The Agricultural Sector

and Trade

in Ukraine

July 2009
# Table of Content

Table of Content ........................................................................................................ 2  
Acknowledgement ...................................................................................................... 3  
Executive summary .................................................................................................... 4  
Introduction ................................................................................................................ 6  
I. Country profile ........................................................................................................ 8  
  1.1 Natural resources .................................................................................................... 8  
  1.2 Political issues ....................................................................................................... 10  
  1.3 Macroeconomic situation ....................................................................................... 11  
II. Agriculture .............................................................................................................. 14  
  2.1 Agriculture's role in the economy ......................................................................... 14  
  2.2 Agricultural production .......................................................................................... 17  
  2.2.1 LIVESTOCK ......................................................................................................... 17  
  2.2.2 CROPS ................................................................................................................ 23  
  CEREALS ...................................................................................................................... 24  
  OILSEEDS ..................................................................................................................... 26  
  SUGAR BEET .............................................................................................................. 29  
  2.3 Farm structure ........................................................................................................ 30  
  2.4 Agricultural policy .................................................................................................. 31  
        PRODUCER SUPPORT ESTIMATE (PSE) ............................................................... 31  
        UKRAINIAN AGRICULTURAL POLICY IN GENERAL ....................................... 32  
III. Agricultural Trade .................................................................................................. 35  
  3.1 Agro-Food Trade Policy ........................................................................................ 35  
  3.2 EU-Ukraine trade relations .................................................................................... 37  
  3.3 Ukrainian Trade ..................................................................................................... 38  
        THE ROLE OF AGRICULTURE IN THE OVERALL TRADE ......................... 38  
        EXPORTS ............................................................................................................. 40  
        IMPORTS ............................................................................................................. 41  
        ECONOMIC CRISIS and UKRAINIAN AGRICULTURAL TRADE ................. 43  
Conclusion .................................................................................................................. 44  
Sources ....................................................................................................................... 45
Acknowledgement

The report was prepared during the traineeship period (March-July 2009) of Aron Thuroczy at L.5 who is thankful for all of the colleagues at L.5 providing assistance and comments during the preparation and presentation of the report.

Particular acknowledgement is expressed to my supervisor Dangiris Nekrašius for his general assistance, Giel Kattenbelt for his contribution and important lessons in the data extraction from the GTA. I am thankful to Joao Pedro Rocha Pereira for providing me information sources and for Florence Buchholzer for the valuable comments on the writing. Finally, I am thankful to Krisztina Pomper and Dominik Olewinski for their assistance in turning this report in English more understandable.
Executive summary

Country Profile

Ukraine is the second largest country in Europe (603,700 km²) after Russia, and is larger than any country of the EU-27. It has a key location between Russia and the EU, and it has important access with many ports to the Black Sea. Ukraine's natural resources (especially fertile soil condition) provide the country great opportunities for agricultural production.

After Ukraine became independent on 24 August 1991, the country experienced an economically severe transition period during the 1990’s. Then, between 2000 and 2007, its economy grew on average more than 7% annually. The main reasons behind this development included the favourable trade environment and rising consumption. Ukraine has also benefited from subsidised Russian gas prices during this recent period of economic boom; however, this situation is not likely to last long. Russian gas prices increased more than 6 times in the last 5 years. Ukraine has, in addition, been strongly affected by the financial crisis. In fact, its economy is likely to shrink by 9% in 2009. Due to decreasing wages, consumption is expected to drop along with investments, export and imports. External debt is likely to reach almost 90% of GDP.

Agricultural sector

The role of agriculture in the Ukrainian economy is remarkable. Almost two thirds of the country’s area is used for agricultural production. The agricultural sector contributes significantly to the employment and the GDP. Furthermore, agriculture has a pivotal role in foreign trade.

Due to decreasing consumption, Ukrainian agricultural output has dropped significantly relative to its 1990 level. In 2007 livestock output was down at 50% while grain production at 75% in comparison to the level of 1990. The main reasons for such a low performance were a decline in inputs and hardly available financial resources.

Although Ukrainian farm structure is characterised by around 15,000 large agricultural enterprises having 2,000 hectares on average, the main part of the agricultural output is coming from smaller individual farms, comprising of peasant farms and household plots. The number of peasant farms has increased notably since Ukraine’s independence; however, due to their large number, household plots own the largest part of the agricultural land and provide the largest part of the agricultural production.

The main agricultural policy measures include input subsidies through concessional taxes and credit availabilities for agricultural producers. An increasing role is given to direct payments based on the number or per tonne of animals and on the agricultural area. Domestic market support instruments are mainly used in the form of minimum prices. The most protected sectors comprise of poultry, beef, pig, and sugar. Due to WTO accession in 2008, considerable change has happened in trade policy measures. WTO commitments capped customs duties at bound rates ranging between 0% and 30% (with a couple of lines at 50%). Therefore import tariffs decreased, especially in the poultry, sunflower, and sugar sectors. In terms of export measures, Ukraine is obliged to ease on its most commonly used restrictive measures (export quotas and duties).
The largest drop in Ukrainian agricultural production occurred in livestock production. While the country was an exporter of meat products at the beginning of the 1990’s, it is likely to turn into a net importer in the future. Milk products are more promising with possible export opportunities, mostly in cheese. Also, the area of oilseeds and grains has expanded, and Ukraine is expected to play an important role in the world export market. The area of vegetables and potatoes has remained mostly the same in comparison to 1990, but the area of fodder crops and sugar beet has significantly dropped due to decreasing animal production and more competitive sugar imports.

The overall trade balance of Ukraine turned negative in 2005 and has gradually increased until 2008. In contrary, the agricultural trade balance is positive and exhibits an increasing trend. Agricultural trade can be characterised mostly by exporting commodities and intermediate products, and imported high value products. Among the main exporting products oil crops and grains have a dominant share. On the import side, food/feed preparations and meat products (chicken and pig) have dominance.

Ukraine's main trading partner in agricultural products is the European Union (EU) both in terms of import and export. CIS1 countries and the Middle East countries have an increasing share in Ukraine's exports as well, while Russia has a decreasing, albeit important role as the third main export destination. Ukraine's agricultural imports come mainly from the EU, as well as from Russia and other CIS countries.

In order to see the real effects of the financial and economic crisis on Ukrainian agro-food trade further monitoring is needed as no reliable conclusions can be drawn based on the latest data available (first quarter of 2009).

---

1 Commonwealth of Independent States includes Russia, Belarus, Ukraine, Moldova, Georgia, Armenia, Azerbaijan, Kazakhstan, Kyrgyzstan, Uzbekistan, Turkmenistan and Tajikistan.
Introduction

This report attempts to introduce the Ukrainian agricultural sector, the agricultural policy, the main products and agricultural trade. It aims to draw attention to some important issues and facts in Ukrainian agriculture in order to provide a basis for the preparation of a MAP\(^2\) Newsletter to be published in 2009.

The report is divided into three main parts. The first part introduces the country's natural resources, and its political and economic background. In the second part, the role of agriculture in the economy, main agricultural production, farm structure and agricultural policy are introduced. The third part takes a closer look at the agricultural trade of Ukraine.

The main agriculture-related data sources used in this report include FAO, FAPRI, GTA, OECD, European Commission, State Statistics Committee of Ukraine and USDA. Economic data were taken from the World Bank and the IMF.

\(^2\) Monitoring Agricultural Policies (http://ec.europa.eu/agriculture/publi/map/index_en.htm)
List of graphs and tables

Map 1: Map of Ukraine
Map 2: Relief Map of Ukraine

Table 1: Land size of selected EU countries and Ukraine
Table 2: Climate zones in Ukraine
Table 3: Basic agricultural indicators, 2000-2007
Table 4: Number of livestock (1 January)
Table 5: Sown area of main agricultural crops, thousand of ha
Table 6: Ukrainian overall and agricultural trade
Table 7: Ukraine main exports to the World & EU-27 share (value average 2006-2008)
Table 8: Ukraine main imports from the World & EU-27 share

