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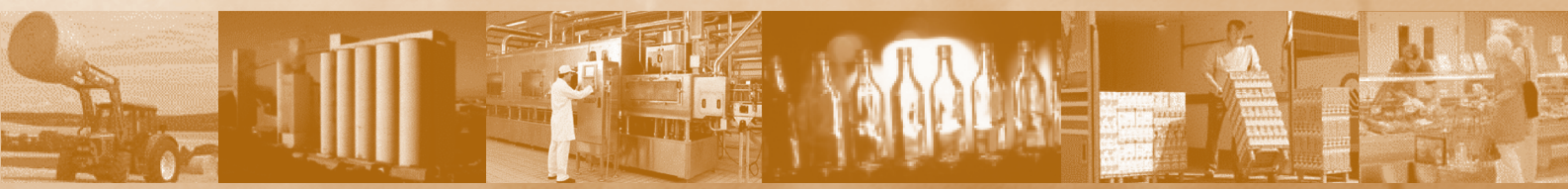

Grain Sector Review and Public Private Policy Dialogue

Study supported by the Canadian International Development Agency
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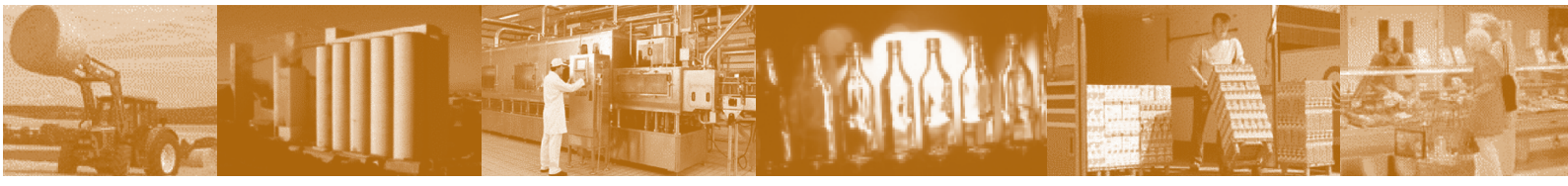

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ACRONYMS AND ABBREVIATIONS

ACP	African, Caribbean and Pacific (countries)
CAP	Common Agricultural Policy
CEECs	Central and Eastern European Countries
CIF	Cost, Insurance and Freight
CIS	Commonwealth of Independent States
CPI	Consumer Price Index
CPT	Carriage Paid To
DAF	Delivered At Frontier
DG	Directorate General
DSTU	Ukrainian National Standard
EBRD	European Bank for Reconstruction and Development
EPA	Economic Partnership Agreement
EU	European Union
EXW	Ex Works
FAO	Food and Agriculture Organization of the United Nations
FAT	Fixed Agricultural Tax
FEFAC	European Feed Manufacturers' Federation
FOB	Free On Board
FSU	Former Soviet Union
FTA	Free Trade Agreement
FTZ	Free Trade Zone
g	gram
GATT	General Agreement on Tariffs and Trade
GOST	GOsudarstvennyy STtandart
ha	hectare
hl	hectolitre
IPO	Initial Public Offering
JSC	Joint Stock Company
kg	kilogram
LDCs	Least Developed Countries
mg	milligram
ml	millilitre
mm	millimeter
MOP	Margin Of Preference
MPL	Maximum Permitted Level
mt	metric tonne
MY	Marketing Year
ND	Normal Document
OECD	Organisation for Economic Co-operation and Development

QMV	Qualified Majority Vote
S&D	Supply and Demand
SRW	Soft Red Winter (wheat)
TC	Technical Committee
TRQ	Tariff Rate Quota
UAH	Ukrainian hryvnia
US	United States of America
VAT	Value-Added Tax
WBCs	Western Balkan Countries
WTO	World Trade Organization

FOREWORD

The potential of Ukraine to produce and export larger quantities of grain through improved yields, increased acreage and better access to export markets is strong. Increased production and export of grains would constitute a source of additional export revenues, farm income and rural employment. However, in order to realize Ukraine's potential in the grain sector, a number of structural constraints and policy bottlenecks need to be removed.

This study was commissioned by the EBRD in the context of the FAO/EBRD "Ukraine Grain Sector Review and Policy Options" project ("the Project"). The main objective of the Project – financed by the Government of Canada and FAO - was to encourage discussions between policy-makers and the private sector on improved policies for the Ukrainian grain sector.

The main part of the study contains an analysis of recent trends in the Ukrainian grain market (Section 1) and key aspects of the state policy towards the grain market (Section 2). It also points at key constraints to grain sector development (Section 3) and presents a series of recommendations for their removal (Section 4). For the most part, the situation in the grain sector described in the study refers to 2008, with a few minor updates.

This publication also contains two papers prepared in response to specific requests made by stakeholders during the initial phase of the project. Annex A - "Perspectives and Options for EU Grain Trade with Ukraine" - was prepared at the request of the Ukrainian Ministry of Agrarian Policy. Annexes B and C, "Proposed Methodology for Grain Supply and Demand Balance Forecasts" were prepared in response to the need expressed by the private sector for clearer forecasting methodologies (Annex C is the Ukrainian version of Annex B).

The study and its annexes were presented at a series of workshops organized by FAO and the EBRD, involving representatives from both the private and the public sectors. A first round table was organized in Kiev on 22 April 2009, with the assistance of UkrAgroConsult, at the occasion of the 6th International Conference Black Sea Grain 2009. The main findings of the grain sector review contained in this report were debated, with the purpose of initiating discussions between public and private grain sector stakeholders, on the situation of the grain sector and existing policy bottlenecks. A second workshop, co-organized with APK-Inform, took place in Yalta on 21 May 2009 during the 8th International Conference "Grain Forum & Grain Industry – 2009." The main findings and conclusions of the paper on "Perspectives and Options for EU Grain Trade with Ukraine" were presented and discussed at this event. Finally, on 1st December 2009, the "Methodology for Grain Supply and Demand Balance Forecasts" (Annexes B and C) was discussed at a meeting hosted by the Ukrainian Ministry of Agriculture in Kiev.

