits are produced as a by-product. However, expansion of cheap European fruits on domestic market will restrict development of Ukrainian horticulture enterprises in the mid-term. Still we believe that in long run FTA will affect positively production process. Expected improvement of

10 Coconuts – 0-20%; other nuts – 0-15%; bananas – 3%; dates, fig, pineapple, avocado etc. – 3-4%; citrus plants – 3%; grapes – 0-10%; melons – 5% (winter); 0.3EUR per kg (summer); apples and pears - 5% (winter); 0.5EUR per kg (summer); quince – 10%; apricot and cherries – 0.5EUR per kg; other fruits – 0.6 EUR per kg; 0-20%

investment climate should attract investors to the sub-sector which will be ready to invest into long-term investment projects like horticulture.

2.6 Beverages, spirits and vinegar

Production of beverages is an important sub-sector of food industry. It takes about 20% of food processing output. During recent years the sector was developing strongly in line with recovery of private consumption (beer production grew by 22.7% in 2006, cognac by 15.3%). Alcoholic beverages production consists of distilled alcoholic beverages[11] (about 50%), beers (about 25%), and wines (about 10%). The sector is highly concentrated; 10 largest companies in Ukraine produce about 80% of all alcoholic products. The Ukrainian alcohol (especially, distilled beverages) is competitive by price versus exporting products. 99% of internal market belongs to domestic producers although protective measures are not very strong. On the other hand more than 25% of Ukrainian products are exported (data for vodka, 2005). Russia is the main consumer of Ukrainian alcohol (more than 80% of exported alcohol beverages).
The government regulates production and distribution of alcoholic products by licensing. Ethyl spirit could be produced only by state enterprises while cognac spirit could be produced by private companies also (license for production is requested).

Upon WTO accession import tariffs for beverages will be reduced more than twice to 11.6% till 2010. Current level of tariffs translated in ad valorem terms equals to 23.97% (2006)[12]. Reduction of tariffs will affect the segment of expensive brand beverages which are not produced domestically. Moreover, significant strengthening of competition is expected on the market of wine and beers. At the same time the segment of public products (like vodka) will be hardly affected since Ukrainian beverages are very cheap and competitive by quality.

Important issue is related to protection of specific designation of origin (geographical indications). Upon WTO accession domestically produced “cognac” and “champagne” should be renamed to “brandy” and “sparkling wine”. Provisionally, those changes should not affect the output of the products since domestic “cognac” and “champagne” belong to low price segment and are produced mainly for domestic consumption.

FTA will have no impact on producers of distilled alcoholic beverages since the EU import tariffs are already zero. At the same time it is anticipated expansion of European wines and beers. European products are very competitive by quality. Reduction of tariffs will lead to increase in domestic consumption of the products.

11 Vodka, whisky, cognac etc.

12 Import tariff is 2-3EUR per litre for wines, champagne and other light alcohols, 7.5EUR per litre (of 100% spirit) for spirit, vodka, whisky cognac and other strong alcoholic beverages.

3 Economic impact

Liberalization of trade with EU should be beneficial for agriculture in general. Improvement of agro-food products assortments will be among the major benefits of liberalization (meat and dairy, beverages, sugar confectionaries). Necessity for compliance with food safety requirements will stimulate for heavy public and private investments. Moreover, liberalization of trade will spur restructuring of enterprises; stronger competition will speed up replacement of inefficient producers. The investment process will be extended since FTA has indirect impact on investment decision while no immediate speed up in capital formation is anticipated. The employment at agriculture (all sub-sectors) will be decreasing due to expected restructuring with subsequent growth of efficiency.

Compliance with the EU food safety aquise (related to animal products) will be essential full-fledged benefit from FTA. Mainly speaking the major positive effect on trade is expected after SPS standards harmonization rather than tariff reduction. The WTO SPS agreement will eliminate non-tariff barriers for imports through harmonization of internal SPS regulation. At the same time domestically applied safety standards should be markedly improved to be recognized at EU. Improvement of standards requires both public and private investments. The government should harmonize legislation and finance modernization of veterinary laboratories to be certified by European authorities. Private enterprises on their side will have to invest into certification of their products. For the majority of domestic agro-food enterprises certification will request prior modernization of their production capacities.