Graph 1: Ukrainian GDP development, 1990 - 2007
Graph 2: Steel prices for Hot-Rolled Coil from CIS
Graph 3: Ukraine: Current account balance
Graph 4: Ukraine: GDP (y-o-y), industrial output, January, 2009
Graph 5: Structure of economic output, 1995-2007
Graph 6: Ukraine: Evolution and annual changes of agricultural output, 1990-2007
Graph 7: Foreign direct investment in Ukraine and Hungary, net inflows
Graph 8: Sectoral contributions to the growth of industrial production and investment
Graph 9: Main animal products
Graph 10: Ukraine: Meat consumption (per capita)
Graph 11: Ukraine: Beef & Veal balance
Graph 12: Ukraine: Broiler balance
Graph 13: Ukraine: Pigmeat balance
Graph 14: Ukraine: Consumption of different milk products
Graph 15: Ukrainian milk production (fluid milk)
Graph 16: Ukrainian export in different milk products
Graph 17: Main cereals production
Graph 18: Ukraine: Cereals export, share in total net export
Graph 19: Ukraine: sunflower seed production
Graph 20: Ukraine: rapeseed, soybean production
Graph 21: Ukraine: sunflower oil production
Graph 22: Ukraine: sunflower seed/oil and soybean export, share in world net export
Graph 23: Ukrainian sugar beet production, 1992, 1998-2018
Graph 24: Gross agricultural output in constant prices by farm type in Ukraine, 1990-2004
Graph 25: Ukrainian PSE level and composition over time, billion USD
Graph 26: Ukraine: Overall Agricultural trade (billion USD)
Graph 27: Ukraine: Agricultural trade with the EU (in billion USD)
Graph 28: Main agricultural exports from Ukraine to the EU-27 and World
   (in % of value average 2006-2008)
Graph 29: Main agricultural imports of Ukraine from the World and the EU-27
   (in % of value average 2006-2008)
Graph 30: Ukraine: destinations of agricultural exports (share in total)
Graph 31: Ukraine: origins of agricultural imports (share in total)
Graph 32: Ukraine: Economic crisis and agricultural exports
Graph 33: Ukraine: Economic crisis and agricultural imports
I. Country profile

1.1 Natural resources

Ukraine is located in Eastern Europe bordered by seven countries; on the southwest by Moldova and Romania; on the west by Hungary, Slovakia and Poland; on the north by Belarus, while on the northeast by Russia. The latter shares the longest border with Ukraine: 1576 km. From the south it is bordered by the Black Sea and the Sea of Azov with a coastline of 2782 km.

![Map 1: Map of Ukraine](Source: Worldatlas.com)

The country extends 1316 km from east to west and 893 km from north to east (FAO Forestry), with a total area of 603.700 km², making it larger than any of the EU-27 countries (see Table 1).

<table>
<thead>
<tr>
<th>Country</th>
<th>Size (km²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ukraine</td>
<td>603.700</td>
</tr>
<tr>
<td>France</td>
<td>547.030</td>
</tr>
<tr>
<td>Spain</td>
<td>504.782</td>
</tr>
<tr>
<td>Germany</td>
<td>357.021</td>
</tr>
<tr>
<td>Poland</td>
<td>304.460</td>
</tr>
<tr>
<td>Italy</td>
<td>301.230</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>244.820</td>
</tr>
<tr>
<td>Romania</td>
<td>230.340</td>
</tr>
</tbody>
</table>

Source: Worldatlas.com

Ukraine has a key geographical position, as it is located between the EU and Russia. Recent gas transit disputes have increased its importance as a transfer country of Russian gas to the EU. Nearly 80% of Russian natural gas goes via Ukraine to Europe (120 billion m³ per year).
This makes up two thirds of OAO Gazprom's revenue coming from the sale of gas crossing Ukraine.

Ukraine also plays an important role in water transport in the Black Sea and Azov Sea regions. More than 30 ports operate there, whereof 19 are Ukrainian. These ports have a considerable role because some countries beside Ukraine, e.g. Kazakhstan, use them as a key transport tool. The most important ports are called the "Big Odessa" and include the ports of Odessa, Ilychevsk and Yuzhny. In 2008 these ports contributed to nearly 65% of Ukrainian grain ship trade. The ports remain ice-free all year round and provide a favourable location for important markets in the Middle East, CIS, North Africa, and the EU.

Ukraine is characterised predominantly by plains as more than 90% of its area is less than a few hundred meters above the sea level. The lowland is interrupted by elevations; the highest is around 300-500 m above sea level while the lowest point is around 40-70 m and can be found in the south. The mountainous section includes the Carpathian Mountains and their foothills on the west, together with the Crimean Mountains along the southern coast of the Crimean Peninsula. The highest peak of the Carpathian Mountains is at 2,061 m above sea level while the highest point of Crimean Mountains is at 1,546 m.

Ukraine has an extensive river network with more than 22,000 rivers that have a total length of 170,000 km. All but one river flow to the Black Sea. The Northern Bug runs north to the Baltic Sea. The largest river, the Dnepr, rises from Russia and flows across the country from south to north. The Danube forms the border with Romania for 120 km before flowing into the Black Sea.

Ukraine has 3,000 natural lakes with a total area of 2,000 km². The country also has swamps whereof 32,000 km² have already been drained and brought into agricultural production, however, in the north of Ukraine there are still about 12,000 km² of swamp lands.
Table 2 summarizes the four agro-climate zones of Ukraine. The humid zone can be characterised by moderately warm summers and cold winters. Precipitation concentrates between May and October. Snow plays an important role as a water source; land is covered by it for 70-90 days from December until February.

<table>
<thead>
<tr>
<th>Table 2: Climate zones in Ukraine</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Location</strong></td>
</tr>
<tr>
<td>Humid zone</td>
</tr>
<tr>
<td>Warm zone</td>
</tr>
<tr>
<td>Semi-arid zone</td>
</tr>
<tr>
<td>Arid zone</td>
</tr>
</tbody>
</table>

Source: FAO Aquastat

In the warm zone precipitation is expected between February and April while in the semi-arid zone between April and October. Mild winters characterise the arid zone with precipitation between December and May. In the mountains precipitation can reach 1600 mm yearly.

Ukraine is endowed with very high quality soil for agricultural production. The country is located in one of the "chernozem" ("black earth") belts. Thanks to this, more than half of the agricultural area (54%) is covered with valuable chernozem containing high percentage of humus.

1.2 Political issues

On 24 August 1991 the Ukrainian parliament declared independence from the Soviet Union with the adoption of the Act of Independence that was affirmed later by a referendum. The day of the declaration is still celebrated as a national holiday.

Ukraine is a republic with semi-parliamentary semi-presidential system. The highest official among the state authorities is the president elected by popular vote for 5 years. The president has considerable legislative, executive and military powers.

Leonid Kravchuk was elected to serve as the first president of the country in 1991 and was followed by Leonid Kuchma in 1994. In 2004 Viktor Yanukovich was announced as the winner of the presidential elections. This controversial sparked protests which evolved to what is known as the Orange Revolution. The Supreme Court called for new elections that brought the opposition leader, Viktor Yushchenko as third president into power. Another opposition leader Yulia Timoshenko became the Prime Minister. The next presidential election will be held on 17 January 2010.

Mr. Yushchenko is more pro-West oriented, campaigning for EU and NATO membership. Mr. Yanukovich is considered to be more Russia-oriented as he represents the mostly Russian-speaking Eastern Ukraine. Ms. Tymoshenko favours both Russia and the Western nations.

The Ukrainian parliament, comprising of 450 seats, is called Verkhovna Rada (Supreme Council). It is the main legislative authority of the country that is also responsible for the
selection of the PM. The PM appoints the members of the Cabinet with the approval of the President. The highest judiciary body is the Supreme Court of Ukraine, which consists of 5 judges elected for a 5-year term by the Verkhovna Rada. The main task of this body is to supervise all judicial activity. Ukraine’s administration is divided into 24 oblasts (provinces) and one autonomous republic (Crimea) whereas cities of Kiev and Sevastopol have the same status as oblasts.

Despite positive political developments, Ukraine is still facing notable challenges. A study conducted in the frame of the Millennium Challenge Cooperation (MCC 2008) draws attention to the country’s below-average performance in areas like political corruption, government effectiveness, and rule of law. Another recent report (Neutze 2007) warns that corruption in Ukraine has reached a level that experts describe as a direct obstacle to the country's economic development and prosperity. This poses a particular threat to transparency, which would be desirable especially in face of the current economic crisis.

1.3 Macroeconomic situation

After a decade of struggle, economic rise

Ukraine experienced a severe transition period during the 1990’s after its independence. Real GDP fell from 81 billion USD in 1990 to 31 billion USD in 2000. This was the worst performance among the ex members of the Soviet Union.

Graph 1: Ukrainian GDP development, 1990 - 2007

Inflation increased dramatically exceeding 10.000% in 1993 and remained at 3-digit level until 1995. In the following year, a new currency called “hryvina” was introduced but the economy continued to contract. Then in 2000, the economy started to boom by an annual average of more than 7% until 2007. This tendency is especially striking considering the 90% increase in the price of gas imported from Russia.

The economic growth of Ukraine was backed by favourable trade conditions (terms of trade rose by a cumulative 17%); total trade turnover in 2006 was around 100% of GDP. One of
the most important factors in trade was the international commodity-price development; especially rising metal prices (see Graph 2). This is Ukraine’s main export product and contributes with 40% to GDP. Trade balance stayed positive between 1998 and 2005 due the advantageous export prices and that the national currency was pegged to the US dollar (which has weakened against the EUR and rouble after 2000).