Beyond the discussions triggered by this study, the establishment of a more permanent forum of discussion between public and private players in the Ukrainian grain sector should be envisaged, in order to develop a joint vision for the development of the sector but also to make informed decisions on specific policy aspects. The study points towards at least two areas where further public-private discussions on Ukrainian grain policies could continue: (i) the identification of ways to remove potential barriers to future grain trade between the European

Union (EU) and Ukraine, and (ii) the establishment of a single and transparent government information system for reporting grain production, use and trade. Further discussions are nessessary to address issues related to export VAT refunds, frequent policy changes, grain quality and safety issues, and other sector-specific issues.

It is anticipated that further policy work will result from the Project. Key participants in this first round of discussions – from the Ukrainian Ministry of Agriculture to major private stakeholders and the EBRD – have expressed their interest in continued policy dialogue in order to move the Ukrainian grain sector forward in a more strategic and sustainable manner.

1. Grain Market Developments During 2003–2008

1.1 Grain production

1.1.1 General trends

Grain production in Ukraine, which is approaching pre-transition levels, is a sign of the overall stabilization of agricultural output in Ukraine. Since the break-up of the Soviet Union in 1991, there has been a dramatic decline in the level of agriculture output in Ukraine (see Appendix A, Figure A.1). Annual grain production, which had been relatively stable at about 47 million tonnes in the period 1986–1990, halved to just 22–25 million tonnes during the period 2000–2004. Many agricultural producers were forced into subsistence farming due to the decreasing budget and financial resources for agricultural investments, hyperinflation (including rising input prices[1]), and the loss of traditional export markets in the Commonwealth of Independent States (CIS). More than fifteen years into the transition, the agricultural output level in Ukraine has gradually stabilized as macroeconomic conditions improved, capital investments picked up again, and a series of market reforms were implemented[2]. During the period 2000–2006, annual grain production rose to 35–36 million tonnes. Nonetheless, total agricultural output remains below its pre-transition level as many structural constraints persist (see Section 3).

Grain production has been variable in recent years. Yields have been stagnating since the marketing year (MY) 2004/2005 harvest and fell sharply in MY 2007/2008 due to a drought (see Appendix A, Table A.1). Spring crops, especially barley, suffered the most from the drought. It reduced the total grain crop size to 27–28 million tonnes compared with a crop size of 34 million tonnes in MY 2006/2007. In 2008, rapeseed, wheat and corn showed the greatest increases in sown areas in response to high prices. The acreage expansion took place chiefly at the expense of barley and sugar beet (see Appendix A, Table A.2). In MY 2008/2009, a grain harvest of between 46 and 49 million tonnes was expected. This volume of production would be close to Soviet-era levels and push Ukrainian grain exports to an all-time high.[3] Combined with a similar rise in exports from the Russian Federation, the Black Sea region would thus strengthen its position as a key determinant for global grain market prices. Although the ratio between input costs and sale prices was not so attractive this marketing year, it was expected that high output volumes would be sustained during MY 2009/2010 as well.

Grain production faces increased competition for arable land from oilseed production. Production of sunflower seed, Ukraine's major oilseed crop, increased considerably in the period 2000–2007 in response to increasing demand from local and international oilseed processors (see Appendix A, Figure A.2). While sunflower seed yields kept relatively stable at a level between 0.93 and

1.- According to the State Statistics Committee, inflation equaled 4,835% in 1993.

2.- The new currency unit (hryvnia) was introduced on 2 September 1996. In addition, a more disciplined budgetary policy ensured a slowdown in the inflation rate and, somewhat later, stabilization of the hryvnia/US dollar exchange rate. In the period 1998–2003, the Government of Ukraine launched a reform programme for collective farms; introduced preferential tax treatment for agricultural producers through value-added tax (VAT) exemptions and a fixed agricultural tax (FAT); developed market regulations (e.g. Law "On Grain and the Grain Market" (337-IV, 4 July 2002), Law "On State Regulation of Sugar Production and Sale" (#758-XIV, 17 June 1999)); completed the privatization of processing enterprises; and passed the Law "On State Support to Agriculture". According to the State Statistics Committee, real per capita incomes increased by 9–18% annually between 2001 and 2003.

3.- The largest total grain crop harvested in Ukraine at the end of the 1980s was 50 million tonnes.

1.25 tonnes/ha, output growth was accounted for mainly by acreage expansion. According to Ukragroconsult's estimates, areas sown with sunflower seed expanded from 2.5–2.8 million ha in 1999–2000 to 4.3–4.5 million ha in MY 2006/2007. In MY 2007/2008, the acreage shrank to 4.06 million ha primarily as a result of the expansion of rapeseed and wheat production. Rapeseed has recently joined sunflower seed as a preferred crop (see Appendix A, Figures A.3). In 1990, only an estimated 90,000 ha of rapeseed were planted in Ukraine. The area under rapeseed started increasing in 2005 and reached 390,000 ha in 2006. Rapeseed now appears to be a strong choice in planting decisions due to strong demand from the countries of the European Union (EU). The area planted with rapeseed reached 1.4 million ha in the 2008s. The total area sown with oilseeds now exceeds 30% of Ukraine's arable area.

Cropping patterns in Ukraine seem to be strongly determined by crop margins. Technically, rapeseed is at present Ukraine's most profitable crop. In the period 2004–2007, its gross margins averaged USD 550/ha (for large-scale farms). The margins for other crops ranged between USD 56/ha (for rye) and USD 432/ha (for wheat). Please refer to Appendix B for the gross margin calculation methodology and details. However, its margins are currently inflated due to relatively low input costs. The official estimates of sunflower seed profitability (measured as percentage of net income over total costs) averaged 54% from 2000 to 2007 and was a near-record 75% in 2007 as compared with much lower returns on grains and sugar beet (see Appendix A, Figure A.4). This was largely due to low input costs (refer to Appendix A, Figures A.5 and A.6) and high sunflower seed prices.