The impact of FTA on the selected sub-sectors will be positive in general (except fruits and beverages). Some of the sub-sectors will undergo immediate positive effect (cereals and sunflower oil); the other will need time and investments to become more competitive at the EU market (meat production).

Cereals are expected to increase output shortly after FTA creation. Certification of Ukrainian grains is already internationally recognized. Still there are two impediments for free trade with cereals (i) quotation of exports by Ukrainian authorities and (ii) tariff rate quota from the EU side. We expect improvement in trade balance since domestic cereals are much cheaper of the European products. FTA could stimulate investments in grain production; however, the factor will not be the key one. Trade liberalization will create additional earning due to higher prices and possible exports expansion. Therefore, grain producers could consider it reasonable to invest in production efficiency for profits enlargement.

Production of oil seeds should benefit of trade liberalization. We do not expect any restrictions on export from EU. However, Ukrainian authorities most likely will try to control oil seeds trading with exports tariffs for supporting domestic sunflower oil producers. The value of export tariff will depend on the negotiation process. Even if further reduction of tariffs will be approved oil producers will have enough resources for processing.

Sunflower-seed oil production will not underwent significant impact although positive consequences are expected. Import tariffs on sunflower oil are already low. Sunflower

oil processing plants are highly competitive; moreover, the EU has much interest to importing Ukrainian sunflower oil. European companies import the product for bio-fuel production.

In general it is expected positive impact of FTA on the meat producers. However, the sector will need significant investments in SPS standards and quality of the products to be marketed in Europe. Domestic prices for meat products will go up due to exporting possibilities for Ukrainian producers. Exports should increase in long-run thus improving trade balance. Investments will be stimulated by necessity to comply with the food safety requirements. Moreover, investments will be attracted through restructuring of the sub-sector; it is expected that trade liberalization should speed up replacement of inefficient producers since the competition at the area will increase. Poultry breeding will benefit from FTA immediately after authorization of Ukrainian chickens export. The product is highly competitive versus EU chickens and strong expansion on European market is projected. In addition, the majority of poultry producers has modern capacities and will not need to invest a lot to be certified for exporting. Pig-breeding will also benefit from FTA; however, the majority of farms are outdated at the sub-sector and significant investments are necessary to become competitive on European market. The short-run impact for cattle breeding is ambiguous. On the one hand Ukrainian beef is competitive; on the other domestic production does not satisfy even internal demand while 3-5 years are necessary for cattle stock recovery. In long-run the sector will expand production and will take strong position of the EU market.

Sugar most likely will be excluded from the FTA agreement since none of the party will benefit from liberalization of the market. The prices for the product are about the same level in Ukraine and EU. Production and exports of sugar confectionaries should increase after FTA creation. The confectionary market is diversified and trade liberalization will be mutually beneficial for both parties. Increase in assortment is expected.

Fruit production will be subdued because of cheap imported products. Current production of fruits as households' by-product will be not affected by liberalization and subsequent inflow of much cheaper imported fruits. However, Ukrainian horticulture enterprises will not be able to compete efficiently on the market. In long-run foreign investments could support recovery of the sub-sector; however, the time horizon for this perspective is very large given long period of orchards cultivation.

Beverages will be affected negatively. Even so consumers will benefit due to assortment enlargement. The major negative impact is expected on wine and beers since European products are more competitive by quality. Ukrainians target mainly CIS countries and are not ready to compete with European producers. Only selected sorts of wine could be considered well enough for demanding consumers; however, production volume of the wine is rather limited. Meanwhile, the majority of domestically marketed wine is counterfeit product which will be never exported. Beer producers will have to improve quality of their products; however, domestic beer was positioned in low price segment and is perceived by consumers as a low quality product (versus European). At the same time distilled alcoholic beverages are not expected to benefit from FTA although these products are very competitive by quality and price. Import tariffs for the products are already zero but Ukrainian producers did not manage to catch strong share of European market.