Another source of the economic boom was growing consumption from 2001 onwards. This was supported by increasing wages and growing consumer credits, and the decreasing unemployment rate falling from 10.9% to 6.5% between 2001 and 2006. Rising consumption was underpinned by social transfers (e.g. pensions) and also by shadow earnings and obligatory set of minimum wages. The evolved situation was favourable for significant investments across different sectors.

Another important source of the economic growth was that Ukraine received Russian gas at a lower price than for example the EU. However, this benefit is not a long-term advantage considering the increasing tendency of the price. In 2004 gas cost 50 USD/1000m³, while in 2006, it rose to 135 USD/1000m³. In January 2009 the price jumped to 360 USD/1000m³ resulting in a harsh dispute with Russia. The high cost of gas caused difficulties for Ukraine in paying Russian gas bills; therefore, the country’s leadership pleaded for international support in order to cover its expenses in June 2009.

Apart from the rising gas prices Ukraine has to face declining population. The IMF forecast estimates a more than 15% drop (a decrease of more than 8 million people) in the population between 1992 and 2014. Another forecast made by World Bank estimates a decrease of 20% between the years of 2000 and 2025, accounting for 11.8 million people. With these figures Ukraine is predicted to experience the largest decrease in the share of population among CIS countries. Without policies countering these processes, Ukraine will face a huge obstacle in its economic growth in the future.

Economic crisis

By the middle of 2008 the economy was overheating. The current account balance decreased from a surplus of 10.6% GDP in 2004 to a deficit of 7.2% in 2008.
In the end of 2008 higher food and energy prices put additional inflationary pressure. The hryvnia has lost significantly its value against the dollar which made import more difficult.

The global financial crisis exposed Ukraine's macroeconomic vulnerabilities and led to an economic crisis. Slowing global demand led to a sharp fall in steel prices badly affecting Ukraine's main export product. According to certain estimations, the country's GDP declined 20% in January 2009 year-on-year (started already in the last month of 2008), and industrial output in various sectors dropped dramatically. The unemployment rate started to rise while real wages started to fall impeding domestic consumption. In addition, the volume of unpaid salaries and wages started to rise.

Even though Ukraine received a rescue package of 6.4 billion USD from international financial institutions, the World Bank predicts Ukraine's economy to shrink by 9% in 2009. Due to decreasing wages, consumption is expected to drop along with investments, export and imports. External debt is likely to reach almost 90% of GDP.
II. Agriculture

2.1 Agriculture's role in the economy

Agriculture has an important role in the Ukrainian economy. 71% of the country's area is agricultural land (compared to 45% in the EU-27), which makes around 41.7 million ha. Agriculture is important in the labour market: in 2007, 17% of workers (EU-27: 5.6%) were employed in this sector. Ukraine’s agriculture also has the potential to become a major export earner. While in the beginning of the nineties 23% of GDP originated from agriculture, in 2007 this dropped to 8% (EU-27: 1.2%).

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP (current billion USD)</td>
<td>77,62</td>
<td>31,26</td>
<td>38,01</td>
<td>42,39</td>
<td>50,13</td>
<td>64,88</td>
<td>86,14</td>
<td>107,75</td>
<td>141,18</td>
</tr>
<tr>
<td>Agriculture, value added (current billion USD)</td>
<td>18,13</td>
<td>4,53</td>
<td>5,50</td>
<td>5,52</td>
<td>5,45</td>
<td>7,02</td>
<td>7,89</td>
<td>8,15</td>
<td>9,38</td>
</tr>
<tr>
<td>Agriculture, value added (% of GDP)</td>
<td>23</td>
<td>17</td>
<td>16</td>
<td>15</td>
<td>12</td>
<td>12</td>
<td>10</td>
<td>9</td>
<td>8</td>
</tr>
<tr>
<td>Employment in agriculture, forestry, fishing (% of total)</td>
<td>19.6</td>
<td>23.5</td>
<td>24.9</td>
<td>25.2</td>
<td>20.4</td>
<td>19.7</td>
<td>19.4</td>
<td>17.6</td>
<td>16.7</td>
</tr>
<tr>
<td>Agricultural land (% of land area)</td>
<td>72</td>
<td>71</td>
<td>71</td>
<td>71</td>
<td>71</td>
<td>71</td>
<td>71</td>
<td>71</td>
<td>71</td>
</tr>
<tr>
<td>Rural population (% of total population)</td>
<td>33</td>
<td>33</td>
<td>33</td>
<td>33</td>
<td>32</td>
<td>32</td>
<td>32</td>
<td>32</td>
<td>32</td>
</tr>
<tr>
<td>Average share of household income spent on food (%)</td>
<td>42</td>
<td>65</td>
<td>63</td>
<td>61</td>
<td>58</td>
<td>58</td>
<td>58</td>
<td>54</td>
<td>57</td>
</tr>
<tr>
<td>GAO growth, crops (% change y-o-y)</td>
<td>-7.4</td>
<td>23.2</td>
<td>12.6</td>
<td>-2.0</td>
<td>-14.6</td>
<td>35.4</td>
<td>-3.0</td>
<td>1.7</td>
<td>-9.5</td>
</tr>
<tr>
<td>GAO growth, livestock (% change, y-o-y)</td>
<td>-8.9</td>
<td>-3.6</td>
<td>7.0</td>
<td>5.3</td>
<td>-6.5</td>
<td>2.0</td>
<td>4.7</td>
<td>3.6</td>
<td>-2.3</td>
</tr>
</tbody>
</table>

Source: WDI, OECD, World Bank

However, according to a report made by the World Bank, the entire contribution of the agri-food sector to the GDP approaches 20% if we add the upstream industries.

The average share of household income spent on food was 57% in 2007. This figure increased from 42% in 1997, although one would expect the opposite trend assuming increasing wages. By comparison, in the EU 16% of household income was spent on food products in 2007.
Between 1995 and 2007 the share of agriculture in economic output decreased along with industry and manufacturing, while the output of the service sector has increased.

**Gross Agricultural Output (GAO)** dropped significantly between 1990 and 2007. In 2007 total GAO was down to 60% of its 1990 level. The output of crops was 25% down while the output of livestock declined by half between 1990 and 2007 (Graph 6).

The World Bank calculated a drop in agricultural output of 51% between 1990 and 1999. At the same time the share of GDP produced in agriculture has also decreased, because the decline in agricultural output was faster than the shrinkage of the overall economy.

There is a difference between the productivity among the oblasts. The central and eastern parts of the country are generally more productive while the northern, western and southern regions produce below the average due low precipitation and less suitable.
An important factor behind the decreasing GAO is the sharp decline in the use of inputs at the beginning of the 1990s and their constant low level thereafter. For example, in terms of wheat the usage of fertilizer dropped from around 150 kg/ha to 30 kg/ha and in case of maize from 250 kg/ha to 38kg/ha. One possible explanation for the drop could be the tremendous price increase at the beginning of the 1990s. Increase in input applications started to rise again from 2000 onwards.

Another typical feature of Ukrainian agriculture in the transition period was the declining share in the investment. The share of primary agriculture in total investment dropped from 21.3% to 5.2% between 1990 and 2002. This happened because the agricultural sector enjoyed strong governmental support through central planning before 1990 (OECD - World Bank 2004).

After the independence foreign direct investment (FDI) was a significant resource in many post-Soviet countries, however, Ukrainian FDI lagged behind that of other neighbouring countries like Hungary (Graph 7). One of the main reasons for this was the inept regulatory framework – the absence of effective laws and policies – which discouraged potential investors. On the other hand, the government did not privatise extensively in order to attract foreign capital.

Graph 7: Foreign direct investment in Ukraine and Hungary, net inflows (current USD)

![Graph 7: Foreign direct investment in Ukraine and Hungary, net inflows](image)

Source: World Bank

However, the expansion of the food and other agricultural processing industries has recently been very impressive. Between 2001 and 2006, this sector contributed to the increase in the industrial production and investment to a large extent, an annual 2.14% and 3.65% respectively (Graph 8).
2.2 Agricultural production

A characteristic change in the Ukrainian agricultural production during the transition period was a decrease in the production of almost all of the main agricultural commodities, especially of animal products, which saw their share in total agricultural output decline from 1/2 to around 1/3. The main reason behind such a sharp decline was a decrease in real per capita income during the transition period. The effect on meat products was particularly visible because animal products have higher income elasticity than other products. Decline in meat production also affected feed production, which dropped to a large extent as well. The production levels in the grain sector rebounded in 2000-2002. Sugar beet production, however, could not compete with the more competitive import of raw sugar products. The production of potatoes, vegetables and sunflower remained relatively stable during the 1990s.