1.1.2 Sector-specific trends

Wheat

Wheat production volumes have varied significantly. Wheat produced in Ukraine has traditionally been used for milling and feeding purposes. Importantly, the government does not seem to stimulate the growing of milling-quality grain. In fact, wheat quality standards are often adjusted so as to consider relatively poor-quality wheat as milling wheat at the time of purchase from farmers. Due to severe winter-kill, the smallest harvest (4.3 million tonnes) in more than 45 years was produced in MY 2003/2004 (see Appendix A, Table A.3).[4] As a result, Ukraine was forced to import 3.4 million tonnes of wheat in 2003 – the highest volume since it gained independence. Five years later (in 2008), wheat production reached 26 million tonnes – the highest official estimate since the 1990s – due to increased area and favourable weather conditions. Combined with high opening stocks, wheat exports reached a record-high level in MY 2008/2009. By comparison, the country's largest crop was 30.4 million tonnes, produced in 1990/1991 – just prior to the break-up of the Soviet Union.

Barley

Barley production has also varied significantly. Barley is the principal grain used for spring reseeding of damaged or destroyed winter-crop fields (including winter wheat, as well as winter barley and

4.- The 2003 crop experienced a series of unfavourable weather events. Fall sowing was delayed or prevented by wet weather. As result, the crop emerged late, establishment was poor, and the crop was not "hardened" when bitterly cold weather arrived in December. Hardening (vernalization) is the process by which winter wheat gradually adjusts to lower temperatures and prepares to enter winter dormancy. The greatest damage to the crop was done in February 2003, when repeated cycles of thawing and freezing led to the formation of an ice crust which persisted for 40– 90 days (wheat begins to suffer damage after only 20 days). It was estimated that 66% of the winter wheat area was destroyed in 2003 (versus an annual average loss of just 15%).

rapeseed). On average, 90% of Ukraine's barley production is accounted for by the spring-sown crop. The area sown with spring barley typically fluctuates in response to the level of winter wheat that is sown in the autumn and the amount of winter wheat that suffers winter kill. Barley has recently competed for area in spring with corn and oilseeds, as gross margin for these crops have been strong. Despite the growth in demand for barley from the developing brewing industry and strong exports of feed barley, the area sown with barley has declined sharply from 5.8 million ha in MY 2003/2004 to an estimated 4.3 million ha in MY 2008/2009 (see Appendix A, Table A.4). In MY 2007/2008, drought and excessive heat drove the barley yield to 1.5 tonnes/ha, its lowest level since 1963. In contrast, barley yields increased to 3 tonnes/ha and production reached nearly 13 million tonnes in MY 2008/2009 according to official estimates. These were record-high levels according to official statistics.

Corn

Corn production is resurging. Traditionally, corn-for-grain comprises two-thirds of total corn seeded area with the remainder intended for silage. The area intended for silage declined sharply in the post-Soviet era, concurrent with the decline in livestock production in Ukraine.[5] The resurgence of corn-for-grain is largely the result of strong gross margins on corn production. Areas sown with corn increased from 1.9 million ha in MY 2006/2007 to 2.5 million ha in MY 2008/2009 (see Appendix A, Table A.5). In terms of production volumes, Ukraine has shifted from the 3–5 million tonne range to the 6–9 million tonne range. Thanks to favourable weather, Ukraine produced 11.5 million tonnes in 2008 (MY 2008/2009), according to the final official estimates. The 2008 crop was the largest on record since 1962, when the output reached 10.1 million tonnes. Improvements in seeds and application of agricultural inputs also contribute to increasing corn production. However, corn yields in Ukraine are still far below crop potential. For instance, the record-high yield of 4.7 tonnes/ha in 2008 is still far below the 2005–2008 United States average yield of 9.5 tonnes/ha or the EU-27 average yield of 6.35 tonnes/ha. Should the government of Ukraine approve the planting of genetically modified corn varieties, it is likely that average yields as well as areas seeded would increase further. However, the regulatory framework for genetically modified plant varieties in Ukraine appears to be in a stalemate.[6]

5.- In 1990, silage accounted for 79% of total corn area, but by 2005 the share had fallen to 29% to reflect a drastic decline in cattle inventories from 24.6 to 6.5 million head during this period (-74%).

6.- USDA GAIN Report on Agricultural Biotehcnology in Ukraine (dated 17 August 2008).

1.1.3 Future trends

Domestic demand for grains will increase moderately. Despite a decreasing population, domestic food consumption of grains will be relatively stable due to rising incomes. Feed consumption of grains, on the other hand, is expected to rise. Historically, a large portion of grains has been fed to livestock in Ukraine due to a sufficient supply of low-quality wheat and a shortage of on-farm grain storage. Although livestock production shrank dramatically in the period 1992–2004 (see Appendix A, Table A.6), it is expected to recover over the next five years in light of rising incomes, the significant livestock investments made in the last 2–3 years, and government support programmes to rebuild cattle herds. Generally, the potential for growth in meat consumption is high.[7] Meat consumption in Ukraine is expected to increase by an annual rate of 4–5%, resulting in an increase in feedgrain demand of 2–3% per year. Total feedgrain consumption may thus increase up to 16–17 million tonnes by 2010 from the current level of 12–14 million tonnes. The main consumers of feedgrain in the next 2–3 years will be pig and poultry production. It should be underlined that the acceleration in grain feeding is not expected sooner than 2010–2011 and is likely to suffer a delay as a result of the current global financial and economic crisis. In addition, the projected increase in domestic demand for grains is not expected to limit exports if production increases, as current feed conversion rates can be expected to improve.

Grain production is expected to flatten out in the medium term. Depending on the definition of currently underutilized land, it is believed that between 5 and 12 million ha might be drawn into farming in Ukraine. Figure A.7 of Appendix A presents estimates of potential increases in annual output of barley, wheat and sunflower seed due to an increase in the area planted. The model assumes the lower estimate of available area (5 million ha), a typical four year rotation of wheat, barley and sunflower seed, and no yield growth (taking average yields from the past three years). Any yield increases would increase production further. While the model does not produce an accurate forecast of future crop area growth, it does provide an indication of the area potential that exists in the Ukraine. In the long term, it is expected that grain production will stabilize at a level of 38–40 million tonnes during 2009–2012, while rising to a level of 40–45 million tonnes between 2012 and 2015. Weather conditions will remain a risk factor contributing to fluctuations in grain production volumes. In addition, the current global financial and economic crisis is likely to put the development of this potential under increased pressure.

Oilseed production is likely to stabilize and depend on improvements in farming practices and rapeseed demand from the EU. Due to the current global financial and economic crisis, credit is becoming increasingly scarce and expensive. Minimizing input costs by planting oilseeds (predominantly, sunflower seed) has thus been attractive to farmers. The total area sown with oilseed crops in Ukraine (exceeding 30% of arable area) suggests that they are planted every three years on average. Such frequent plantings approach the agronomic limit for sunflower seed, making further expansion difficult to achieve.[8] Future output increases could potentially be

7.- At present, average meat consumption in Ukraine is estimated at 34 kg per capita compared with 84 kg per capita in 1990. This is also low compared with per capita consumption in other European countries: Hungary (120 kg), Germany (86 kg) and Poland (78 kg).

8.- Traditional Soviet agronomy rules for crop rotations prescribed that sunflower seeds, which extract more moisture and nutrients from the soil than other crops, should not be planted in the same field more than about once every seven years. However, the area planted with sunflower seeds in Ukraine has expanded with many farms planting the crop once every four years or less. In principle, sunflower seeds could be planted every four to six years provided farmers use disease-resistant seed, apply adequate amounts of mineral fertilizer and treat the fields with appropriate plant-protection chemicals. However, for most farmers in Ukraine these recommended practices are too expensive.

achieved through improved crop yields, but this risks being undermined by soil exhaustion and soil-borne fungal diseases (such as phomopsis) if farmers do not change their current growing practices. The recent increase in rapeseed production in Ukraine will solely depend on the sustained demand from the EU biodiesel industry as there is very limited domestic demand for rapeseed oil and meal from the food processing and the compound feed industries.

1.2 Grain prices

1.2.1 Principles of grain price formation

Domestic grain market prices are low shortly after grain harvests. The behaviour of grain market prices in Ukraine overall reflects the changes in supply and demand balances as discussed above. Typically, grain prices on the domestic market drop just after harvest and rise toward the end of the marketing season. The huge sales just after harvest depress domestic grain prices. The low prices just after harvest are mainly the result of information asymmetries, a lack of financial risk mitigation instruments and the high cost of farm financing coupled with limited on-farm storage capacities.

Domestic grain prices are closely correlated with international grain prices. Because Ukraine is a grain exporting country, domestic grain prices are usually lower than the world price (United States HR#2 wheat). In general, Ukrainian prices track world prices minus the transportation costs and other charges. The actual size of the average discount for Ukrainian grain prices depends on domestic and international supply and demand balances. Proximity to the import markets in North Africa and the Middle East and the availability of grain export terminals make Ukrainian grain suppliers powerful competitors to all traditional suppliers.

Ukraine has maintained low import duties on grain. Domestic grain prices can rise towards import price parity when shortages in domestic grain supplies arise. Table A.7 in Appendix A shows that, with a stable level of world prices, a switch from a net grain exporting status to a net grain importing status could result in a 75% rise in prices (USD 210 versus USD 120/tonne) in Ukraine. Ukraine is a member of the World Trade Organization (WTO) and has low import tariffs on grain (about 5–10% *ad valorem* for major grains). In addition, imports from the Russian Federation, Kazakhstan and other countries of the CIS are duty-free under the existing trade agreements. Depending on the quality of local wheat, imports from the Russian Federation and Kazakhstan may be needed to cover demand from the domestic milling industry for high-protein wheat.

1.2.2 Domestic grain prices in MY 2007/2008

Domestic grain prices increased dramatically. Following the major price increases observed in MY 2003/2004, Ukraine's grain market switched to a more predictable behaviour in MY 2004/2005 (see Appendix A, Figure A.8). However, seasonal price fluctuations sharply decreased soon thereafter. Since MY 2006/2007, the Ukrainian market has been following the overall upward trend in world prices even under conditions of grain export restrictions. MY 2007/2008 marked the unfolding of a global food crisis as a result of increasing international agricultural commodity prices. Organizations such as the Food and Agriculture Organization (FAO), the World Bank and the Organisation for Economic Co-operation and Development (OECD) identified as the main drivers behind this development the growing world population, increased d Traditional Soviet agronomy rules for crop rotations prescribed that sunflower seeds, which extract more moisture and nutrients from the soil than other crops, should not be planted in the same field more than about once every seven years. However, the area planted with sunflower seeds in Ukraine has expanded with many farms planting the crop once every four years or less. In principle, sunflower seeds could be planted every four to six years provided farmers use disease-resistant seed, apply adequate amounts of mineral fertilizer and treat the fields with appropriate plant-protection chemicals. However, for most farmers in Ukraine these recommended practices are too expensive. emand for meat and dairy products from emerging economies (which disproportionately increases demand for grains and oilseeds), rising energy prices (which increase production and trade costs), the development of the biofuel industry and adverse weather conditions in many key producer countries, including Ukraine.