2.2.1 LIVESTOCK

Ukraine experienced a sharp drop in its livestock inventories and its animal production in the 90’s. A dramatic decline occurred in its cattle stock where the number of animals has continued to drop. In January 2009 the stock stood at 22% of the level of early 1990s. The pig sector contracted in the same way. Today there are about 60% less pigs in Ukraine than at the beginning of the 1990s.
Table 4: Number of livestock (milion)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cattle</strong></td>
<td>22.9</td>
<td>10.6</td>
<td>9.4</td>
<td>9.4</td>
<td>9.1</td>
<td>7.7</td>
<td>6.9</td>
<td>6.5</td>
<td>6.2</td>
<td>5.5</td>
<td>5.1</td>
</tr>
<tr>
<td><strong>Pig</strong></td>
<td>17.1</td>
<td>10.1</td>
<td>7.7</td>
<td>8.4</td>
<td>9.2</td>
<td>7.3</td>
<td>6.5</td>
<td>7.1</td>
<td>8.1</td>
<td>7.0</td>
<td>6.5</td>
</tr>
<tr>
<td><strong>Sheep &amp; Goats</strong></td>
<td>7.5</td>
<td>1.9</td>
<td>1.9</td>
<td>2.0</td>
<td>2.0</td>
<td>1.9</td>
<td>1.8</td>
<td>1.6</td>
<td>1.6</td>
<td>1.7</td>
<td>1.7</td>
</tr>
<tr>
<td><strong>Poultry</strong></td>
<td>219</td>
<td>126</td>
<td>124</td>
<td>137</td>
<td>147</td>
<td>142</td>
<td>153</td>
<td>162</td>
<td>167</td>
<td>169</td>
<td>178</td>
</tr>
</tbody>
</table>

Source: State Statistics Committee of Ukraine

*Sheep and goat* numbers decreased, although an upward trend started from 2007. The poultry stock experienced a sharp (over 40%) drop by 2001. However from then a constant recovery could be seen with numbers increasing by almost 50%.

The main reason of the decline in the number of animals is that production experienced a drop due to the reasons mentioned before. During the period of decline, most animal production remained unprofitable, with the exception of poultry and eggs.

Graph 9: Output of main animal products

Since 2000 production has not dropped to the same extent anymore, and signs of recovery could be revealed in some products, such as egg production. Due to higher prices the gross value of animal production increased by 5.3% in 2001 and again by 5.6% in 2002.

In the 1990s meat *consumption per capita* decreased sharply, and this in turn affected production. Around 1999, consumption started to increase and is now projected to grow further and reach 53.6 kg per capita in 2018 based on a projection prepared by FAPRI. Consumption can be characterised also by changing patterns. While beef and pigmeat were historically the most consumed meats, poultry should overtake them both by 2009.
Between 1998 and 2008 beef meat production decreased in particular and is now predicted to shrink in the projection period.

Pigmeat production has slightly decreased from its 1998 volume and is projected to slightly increase in the projection period.
Broiler production shows a strong increase between 1998 and 2008 and in the projection period is expected to stabilise at around the production level of 2010.

Meat export shows a decreasing trend in Ukraine. While at the beginning of the '90s pigmeat and especially beef appeared among Ukraine's main agricultural export, from the end of the '90s they have tended to decrease.

Beef was the last meat product where significant export occurred in 2006. After this, Ukraine has become a net importer in meat products. However, the current economic crisis affects purchasing power; and therefore, in January 2009, consumption, and in turn import, have decreased for the first time in 8 years.
Unlike meat products, the consumption of milk did not experience the similar sharp decline during the transition, because milk is considered to be one of the cheapest sources of protein. Per capita consumption rose sharply from 2003 to 2004 (72 kg to 108 kg) and dropped dramatically in 2006 from 130 kg to 79 kg. However, this trend is projected to turn from 2009/2010 and to gradually increase until 2018 and reach 105 kg per capita. This figure is one of the highest among the countries that FAPRI analyses (EU 67 kg, USA 89 kg).

The consumption of other dairy products, like cheese (from 2 kg to 1 kg) and butter (from 5 kg to 2 kg) has dropped in the 1990s. Cheese consumption rebounded in 2000 and the FAPRI forecast suggests that the increase will continue until the end of the projection period. Butter consumption per capita is projected to stabilise around the level (with some fluctuation) it has fallen in the ’90s.

Milk production declined in the transition period mainly due to unprofitable production. The turnaround in the production occurred in 2001 with 6% and in 2002 by 5% increase in milk production. However, the recapture was not durable, and from 2006 production started to decrease again.
The number of milk cows has decreased significantly after the independence. In 1998 there were 6.2 million dairy cows, but their number dropped to 2.6 million in 2008. The number of milk cows is projected to further decrease, albeit at a slower pace, to reach 2.2 million in 2018.

Similarly, production has also decreased from 13.8 million tonnes of milk in 1998 to 11 million tonnes in 2008. However, a small recovery can be seen between 1999 and 2004 from 2005. In the projection period the fall in production seems to come to halt and begins to increase from 2010 onwards. Yield has been improving gradually from around 2000 kg per head to almost 5000 kg per head. However, this still lags behind the EU data – 4700 kg and 6600 kg respectively.

Ukraine has good export potential in dairy products. It is already exporting various products, although at a lower level. On the other hand, cheese shows a reassuring performance after a sharp drop in export from 110.000 to around 40.000 tonnes between 2005 and 2006. FAPRI predicts that the value of cheese export will reach around 90.000 tonnes in 2018, and thereby place Ukraine as the fourth largest exporter in the world behind New Zealand, the EU, and Australia.

Ukrainian butter and whole milk powder exhibit an increasing export value as well, although at a lower level; while non-fat dry milk export is projected to decline from 2009 onwards.
2.2.2 CROPS

Similarly to the animals, the total area of important crops has dropped since 1990. This is attributable to the decline seen in sugar beet and fodder areas each around 75%. The latter relates to the drop in livestock. The decrease in the sugar beet area proves the negative profitability of the production.

![Table 5: Sown area of main agricultural crops ('000 ha)](image)

While the area of vegetables and potatoes remained mostly the same, the grain area has slightly increased (around 1 million ha) in comparison to the beginning of the 1990s. The area of sunflower production has risen by more than 100%, showing Ukraine's great interest as an important player on the world market in this crop.
CEREALS

Between 1992 and 2000 production of cereals decreased by about one third, however, in 2001 production recovered. The structure of grain production has been relatively stable with approximately 50% wheat, 25% barley, and the rest mostly maize. However, the share in cereal production is projected to change in the future with increasing maize production.

Wheat has been harvested on average on 5.8 million hectares in the last 10 years. Due to unfavourable weather conditions, 2003 was an exceptionally weak year, when only 2.45 million hectares were harvested. In 2008 Ukrainian wheat harvest was very high of over 25 million tonnes.

Graph 17: Area, Yield and Production of main cereals in Ukraine

The second most planted crop is barley with an average of 4.3 million harvested hectares between 1998 and 2008. In the mentioned time period the most and least productive years (2007 and 2008) happened to be at the same amount of harvested area; 4.1 million hectares. Favourable weather conditions and a more than 50% increase in the yield were the key reasons for the record harvest.

The third coarse grain is maize with an average of 1.7 million harvested hectares in the last 10 years. Maize production is projected to increase in the future and reach the level of barley production until the end of the projection period.

Ukraine is a significant exporter of cereals. One of its main exports is barley with an increasing share in the world export. In 2006/07 export amounted more than 5 million tonnes that gave 36% of the total net export, turning Ukraine the world’s largest exporter that year. After a weaker year in 2008/09, Ukrainian barley export is projected to peak at almost 5.5 million tonnes contributing 30% to the world net export. This year Ukraine is projected to become again the world’s largest exporter of barley leaving behind countries like the EU, Argentina, Canada or Australia, all notable exporters of cereal products. In the projection period its share in net export seems to stabilise at around 25-27%.
Wheat has the largest export volume among cereals with an average of 4.5 million tonnes between 1998 and 2008. Nevertheless, in 2000 and 2003 Ukraine imported wheat. The share of wheat among world’s top net exporters averaged around 5%. Due to favourable weather conditions and excellent harvest, wheat export peaked in 2008 at almost 9 million tonnes. FAPRI projects that Ukraine’s wheat export share in the total net export is about 7-8%.

Maize export has the lowest share among main cereals and also in the world total net export. However, the export volume has been gradually increasing from 328,000 tonnes in 1998 to almost 3.5 million tonnes in 2008. The share of Ukrainian maize among top net exporters is small, although it is slightly increasing. While in 1998 that share did not even reach 1%, at the end of the projection period it should reach around 6%.