Rising grain prices fed into sharp food price increases, fuelling strong inflationary pressures. Food represents a large share (50%) of the consumer price index (CPI) basket in Ukraine. Grain and animal products alone account for 27% of the CPI basket. By comparison, just 10.3% is spent on food in the United Kingdom and roughly 5% on grain and animal products. A significant rise in grain prices can thus entail a fast growth in food prices and the overall inflation rate in Ukraine. While export restrictions prevented domestic grain prices from increasing to the world market's reference points, a World Bank report found that in March 2008 food price inflation in Ukraine was 42.2% year-on-year and accounted for 93% of the overall CPI inflation of 26.2%.[9]

1.3 Government interventions in the grain market

1.3.1 Introduction of export restrictions

The government responded to rising food prices by imposing a series of export restrictions. In September 2006, the Cabinet of Ministers passed a resolution on automatic licensing of wheat exports. However, the resolution was superseded by another resolution that introduced non-automatic licensing (i.e. export quotas) in October 2006. Export quotas were also introduced on barley, corn and rye. The government retained the export quota regime (with short interruptions for barley, corn and wheat) throughout MY 2006/2007 and MY 2007/2008. In May 2008, export quotas and automatic licensing arrangements (for corn) were cancelled due to the prospect of a large grain harvest in MY 2008/2009. In addition, Ukraine had an obligation to cancel the export

9.- World Bank. 2008. *Competitive agriculture or state control: Ukraine's response to the global food crisis.* Washington DC, Sustainable Development Unit, Europe and Central Asia Region. p. 5.

restrictions as part of its WTO commitments.[10] The history of the decisions made concerning grain export restrictions is given in Table A.8 in Appendix A. The 12 government resolutions that were passed in the period 2006–2008 demonstrate the ad hoc manner in which the government tried to stabilize the grain market.

1.3.2 Impact of export restrictions in MY 2006/2007 and MY 2007/2008

Grain export restrictions had a limited effect on restraining domestic grain prices and increased the levels and volatility of world market prices. Figures A.9, A.10, and A.11 in Appendix A demonstrate that domestic wheat and barley prices moved further away from world market prices following the export restrictions imposed by the government, while corn prices held their relationship and gradually converged to world market price levels. Although grain prices would have been higher in the absence of the export restrictions, the latter failed to stop the overall upward trend in domestic grain prices. The reasons for this were multifold. Even with export restrictions, the domestic grain supply was overall too small to drastically reduce prices. In addition, as wheat and coarse grain availability relaxed somewhat in the domestic market, grain exporters switched to flour production (which did not face export quotas) in order to circumvent the grain export quotas. This resulted in wheat flour exports being at a record high in MY 2007/2008. Furthermore, there was an increased willingness among many grain producers and traders to store grains until prices arrived at desired levels.

The export restrictions created significant uncertainty among grain producers and resulted in a major distortion of price signals. The export restrictions limited grain producers' incomes compared with their potential level, thus reducing incentives for private investments in domestic grain production. As discussed above, Ukrainian grain producers responded to depressed farmgate prices for grains (and hence gross margins) by shifting production and investments to oilseeds. The uncertainty as to whether an individual grain producer would be able to sell his/her crops to exporters further supported this shift. With the easing of quotas in the spring of 2008, Ukrainian grain prices returned to their usual patterns of close correlation with international prices. The removal of export restrictions is likely to renew incentives for private investments in the grain sector.

The benefits of the grain export restrictions were unevenly distributed. Though prices for the affected crops increased, they were lower than they would have been had exports been unrestricted. The imposition of export quotas thus led to foregone revenues for grain producers to the benefit of the milling industry, livestock producers and consumers.

10.- Report of the Working Group for Ukraine's Entry into the World Trade Organization (document WT/ACC/UKR/152 of 25 January 2008), which is an integral part of Ukraine's Law "On ratification of the Protocol on Ukraine's Entry into the World Trade Organization" #250-VI adopted by the Parliament of Ukraine on 10 April 2008, includes Ukraine's commitment to lift its grain export restrictions on the day of Ukraine's entry into the WTO (paragraphs 255 and 370).

2. Policy Environment of the Grain Sector

2.1 The policy-making process

2.1.1 The role of government bodies

Government bodies sometimes take a creative approach to defining their role in agricultural policy-making. The Parliament (Verkhovna Rada), President, Cabinet of Ministers, and the Ministry of Agrarian Policy of Ukraine are the key government bodies involved in grain sector policy-making. Their respective legislative and executive roles and responsibilities are defined in the Constitution of Ukraine.[11] However, they have sometimes tried to broaden their responsibilities by interpreting their constitutional mandates. For example, the president availed himself the right to use provisions in the Law "On the Council of National Security and Defense of Ukraine", which empowers the president to consider issues concerning state security, when signing the Decree "On the Condition of the Agro-Industrial Sector and Measures for Ensuring Food Security of the State".[12] The Presidential Decree provides for the establishment of a fund that guarantees warehouse receipts for grain. It also gives instructions to the cabinet of ministers on a very wide range of issues: from facilitating the establishment of agricultural producer cooperatives to aligning legislation with WTO requirements. Often, decisions made by one power branch are not coordinated with other branches or executed (as in the case of the decree mentioned above) due to the lack of funding or conflicting interests.

There are no uniform legislative or regulatory practices. The Parliament of Ukraine is the central legislative body. However, the president and the cabinet of ministers, as part of the executive branch, can initiate legislation as well and thus propose basic principles for regulating the grain sector.[13] All parties have availed themselves of this right in recent years.[14] Since July 2008, however, the situation of a minority government in Ukraine has made all legislative and regulatory work generally ineffective.[15]

11.- The President of Ukraine is responsible for blocking unconstitutional acts by the Ukrainian government by simultaneously: addressing the Constitutional Court; heading the Council of National Security and Defense of Ukraine; and signing laws passed by the parliament, although the president has a veto right which allows him/her to send a draft law back to the parliament for reconsideration. The Parliament of Ukraine is responsible for: the adoption of laws; approval of the state budget (including expenditures for grain-grower support and other agricultural support programmes); approval of national economic development programmes; review and adoption of the programme of the Cabinet of Ministers' actions; appointment, as well as dismissal, of Ukraine's Prime Minister, members of the Cabinet of Ministers (including the Agrarian Policy Minister), the Head of the Anti-Monopoly Committee and a number of other governmental bodies; control over activities of the Cabinet of Ministers of Ukraine; ratification of the obligation of Ukraine's international agreements and their denouncement; approval of the list of state property objects that are not subject to privatization. The Cabinet of Ministers of Ukraine is responsible for: pursuing financial, price, investment and taxation policies as well as policies in the fields of labour relations and employment, environmental security and education; working out and implementing national economic development programmes; providing equal conditions for the development of all ownership forms and managing state property objects; drafting the Bill on the State Budget of Ukraine and ensuring the implementation of the budget passed by parliament; guiding and coordinating the work of ministries; and creating and liquidating ministries and other governmental bodies.

12.- Decree #1867/2005 of 27 December 2005.

13.- Article 93 of the Constitution of Ukraine.

14.- On 20 October 2006, the *President* submitted to the Parliament of Ukraine for its consideration a draft law to amend the Law of Ukraine "On State Support to Ukraine's Agriculture". The draft concerned, in particular, bringing the terms of foreign trade in state price regulation objects (including a number of grain crops) into agreement with the WTO requirements. It was adopted on 31 November 2006 (Law #401-V). On 9 November 2006, the *Cabinet of Ministers* submitted to the Parliament a draft law to amend the Law "On Grain and the Grain Market in Ukraine". It has since been adopted by the Parliament (Law #547-V). The *Parliament* adopted the draft law amending the Law "On Value-Added Tax" submitted on 10 October 2006 by the People's Deputies of the 5th convocation. The law (#273-V) prolonged VAT benefits for agricultural producers (including grain growers) for 2007.

15.- The People's Deputies can withdrawal from the coalition, though formally remain People's Deputies (i.e. be voting members of the

The Ministry of Agrarian Policy is the leading ministry in agricultural policy-making and implementation. The ministry's role and responsibilities are defined by Resolution #1541 approved by the Cabinet of Ministers of Ukraine on 1 November 2006 and its activities are guided and coordinated by the Cabinet of Ministers of Ukraine.[16] Importantly, the Ministry of Agrarian Policy participates in the drafting of the state budget, which determines financing of agricultural support programmes. However, significant roles are also assigned to other ministries in agreeing upon common government approaches to agricultural policy. The Finance Ministry is closely involved in defining procedures for distributing funds under the agricultural support programmes. The Economy Ministry supports risk assessments of food security conditions. And the Justice Ministry considers all legal aspects of government actions in the agriculture sector. A series of other ministries and government agencies are to a lesser degree involved in the policy-making and implementation processes.[17]

The dispersion of power and responsibilities in agricultural policy-making and implementation calls for a close coordination among all actors involved. Since 2000, responsibilities in the area of agricultural policy-making have been scattered at the level of the central government and between the central government and the regional authorities. The Government of Ukraine sometimes attempts to address coordination issues by establishing the post of Vice Prime Minister in charge of agricultural sector development. However, not every cabinet of ministers maintains such a position.

State-owned trading enterprises do not play a major role in grain sector policy-making. The three main entities that are entitled to store and trade grain and thus actually implement government agricultural and food security policies are the joint stock company (JSC) Khlib Ukrainy (Bread of Ukraine), the Agrarian Fund and the State Committee on Material Reserves.

Khlib Ukrainy owned more than 80 grain elevators and grain processing facilities, including the port elevators in Odesa and Mykolaiv, when it was founded in 1996, after grain elevator privatization.[18] The company was responsible for carrying out mortgage (pledge) grain purchases during 2001–2004. It lost the role of government agent in the grain market after the establishment of the Agrarian Fund. The government made several attempts, with not much success, to establish

Parliament). As a result, the coalition of parliamentary factions that form the Cabinet of Ministers could number just 225 People's Deputies, while 226 votes are needed to pass a decision required to support activities of the cabinet.

16.- The Resolution stipulates that the Ministry of Agrarian Policy is responsible for developing agricultural policy (strategy) and mechanisms for its implementation, including drafting of legal and regulatory acts; developing and participating in the implementation of state targeted programmes; taking part in elaborating drafts of the state budget and the government activity programme; and monitoring of markets and working out supply and demand balances for agricultural commodities. Following the grain supply shortages in MY 2003/2004, the ministry also became responsible for collecting information on the country's grain stocks and imports needed to set off the shortage; ensuring certification of grain warehouses; keeping a warehouse documents register and guaranteeing grain availability declared by grain storage subjects; coordinating the work of the Agrarian Fund for making up food reserves; ensuring control over the quality and safety of agricultural commodities and foods; managing state property within the ministry's management domain; participating in the development and implementation of a land protection policy; elaborating technical regulations and standards within the ministry's competence; and ensuring the development of biofuel production.

17.- They include the Environmental Protection Ministry of Ukraine, the Fuel and Energy Ministry of Ukraine, the Industrial Policy Ministry of Ukraine, the Transport and Communication Ministry of Ukraine, the State Committee on Forestry of Ukraine, the State Committee on Water Management of Ukraine, the State Committee on Land Resources of Ukraine, the National Electricity Regulation Commission of Ukraine, the State Committee on Technical Regulation and Consumer Policy of Ukraine, the State Committee on Regulatory Policy and Entrepreneurship of Ukraine, the State Tax Administration of Ukraine, the State Customs Service of Ukraine, the Anti-Monopoly Committee of Ukraine, the State Committee on Fishery of Ukraine, the State Food Department of Ukraine, and the State Committee on Material Reserves.

18.- Created by Government Resolution #1000 of 22 August 1996.

Khlib Ukrainy as a powerful national trader.[19] The company is now rather heavily indebted. Various attempts for restructuring the company by selling parts of the company's assets have been blocked by the government or the parliament.

The Agrarian Fund[20] now performs government interventions in the grain market, operates the mortgage purchase system and administers intervention grain reserves in line with the Law of Ukraine "On Grain and the Grain Market in Ukraine". The fund does not own elevators, and stores its grain in both private and state-owned elevators on a contractual basis. Its role is rather to execute decisions made by the Cabinet of Ministers of Ukraine and/or Ministry of Agrarian Policy of Ukraine rather than be involved in grain market policy-making.