Cereals market organization (OECD 2009)
- The Law on State Support to Agriculture (2004) determines grains as “objects for state price regulation”. A minimum price is set for these products applying state interventions.
- The Agrarian Fund state agency set up in 2005 is responsible for the implementation of state market interventions through direct spot purchases into the State Food Reserve that is forward contracting and lending against pledged grains. However, the scale of grain intervention system is not exceeding 2% of seasonal grain consumption; moreover the official minimum prices for grain remained below market price.
- In 2006 and 2007 the Agrarian Fund did spot purchases of grain and concluded forward contracts with grain producers on average price registered in the wholesale market (such as Agrarian Exchange and regional commodity exchanges).
- The Agrarian Fund also implemented grain pledge in 2006 (similar to US commodity loans) with a loan rate set at 80% of the official minimum price.
- The grain intervention expenditures were 57 million USD in 2006 and 108 million USD in 2007.
- Due the anticipated oversupply in 2008/09 the government allocated USD 258 million for grain intervention. It is expected to withdraw around 800,000 tonnes of grains from the market through pledge measure.
- In 2006, per ha payments were introduced for grain, rapeseed, hop and flax producers. (2006: 191 million USD, 2007: 114 million USD)

Trade policy measures:
- Main trade policy measures for grains have restrictive nature.
- Export quotas were introduced between 2006 and 2008 for wheat, barley, maize and rye.
- As a result, cereal export declined from 13.2 million tons in 2005/06 to 9.6 million tons in 2006/07 and 3.7 million tons in 2007/08. Between March and July 2008 only 12,000 tonnes of export were allowed.
OILSEEDS

Ukrainian oilseed crops are competitive agricultural products. Ukrainian farmers consider growing sunflower seeds more profitable than growing grains. Sunflower is the only large field crop that experienced a growth in production during the ’90s. Production levels in the ’90s were even higher than in the pre-reform era. The main reasons for this were increased profitability and a reliable export market.

Harvested sunflower area in 2008 was a record of over 4 million hectares. This increase contributed to a record harvest of more than 6 million tonnes. The average yield per hectare was the highest since 1998 at 1.54 t/ha. A decrease can be expected in the harvested area (and production) in the 2009/10 marketing year due to high price volatility as well as crop rotation requirements. Additionally, the financial turmoil and credit crunch may have a disadvantageous effect on farmers’ input applications and technologies, which then may produce a negative effect on yields.

Further important oilseeds in Ukraine include soybean and rapeseed. The increasing role of these products can be concluded from the rise in their planted area. In the case of soybean, it grew from 31,000 hectares in 1998 to more than 700,000 hectares in 2006. After this, the harvested area dropped slightly to its 2009 level of 650,000 hectares.

Graph 19: Sunflower seed production

Graph 20: Soybean and rapeseed production
Rapeseed harvested area shows a slight decrease between 1998 and 2003. However, from 2003 to 2009 the harvested area exhibits a sharp increase from 54,000 hectares to almost 1.2 million hectares with a peak in 2008 (1.4 million hectares). Production also shows a significant increase: in 2008 soybean production was twenty-two times and rapeseed production was forty-two times higher than in 1998.

Ukraine has developed its sunflower oil production by introducing export tariffs on sunflower seeds in 1999. The aim was to strengthen domestic crushing industry and to export sunflower oil in order to gain higher export earnings. This measure successfully increased sunflower oil production from around 1.5 million tonnes to around 2.2 million tonnes between 1998 and 2008. The same amount of production is projected by FAPRI in the future. Consumption has remained low, offering a large share of the production for export.

Ukraine plays an important role in sunflower seed and soybean world export. Sunflower seed export has fluctuated heavily. In 2000 export declined significantly, particularly after the introduction of export restrictions. In 2003 record export reached 926,000 tonnes of sunflower seed contributing with more than 60% to the world net export. In 2004 the lowest sunflower seed export amounted 6,000 tonnes.

Graph 21: Sunflower oil production and use

Graph 22: Net exports of sunflower and rapeseed and share among top net exporters
FAPRI projects sunflower seed share among world's top net exporters to be at around 40% over the projection period.

*Rapeseed export* has an increasing role in the world export. The first significant export in 2006 amounted 483 000 tonnes that comprised 8% of world's top net exporters. In 2009 rapeseed net exports is expected to hit a record of 2.5 million tonnes (27% share among world's top net exporters). In the projection period export seems to further increase to around 3 million tonnes per year, turning Ukraine into the second largest exporter of the world after Canada.

*Sunflower oil* is an important export product for Ukraine. While in 1998 only 175 000 tonnes were exported, in 2008 net exports has risen to around 1.5 million tonnes; and is expected to remain stable over the projection period. Ukraine gained an important role in sunflower oil exports around the world by being responsible for almost half of the world’s sunflower oil trade.

Net exports of soybeans are not yet significant; however, an increasing trend is observed between 1998 at around 7 000 tonnes and 2009 at more than 230 000 tonnes.

Although Ukraine has a significant supply of biofuel crops, local biofuel production has not developed yet. Therefore, oil crops are mainly exported to the European Union where biofuel production is more widespread.

**Agricultural policies affecting oil crops:**
- Ukrainian oilseed growers will continue to enjoy considerable *tax benefits* in the 2009/2010 marketing year.
- Ukrainian crop growers, including growers of some oilseeds, *have also been subsidised* depending on the crops they cultivated.
- In marketing year 2008/2009, farmers growing “elite” and first generation soybean crops might be able to claim a subsidy of 10 USD/ha, second and third generation soybean crops – for 6 USD/ha, flax and hemp – 83 USD/ha.
- The GOU sometimes attempts to *influence sunflower oil prices* through different administrative measures, including investigating operations of sunflower oil producer through the Antimonopoly Committee.

**Trade policies affecting oil crops:**
- Upon WTO accession (May 2008) Ukraine *reduced its export duties* on certain products, including oilseeds from 17% to 14%. They are subject to a 1% percent point decrease each year until reaching a total of 10%. Therefore, export duties for sunflower seed, flaxseed and linen seed have decreased to 13% since January 1, 2009.
- Ukraine agreed *not to apply minimum export prices* as part of its WTO accession package. The minimal (indicative) export prices for oilseeds were abolished starting from October 2008. Previously, the indicative price was an instrument with which the government was able to limit sunflower seed exports from Ukraine by setting indicative prices at levels that did not allow exporters to sell sunflower seed profitably abroad.
- *Export quotas* were introduced for oil crops between May and July 2008; 1 000 tonnes of sunflower seed and 300 000 tonnes for sunflower oil.
SUGAR BEET

Sugar consumption in Ukraine has declined in the 1990s (from 50 kg per capita in 1990 to 30 kg in 1997), thereby unfavourably affecting the production sector. Sugar beet production was unprofitable in the 1990s due high production costs and inefficient processing facilities. As a result, the sugar beet area declined over the time period of 1992-2002 by around 50% (from 1.4 million ha to 763 000 ha). Accordingly, production dropped also by 50%, equalling 14 million tonnes. Between 2002 and 2006 the harvested area seemed to stabilise at around 600-700,000 hectares; however, in 2008 it dropped again and this trend is expected to continue until around 380 000 hectares and 10-11 million tonnes of production. During the 1990s yields fell by 20%.

Since 2000 the average yield has been improving constantly and reached around 30 t/ha by 2008 due to higher input application mainly by large agricultural companies. This increased the profitability of the sugar beet sector. A large portion of total sugar beet area is sown by very large vertically integrated companies that have their own sugar beet processing capability, or large land banks that may exceed 100 000 ha. The development of these large integrated companies is one of the drivers for the increase in sugar beet yield seen recently.

The number of sugar processing plants in Ukraine has sharply decreased. 192 plants existed at the beginning of 2000, while only 70 sugar plants operated in the 2008/2009 marketing year.

**Domestic sugar policy**
- Sugar is subject to intervention purchases
- **Sugar Quota Regime** (established in 2000): National marketing quota for sugar produced from sugar beet is set annually. Main changes due to WTO accession include:
  - Quota A – Production quota for refined sugar to be sold in the domestic market. A minimum price is guaranteed as well as a direct payment of 155 USD/sown hectare.
  - Quota B (exports in accordance with International Agreements) and Quota C (Sugar produced in excess of the quotas A and B and intended for exports) – have been abolished with the entry to the WTO

**Policy in sugar trade**
- In the WTO negotiations Ukraine preserved the right to apply TRQ for sugar. It was reintroduced in 2008 for raw sugar processed from sugar cane. The quota was set at 263 000 tonnes for 2009 and 267 000 tonnes for 2010 with in quota tariff rate of 2% and over quota tariff of 50%. The quota will be filled with a “first come first serve” basis within the first 3 years of accession.
2.3 Farm structure

In the Soviet Union most of the land was owned by the state, and so was in Ukraine. In 1988 a process began, which aimed to privatise the land in different stages. In 1998 6.9 million farm members received land share certificates as preliminary evidence of their ownership. Altogether there are more than 11 million people today, who are recognised as owners of land parcels. In January 2008, 99% of farm members holding preliminary ownership, received certificates as a final proof of ownership. In January 2008 91% of certificate holders received land property acts, which included the exact parcels owned by the owners.