The State Committee on Material Reserves owns grain elevators and is responsible for maintaining the grain stock for food security purposes only. The committee buys and sells grain through tender procedures and can conduct market interventions only in specific cases.

2.1.2 The role of agribusinesses and business associations

The number of well-established agribusiness associations in Ukraine's grain sector is small. The legal framework governing associations allows for the creation of associations of any type in Ukraine.[21] Agribusiness associations can be divided in cross-sectoral associations (for example, the Association of Farmers and Private Land Owners of Ukraine, which comprises not only grain growers but also producers of other agricultural commodities) and grain sector associations (for example, the All-Ukrainian Bakers' Association). Many associations in Ukraine face difficulties in trying to develop an equal partnership with the government. Membership in these associations is often nominal and does not involve the payment of membership fees, which undermines the financial viability of the associations' activities. A list of the most important agricultural and grain associations is given in Table A.9 of Appendix A.

Agribusiness associations are involved in grain sector policy-making in various ways. They can participate in grain sector policy-making either through: (i) direct interaction with the legislative and executive branches of power (for example, by meeting with officials, sending letters and requests to government authorities, sharing information on market conditions); (ii) influencing public opinion on a particular topic of their interest (conducting media campaigns, conferences, discussion events); and (iii) participation in the institutionalized forms of public-private dialogue, such as advisory councils and subject-specific consultations or expert working groups.

Ministry councils

The ministry councils are not always effective in developing or influencing the policy-making process in a specific sector as they consist of both industry and government officials who meet to provide advice to ministers on a wide range of topics. A council works under each ministry to consider and approve

19.- The latest of such attempts was Government Resolution #295-r of 29 July 2005, which gave Khlib Ukrainy export VAT refund preferences and railway carriage discounts.

20.- [20] Created by Government Resolution #543 of 6 July 2005 "On the Agrarian Fund".

21.- Ukraine's legislation allows the creation of both associations (the Economic Code of Ukraine) and citizens' unions (Law of Ukraine "On Citizens' Unions"). At times, it has been difficult to obtain non-profit status (Item 7.11. of Article 7 of Ukraine's Law "On Taxation of Enterprise Profits").

general approaches to policy issues in the ministry's area of competence.[22] Representatives of almost all of the leading agribusiness associations presented in Table A.9 of Appendix A are members of the Council of the Ministry of Agrarian Policy.[23] Some associations participate in other council ministries as well. For example, representatives of the Ukrainian Grain Association are members of the Council of the State Tax Administration as well as members of the Council of the Ministry of Agrarian Policy. The impact of these ministry councils on the policy-making process is limited as many government decisions are made without being discussed in the ministry councils.

Sector-specific consultation and advisory bodies

Sector-specific consultation and advisory bodies set up by the government allow for a more effective participation in the policy-making process. In relation to the grain sector, the most important of such bodies are the Coordinating Council for Agricultural Policy[24] and the Working Group for Grain Market Coordination. Representatives of almost all of the leading agribusiness associations presented in Table A.9 of Appendix A are members of these two bodies, which are often involved in drafting legislative and regulatory acts and developing standards. In particular the Working Group for Grain Market Coordination has proven to be an effective tool for developing common positions between the government and the associations. To some degree, these bodies are also instrumental in settling issues among associations.[25] However, the work of these bodies is very much dependent on the leadership of government staff and is often undermined when membership needs to be reapproved following a change in administration.

The government also reaches out to associations individually for certain initiatives. One of the most significant initiatives is the State Program of the Ukrainian Grain Sector's Development till 2015, which was developed by the government in collaboration with the Ukrainian Grain Association. Another example is the participation of representatives of the Ukrainian Agribusiness Club in the Working Group of the Ministry of Agrarian Policy of Ukraine for development of the draft 2009 State Budget. The working group allows the association to make proposals when the budget it is still in a preparatory stage.

2.1.3 The role of expert groups

Though still at an early stage, expert groups are increasingly being engaged in agricultural policy-making in Ukraine. The government is trying to recruit qualified staff, as many government agencies are short of experienced economists and market analysts because most of the expertise in these areas is currently concentrated within private consulting companies and commodity trading firms. Ukraine's government institutions have recently started engaging independent experts in agricultural policy analysis through direct contracting or international technical assistance projects. Also, large agribusinesses and industry associations are increasingly outsourcing expertise to support policy proposals and engage in dialogue with the government. Overall, these developments could contribute to a more balanced approach in developing policies that affect the agrofood industry and the grain sector in particular.

22.- The operations of the Council of the Ministry of Agrarian Policy are governed by Item 9 of the Regulations on the Ministry of Agrarian Policy of Ukraine, which was approved by Government Resolution #1541 of 1 November 2006.

23.- A list of the public council members is available at http://www.minagro.kiev.ua/page/?4243

24.- Its new membership was approved by Government Resolution #185 of 12 March 2008 "On Approving the New Membership of the Coordinating Council for Agricultural Policy".

25.- The associations often lobby principally different positions. An example of such a situation is when the associations of grain growers and exporters opposed the grain export quota regime, while the associations of livestock raisers and bakers supported retention of the quotas.

2.1.4 The role of women

There are no special provisions aimed at enhancing the role of women in agricultural or grain sector policy-making. A nationwide legal framework and action programme for promoting gender equality is in place in Ukraine.[26] It authorizes government bodies to appoint a person (coordinator) responsible for gender issues and to conduct examinations of legislative acts for gender issues. The organizational charts of the Ministry of Agrarian Policy do not clearly identify officials responsible for gender issues. The overall implementing of gender regulations has been fragmented and many regulations remain unenforced.[27] As a result, real progress in assuring gender equality in Ukraine's agriculture sector has thus far been limited.