This process is required for a well functioning land rental market. The privatisation process is not yet over as there are still limitations on ownership, which need to be removed. Among others, these limitations include the ban on sale of agricultural land. This ban was extended at the end of 2007 from its previous start date just one month later. It is worth to mention, however, that the Memorandum between the IMF and Ukraine over the anti-crisis assistance agreed in October 2008 highlights the “creation of the functioning land market” among its required structural changes.

The farm structure of Ukraine can be characterised by 2 main types of farms: individual and corporate farms. Corporate farms are large-scale agricultural enterprises, successors of large state-owned farms from before 1990. According to the OECD, there are almost 15 000 agricultural enterprises with an average size of agricultural land of 2 080 hectares. These enterprises used to own the majority of the agricultural land; however, they seem to have lost this share. While some estimations suggest that the share of enterprises in agricultural land in 2004 was 59%, in 2006 it was only 46%. In the meanwhile enterprises contributed by 39% of total agricultural output in 2006. Another feature of these enterprises is the dominance (64%) in the total number of lease agreements in 2005.

Individual farms have an increasing share in the agricultural land with 55% and a large contribution to the agricultural output with 61% in 2006. Among individual farms, one can distinguish peasant (family) farms and household plots.

Peasant farms are characterised by an increasing number and average farm size. Between 1993 and 2005 the number of family farms increased from 14 700 to 46 400, while their average farm size grew from 19.9 ha to 74.7 ha. Other estimations suggest that in 2006 their average farm size was more than 100 hectares. Peasant farms possess 11% of all agricultural area (4 million hectares). Larger family farms are mostly in the eastern part of the country with an average size of 137-142 hectares; while smaller family farms are in the western part of the country (average size 7-13 hectares).

Graph 24: Gross agricultural output in constant prices by farm type in Ukraine, 1990-2004

Source: Lerman et al, 2006
Another category of individual farms is the **household plot** with a smaller average farm size, 2.8 hectares. This farm type is the most common one, considering that in 2006 there were 5.5 million. The activities of these farms are intended to cover mostly own consumption, therefore they are mostly non-commercial in contrast to peasant farms and agricultural enterprises. Nevertheless, in some cases they produce goods that are in demand. In 2006, household plots amounted to 42.9% of the total agricultural area (15.6 million hectares) (WB 2008), representing the second largest share of farms after the enterprises. Regarding gross agricultural output, however, households overtake enterprises. It is notable that in 2004 household plots accounted for the largest share in the gross agricultural output (see Graph 24).

This is possible because household plots can produce at a lower cost than enterprises. On the other hand, the lower productivity of enterprises can slow down any improvement of the farms themselves, causing inefficient input supply and output marketing chains. Moreover, scarce credit markets, which they depend on, might also contribute to the lower performance.

### 2.4 Agricultural policy

**PRODUCER SUPPORT ESTIMATE (PSE)**

In **2005-2007 PSE in Ukraine was 10%** in comparison to 1995-1997, when implicit taxation levelled at 10%. **Ukraine was below the OECD average** in 2005-2007 (26%). The average PSE for 2005-2007 shows a decline from **12% to 4%** due to changes in price support among the different commodities.

Graph 25: Ukrainian PSE level and composition over time, billion USD

- **Budgetary transfers (left scale)**
- **Support based on commodity output (left scale)**
- **% Producer Support Estimate (right scale)**

Source: OECD
Ukrainian farmers received 4% higher prices than they would have on the world market in 2005-2007, although this number stood at –11% in the mid-1990s. In addition, farmers’ incomes were 11% higher in comparison to what their earnings on the world market could have been in 2005-2007. By contrast, this figure was –5% in 1995-1997.

Agricultural price support placed an implicit tax on consumers turning Consumer Support Estimate (CSE) to –6% in 2005-2007 after an implicit support of consumers in 1995-1997 of 18%.

Transfers through policies granted to commodities contributed 45% of total PSE in 2005-2007. The highest transfers were received by poultry, sugar, pigmeat, and beef ranging from 52% to 23%.

Support provided to general services in agriculture (GSSE) amounted to 23.5% of the total support to the agricultural sector in 2005-2007. This was a decrease in comparison to 2003-2005. GSSE gave almost half (44.4%) of all agricultural support. The main element of this covered infrastructural expenditures, followed by agricultural schools in 2005-2007.

The total support of the agriculture as a percentage of the GDP was 2.5% in 2005-2007. This was higher than two years earlier, when it was 1.4%; and much higher than a decade earlier with –1.47%. In 2005 total agricultural support reached 3.55% of the Ukrainian GDP.

UKRAINIAN AGRICULTURAL POLICY IN GENERAL

The main cornerstones of Ukrainian agricultural policy were laid down in the “Law on Basic Principles of the State Agrarian Policy” in 2005 where long-term objectives were established until 2015. These include:

1. **Food security**
   This objective mirrors the low incomes in Ukraine and the large proportion of the society being economically vulnerable.

2. **Efficiency and international competitiveness of the agricultural sector**
   Reflecting the WTO accession of Ukraine in May 2008, this goal aims to strengthen the country’s position in the global markets.

3. **Integrated development of rural areas and improvement of social conditions of rural people.**

In 2007 a program was attached to the above-mentioned law called *State Targeted Program for Development of the Ukrainian Countryside*. This program renders concrete tasks for the objectives and determines financial (both governmental and private) sources and needs for the specific tasks. In 2008 the third objective was further affirmed with the National Program for Rural Development until 2015. In 2004 another important document was prepared, which established main agricultural support instruments and programs.

Ukraine’s main policy instruments are output payments (particularly in case of livestock products) and input subsidies. One feature of these subsidies is the option for agricultural producers and food processors to hold back their VAT payments. Recently area and head payments were introduced by the authorities. Further support is granted in the form of tax and...
credit preferences. Different forms of market price support instruments are widespread, for instance through tariff protection, non-tariff trade regulation, minimum purchase price, direct state purchase and loans for pledged grain.

- Minimum price is an important market price support measure. Mostly grains, oilseeds, and livestock products are "subject to state regulation". In the case of livestock products this instrument serves as a basis for defining the levels of per tonne subsidies. Minimum prices are also meant to serve as a floor price reference. The Agrarian Fund is responsible for market interventions through direct spot purchases, forward contracting and lending against pledged commodities. Pledge operations are implemented for grains. Their mechanism is similar to US commodity loans. The loan rate is set at 80% of the official minimum price.

- Direct support is mostly intended to increase livestock production. Cattle, pigs and poultry breeders receive direct payments per tonne of animals delivered for processing. Payments based on area and animals have relatively smaller share in direct budgetary transfers, although their importance is increasing.

- Ukrainian agricultural policy intends to raise input applications through different programs.

  o The concessional credit programme started in 2000 and aims to support large farms that cannot finance their inputs for sowing and harvesting. In the meantime the program also provides investment credit. More than 100 accredited commercial banks are involved in the governmental programs. In 2006 around one-quarter (24%) of the loans received by agricultural enterprises were subsidised while in 2007 they reached 53% of the total loans provided for agricultural enterprises. Governmental expenditures for subsidised loans were 63 million USD in 2006. This number almost doubled and reached 120 million USD by 2007.

  o Ukrainian government provides direct budgetary subsidies for different purchased inputs, like electricity, fuel for irrigation, domestically produced fertilisers, and seeds. The governmental expenditures within this programme have been increasing since 2002 and reached 26 million USD by 2007. Another form of financial support aims to develop the quality of agricultural plants and livestock products. For example, support can be received in order to improve seed production, pedigree breeding, and biotechnologies. In 2007 these programmes were funded by 39 million USD. Agricultural subsidies also include the support of farms operating under unfavourable conditions.

  o The most significant support among input subsidies are tax concessions that cover two-thirds of the programmes related to the reduction of input costs. Producers are enabled to retain VAT payments on the agricultural goods that they produce; and they can use them to purchase inputs. In 1999 when the programme started, the aim was to substitute delayed payments caused by the budget deficit. Until November 2008 the regime did not apply to milk and livestock because the VAT rate for these products was zero. In this case processors were obliged to accumulate VAT payments and return them back to the primary producers as top up payments.
The WTO accession negotiations questioned the VAT regime because of the principle that domestic and imported products should be treated in an equal way. The VAT regime was finally accepted during the negotiations and was considered as an input purchase support. Only in the case of milk and meat products should the system be eliminated, because this puts domestic products in a preferred position compared to imported products. Agricultural enterprises are eligible for a fixed agricultural tax that is determined based on a proportion of the agricultural land value. This tax was introduced in 1998 in order to simplify the taxes put on agricultural producers as the sector was characterised by constant tax delays. This tax is originally in force until the end of 2009.

- The Ukrainian government has lately become a supporter of biodiesel production. In 2006 a programme was approved, which aims by 2010 to construct 20 plants with an aggregate annual capacity of at least 623,000 tonnes of biodiesel. Public funding for this project is 14 million USD, while private sources from national and foreign investors are expected to be 1.8 billion USD. However, no financial sources were allocated between 2006 and 2008 for this goal. Only a list has been prepared containing agricultural enterprises that will contribute in the production of raw materials for biodiesel production from 2008 onwards. Additionally, draft legislation (Law on Support to Utilisation of Biofuel) has been prepared to encourage domestic biofuel use. For example, this legislation makes it mandatory to use biofuel for the production of conventional fuels, and it provides preferential excise tax rates for blended gasoline. Ukraine has moreover the capacity of supplying the raw materials for biofuel production that is currently exported to countries with functioning biofuel capacities.

- Among Ukraine’s agro-environmental measures the goal is the protection and rational usage of agricultural land. In 2006 and 2007 an agrochemical certification of agricultural land was carried out in order to improve control over the soil quality. Based on these certifications recommendations were made on the rational use of fertilisers.
III. Agricultural Trade

3.1 Agro-Food Trade Policy

One of the main developments in Ukrainian politics after the independence was the accession to the WTO on 16 May 2008, for which the country had applied in 1993 (WTO). In February 2008 the General Council approved the “entrance package” of Ukraine that was ratified by the Verkhovna Rada in April 2008. The final amendments to the Customs Tariffs were adopted by the end of the same year.

Before the accession, Ukraine underwent a significant legislative process, in which Ukrainian law was taken in line with WTO principles. Due to this, between 2005 and 2008, 55 national laws were adopted, of which 21 were agriculture-related. Nevertheless, more laws need to be adopted in order to meet WTO requirements – i.e. sugar import regime, national food safety and quality standards.

In frame of the WTO obligations, Ukraine
- schedules import tariff reductions,
- eliminates specific tariffs and maintains only ad valorem rates,
- will not apply other than ordinary customs duties and the standard safeguard measures,
- will not use export subsidies and will lower the existing export duties,
- will eliminate the obligatory minimum export price,
- and accepted a limit of 0.6 billion USD for trade distorting measures.

Import measures

Ukraine used to have high tariff protection for certain agricultural goods, like for poultry (applied tariff, ad valorem equivalent: 250-300%), sunflower seeds (around 200-250%) and sugar (around 150%). However, in line with the WTO negotiations the tariff lines started to decrease from 2005. Lower tariffs result in stronger import competition, especially in the pigmeat, poultry, and sugar sectors, while other sectors are mainly export oriented.

Ukraine applied import Tariff Rate Quota for raw sugar until 2004. Since 2005 no TRQ for raw sugar has been applied. However, in the WTO negotiations the country preserved the right of applying TRQ for this product. This was reintroduced in 2008 for raw sugar processed from sugar cane. The quota for 2009 was set at 263 000 tonnes and for 2010 at 267 000 tonnes with an in-quota tariff rate of 2% and an over-quota tariff of 50%. The quota will be filled with a "first come first served" basis within the first 3 years after accession.

Ukrainian trade policy is characterised by licensing that is valid both for import and export products. The eligible goods are determined by the government annually. In 2006 import licensing was required for live animals, meat and wheat while in 2007 the list was extended by several food by-products. Due to the high prices on the world market, licensing was limited in 2008. In 2007 and 2008 no ban was introduced for agricultural products, except for products containing GMO.
Export measures

Ukrainian export regulation is characterised by restrictions (export quotas, export duties) in order to constrain food price inflation. Export quotas were used between 2006 and 2008 for wheat, barley, maize and rye. The result was a decline in grain export from 13.2 million tonnes (2005/06) to 9.6 million tonnes (2006/07) and 3.7 million tonnes (2007/2008). Between March and July 2008 only 12 thousand tonnes of grain export were allowed.

Export duties were imposed on oilseeds, live animals, hides, and skins in 2008. After the WTO accession Ukraine preserved the right to use export duties, albeit they should be cut over a six-year period.

Ukraine's WTO commitments (OECD 2009)

Tariff bindings
Ukraine's market access schedule outlines custom duties to be set between 0 and 50% (bound rates). Some bindings involve reductions phased in over a period of up to 2013. Ukraine's average tariff bindings are in agriculture 10.66% and in industrial goods 4.95%. The highest tariffs might be applied on items like sugar (50%) and sunflower seed oil (30%). Ukraine has agreed not to apply "other duties and charges" - only ordinary custom duties. It will apply ad valorem duties after the accession to the WTO, with the exception of goods that are subject to excise tax (like wine, liqueur, vodka and tobacco products).

Tariff rate quota (TRQ)
Ukraine opens TRQ merely for one agricultural product: raw cane sugar (see earlier).

Special Safeguard Measures (SSM)
Ukraine has undertaken not to apply SSM provisions of Article 5 in the Agreement on Agriculture of the WTO.

Domestic Support
Ukraine agreed on an Aggregate Measurement of Support (AMS) of approximately 628 million USD for the 2004-2006 period. As in case of other WTO members, there is no spending limit on domestic support that has no or only minor impact on trade until these programmes meet the criteria laid down in the Agreement on Agriculture.

Ukraine has agreed not to apply export subsidies.

Pricing policies will be applied in accordance with WTO principles and will respect exporting WTO members. Moreover, Ukraine will abolish mandatory minimum prices on importing products.

Ukraine has agreed not to apply any quantitative restrictions or other non-tariff measures on imports that are not supported by the WTO Agreement. Import licensing procedures will be applied in conformity with the WTO Agreement.

Export restrictions can be applied in accordance with WTO provisions; therefore, current restrictions on grain will be lifted. Export duties will be reduced on oilseeds, live cattle and animal skins; furthermore, obligatory export minimum prices will be suspended.
The right to import and export, i.e. licensing registration fees will be taken in line with WTO rules.

State-owned enterprises will be controlled in the future to ensure that they operate on commercial bases in compliance with WTO conforms.

3.2 EU-Ukraine trade relations

In 2008 Ukraine was the EU’s 17th largest trading partner and 14th largest export market. The EU is Ukraine's largest trading partner, with 27% of the total exports and 34% of imports in 2008. EU-Ukraine trade reached 39,5 billion EUR in 2008, having increased from 34,8 billion EUR in 2007, and has been growing by two-digit rates steadily in the recent years. The main export categories from UA to EU are agricultural products, energy, chemicals, iron and steel. The main import categories from EU to UA include machinery, transport equipment, chemicals, textile and clothing, and agricultural products.

Ukrainian exports to the EU are to a very large extent liberalized thanks to Generalized System of Preferences (GSP) granted by the EU to Ukraine since 1993. In 2007, GSP utilisation rate reached a good level of 74% of the eligible products. With 2,2 million EUR of GSP preferential imports to the EU, Ukraine ranks 9th among the most effective users of the system. Preferential imports are diversified and include i.a. the following sectors: chemicals, plant oils, minerals, base metals, machinery and mechanical appliances. Furthermore there are sectors where the Most Favoured Nations (MFN) duty applied by the EU is already zero (around 42% of all agricultural products can be sold duty-free by the Ukrainian exporters on the EU market).

With regard to quantitative import restrictions - before Ukraine became a full-fledged member of WTO, steel and textiles were subject to such import limits in the EU. They were regulated by respective bilateral agreements. These agreements lapsed as of day of Ukraine's WTO accession on 16 May 2008 and now Ukraine enjoys unrestricted exports of steel and textiles to the EU.

Free Trade Agreement (FTA) between Ukraine and the EU

The FTA negotiations aim to achieve a more liberalised trade between the EU and Ukraine. The negotiations were formally launched on 18 February 2008 in Kiev by Commissioner Mandelson and President Yushchenko. Seven formal negotiation rounds have been held until July 2009.
3.3 Ukrainian Trade

THE ROLE OF AGRICULTURE IN THE OVERALL TRADE

Overall trade balance in Ukraine displays a decreasing trend and has in 2005 even turned negative for the first time. From then onwards the trade deficit has been constantly increasing. On the contrary, agricultural trade was positive in the last 5 years and peaked in 2008 with more than 4.3 billion USD turning Ukraine into a net exporter of agricultural products.

The share of agriculture in exports has always been over 10% in the last 5 years. In 2008 agriculture contributed to export with the historically high level of 16,2% (10,83 billion USD) mainly due to high commodity prices around the world.

<table>
<thead>
<tr>
<th>Table 6: Ukrainian overall and agricultural trade (billion USD)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>Total Exports</td>
</tr>
<tr>
<td>Total Imports</td>
</tr>
<tr>
<td>Total Trade Balance</td>
</tr>
<tr>
<td>Agricultural Exports</td>
</tr>
<tr>
<td>Agricultural Imports</td>
</tr>
<tr>
<td>Agricultural Trade Balance</td>
</tr>
<tr>
<td>Share of Agriculture in Total Exports</td>
</tr>
<tr>
<td>Share of Agriculture in Total Imports</td>
</tr>
</tbody>
</table>

Source: Own calculations based on data from State Statistics Committee of Ukraine

Agricultural products represented 6-9% of the overall imports between 2003 and 2008.

Graph 26 shows the nature and development of Ukrainian agricultural trade that can be characterised by an **increasing trade value** over the recent years. Regarding the product types Ukraine is mostly exporting commodities and intermediate products while on the import side **high value products** are the most popular items, i.e. finished food industry products.

In 2008 within agricultural export a significant share was taken by **plant products** with 8,3% (or 5,6 billion USD), especially cereals with 5,5% (3,7 billion USD) and oil seeds and fruits with 2,1% (1,4 billion USD).
Ukrainian agricultural trade with the EU shows a similar picture to the overall trade with Ukraine mostly exporting commodities and intermediate products while importing high value products.

The trade balance is positive towards the EU representing Ukraine as a net exporter and the EU a net importer in bilateral trade in agricultural products.
**EXPORTS**

Graph 28 lists the 10 **most exported products** to the world and to the EU. They account for 66% of Ukraine’s agricultural exports and 82% in the case of exports to the EU. The top products of world exports are mainly comprised by the following product groups: **sunflower and other oilseed products** (oils, seed, seed oil, oilcake, rapeseed), **cereals** (wheat, barley, maize), **chocolate and cheese**.

Graph 28: Main agricultural exports from Ukraine to the EU-27 and World  
(HS6 aggregation, in % of value, average 2006-2008)

<table>
<thead>
<tr>
<th>HS6 description</th>
<th>Million USD</th>
<th>Share in total exports</th>
<th>EU-27 share</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Sunflower seed/safflower oil, crude</td>
<td>1 182</td>
<td>16,1%</td>
<td>49,4%</td>
</tr>
<tr>
<td>2 Wheat</td>
<td>796</td>
<td>10,9%</td>
<td>29,9%</td>
</tr>
<tr>
<td>3 Barley</td>
<td>782</td>
<td>10,7%</td>
<td>4,6%</td>
</tr>
<tr>
<td>4 Rape &amp; colza seeds</td>
<td>585</td>
<td>8,0%</td>
<td>77,6%</td>
</tr>
<tr>
<td>5 Maize</td>
<td>335</td>
<td>4,6%</td>
<td>37,2%</td>
</tr>
<tr>
<td>6 Chocolate (+ food prep. cont. cocoa)</td>
<td>328</td>
<td>4,5%</td>
<td>4,1%</td>
</tr>
<tr>
<td>7 Cheese</td>
<td>267</td>
<td>3,6%</td>
<td>0,0%</td>
</tr>
<tr>
<td>8 Oil-cake</td>
<td>204</td>
<td>2,8%</td>
<td>40,3%</td>
</tr>
<tr>
<td>9 Sunflower seed oil</td>
<td>172</td>
<td>2,3%</td>
<td>17,3%</td>
</tr>
<tr>
<td>10 Skimmed milk powder</td>
<td>143</td>
<td>2,0%</td>
<td>3,0%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>7 330</strong></td>
<td><strong>100%</strong></td>
<td><strong>28,7%</strong></td>
</tr>
</tbody>
</table>

Within the top exported products, the share of the EU (Table 7) is high for rape and colza seeds (77%), sunflower seed and oil (49%), oilcake (40%), maize (37%) and wheat (30%). A small EU share can be seen within cheese and barley.

Source: GTA

The main agricultural export product groups towards the EU are similar to the Ukrainian world export (sunflower and other oilseed products, cereals) excluding chocolate and cheese but including frozen fruits, nuts, and apple juice.

Table 7: Ukraine main exports to the World & EU-27 share (GTA, avg.2006-2008)
IMPORTS

In 2006-2008 Ukraine imported 4.4 billion USD (in average value) agricultural products. The largest share is constituted by final products, followed by intermediate products and commodities.

Table 8 shows the main overall agricultural imports of Ukraine and the EU-27 share in these products in the value average between 2006 and 2008.

Generally, Ukraine imports mostly final or intermediate agricultural products. In 2006-2008 the biggest import product was raw tobacco by more than 200 million USD with almost 30% of it coming from the EU-27, which also has high shares in Ukrainian imports of animal feed preparations (93%), edible mixtures or preparations of animal or vegetable fats or oils (68%), coffee extracts and essences (62%) and "other" food preparations (61%).
MAIN TRADING PARTNERS

The EU-27 became the main destination of Ukraine’s agri-food exports in 2006, with a share of almost 30% in 2008. Due to embargos on meat and dairy products, Russia’s share dropped to a mere 18% in 2006. In 2007 it recovered to 23% but in 2008 it dropped again to its 6-year (2002-2008) low level of 17%. The share of exports to the other CIS countries has increased to 18.6% in 2007; however, it dropped to 16% in 2008, although this is still higher than the 2002-2007 average of 15%. Most of the products in this country group go to the neighbouring Belarus and Moldova.

The share of exports to North African countries is stable at around 8%. Finally, a significant share of export flows to Middle Eastern countries with 22% in 2008, which was at a peak in the last 6 years increasing from 9% in 2002. The most important destinations in this country group are Turkey and Saudi Arabia.

Turning to the import side, the EU appears as the main agricultural partner of Ukraine with slightly increasing share from 2002 (37.5%) to 2008 (42.5%) covering almost 50% of the country's agricultural import needs. The second largest import partner of Ukraine is Russia with an average of a 14.2% share between 2002 and 2008. Over time this share increased from 12.6% to 15.8%, but then fell to 12.2%. In contrast to the export in terms of import, the USA is Ukraine's fourth partner with a constantly increasing share from 2005 (3.9%) onwards until 2008 (6.9%).
Except for 2008, the third largest import partner of Ukraine have been the CIS countries with a record share in 2003 (16%) and on average covering 8% of Ukraine's agricultural import.

**ECONOMIC CRISIS and UKRAINIAN AGRICULTURAL TRADE**

In the third quarter of 2008, Ukrainian agricultural trade reached an exceptionally high level, both in exports and imports. However, in the first quarter of 2009 trade with agricultural products dropped by more than 50% compared to the fourth quarter of 2008. In the second quarter of 2009 exports increased slightly, while imports remained virtually unchanged.
Nevertheless, figures for the first half of 2009 do not display a significantly lower level in comparison to the figures of same time period in earlier years. Although agricultural imports in the first half of 2009 were 21% lower than in the first half of 2008, they were still 29% and 60% higher than in the first halves of 2007 and 2006, respectfully.

**Graph 33: Ukraine: Economic crisis and agricultural imports (GTA, mio USD)**

<table>
<thead>
<tr>
<th>Commodities</th>
<th>Intermediate</th>
<th>Final Products</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>IMPORTS</td>
<td>Q1</td>
<td>Q2</td>
<td>Q3</td>
</tr>
<tr>
<td>2006</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2007</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2008</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2009</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Conclusion**

Ukraine is a country with great natural resources for agricultural production. During the transition period due to decreasing consumption, underinvestment and insufficient input usage, agricultural output decreased, especially in livestock production. From 2000 onwards signs of recovery could be seen, particularly in oil products and grains. In some of these products Ukraine became one of the main exporters of the world and its dominancy is projected to remain for further increase. Thanks to this, Ukraine shows an increasing positive trade balance in agricultural products.

The economy provides plenty of uncertainty, because it is projected to shrink significantly in 2009 as a result of the financial and economic crisis. Ukraine needs to ensure as soon as possible a solid and stable macroeconomic background that is vital for the agricultural production. The same stability is necessary in the country's political field to ensure a reliable environment for Ukrainian farmers.
Sources

BBC (23 June 2009). Date set for Ukrainian election
   Available: http://news.bbc.co.uk/2/hi/europe/8115517.stm


Climate-Zone

Delegation of EU to Ukraine (2009)

FAO Aquastat

FAO Country Pasture

FAO Forestry