2.2 Public support measures

2.2.1 Agricultural budget support measures

The agricultural support system has drastically changed since Soviet times. Prior to transition to a market economy, both the supplying of inputs and the selling of farm output products were performed by state authorities. From the early- to mid-1990s, a considerable amount of grain was still sold to the state under the state order system. Under this system, the government partially prepaid farmers for products that they had to sell in stipulated volumes for an established price after harvesting. However, the system became unsustainable due to insufficient budgetary resources and persistently insufficient farm supplies. The state order system was formally cancelled during 1996–1997, though the advancing of grain deliveries to the state continued for a number of years thereafter.

Public financing for agricultural support programmes bottomed out in the late 1990s, early 2000, but increased substantially thereafter as the overall economy recovered. The adoption of the Law "On State Support to Ukraine's Agriculture" in June 2004 is considered the turning-point at which state support to agricultural began to grow. The law established the basic principles of state support to agriculture, including production subsidies, insurance and credit subsidies, intervention operations, etc. The list of specific support programmes and their approved budget levels apears in Appendix C. As information provided in Appendix C does not include the amount of quasi-fiscal support (FAT, value-added tax (VAT) privileges, etc.), some experts believe that the actual total amount of state support could be much higher. The financial crisis and WTO commitments to reduce agricultural support will likely constrain the growth of state support to agriculture in Ukraine. In the paragraphs to follow the current agricultural budget support measures as they apply to the grain sector are reviewed.

26.- Article 7 of the Law of Ukraine #2866-IV of 8 September 2005 "On Providing Equal Rights and Opportunities to Men and Women" identifies the authorized government bodies responsible for ensuring equal rights for men and women. The authorized bodies include: the Parliament of Ukraine; the Human Rights Commissioner of Parliament; the Cabinet of Ministers of Ukraine; the special central body for ensuring equal rights and opportunities for women and men; authorized persons (coordinators) in governmental and regulatory bodies; and citizens' unions. Government Resolution #1834 of 27 December 2006 "On Approval of the State Program for Establishing Gender Equality in the Ukrainian Society for the Period till 2010" envisages the development of a plan for: conducting examination of legislative acts for gender bias and legal accuracy; bringing regulatory legal acts in line with the Law of Ukraine "On Providing Equal Rights and Opportunities to Men and Women"; conducting staff reviews of executive authority bodies; and supporting educational initiatives.

27.- The Government of Ukraine passed a number of acts following the approval of the State Program for Establishing Gender Equality in the Ukrainian Society for the Period till 2010. They include Resolution #504 of 12 April 2006 "On Conducting Gender Legal Examination" and Resolution #1087 of 5 September 2007 "On Advisory Bodies for Issues of Family, Gender Equality, Demographic Development and Human Traffic Prevention". In addition, Resolution #14 of 16 January 2008 on the action programme Ukrainian Break-through: for People, not for Politicians envisages the creation of a National Gender Resource Centre along with similar regional centres and the inclusion of a gender component in social and economic development programmes.

Production subsidies

Grain subsidies overall have a limited impact on grain production decisions. Direct support to grain producers in the form of subsidies per ha of crops began in 2003 as a measure to compensate farmers for the adverse weather conditions they suffered that year. One year later, the per-ha payments became a non-emergency element of state support (2004). While the list of subsidized crops has changed over time, per-ha payments for crops were made during each of the subsequent years except in 2005. The terms and procedures for supporting crop producers in 2008 were stipulated by the government in Resolution #256 of 21 February 2007.[28] The per-ha payment rates are presented in Table A.10 of Appendix A. Given that crop growing costs range between UAH 2,000/ha and 3,000/ha, the subsidies cover about 3–5% of these costs and even less in terms of per-ha incomes. For most grain crops, the allocated subsidy amounts are thus not a critical factor in the crop choice or planting area decisions of agricultural producers.

Insurance subsidies

Insurance subsidies have not helped to establish an agricultural insurance market. The Law "On State Support to Ukraine's Agriculture" provided for the establishment of an agricultural insurance subsidy fund. The fund is financed through contributions from both the government and insurance companies. Agricultural producers who wish to insure against agricultural risks (including adverse weather risks) are being reimbursed 50% of the insurance premium they pay to private insurance companies. While UAH 50 million was allocated for this purpose in 2007, the government was projected to allocate UAH 200 million[29] in 2008 (see Appendix C). However, this support measure has not yet helped to create a functioning system of agricultural insurance in Ukraine. The government continues to compensate (fully or partially) agricultural producers directly through the Reserve Fund of the Cabinet of Ministers for the losses incurred due to natural disasters.[30] Agricultural insurance is still viewed as a non-reliable risk reduction tool as opposed to direct government emergency/disaster payments. It thus perpetuates a situation whereby compensations for losses will continue to be required in the future.

Farm mechanization subsidies

Farm mechanization subsidies are unsuccessful in modernizing farms and building a competitive agricultural machine manufacturing industry. The Law of Ukraine "On Stimulating the Development of National Machine Building for the Agro-Industrial Sector"[31] aims to support machinery upgrading on farms in Ukraine and the development of a domestic, agricultural machine manufacturing industry. A first support mechanism under the law partially compensates agricultural producers for the cost of purchasing domestically produced machinery and

28.- Decisions on support payments are made by special commissions comprised of representatives of the regional departments for agroindustrial development (agricultural units of local administrations), land resource bodies, agribusiness associations and other parties. Applications for obtaining support payments are to be submitted before April 1 for winter crops and before July 1 for spring crops. To be eligible, the agricultural producer must not be in arrears on payments to the budget and state specialized funds in the six months prior to application. The special commissions review the submitted application packages and draw up registers of the eligible agricultural enterprises. Amendments to Resolution #256 were introduced by the government through Resolutions #965 of 25 July 2007, #86 of 22 February 2008, #352 of 17 April 2008 and #584 of 25 June 2008.

29.- The procedure for subsidizing from the state budget the insurance premiums paid by farmers was approved by Resolution #235 of 6 May 2005.

30.- One of the more recent examples of inconsistent government behaviour is Resolution #794 of 4 June 2007 "On Urgent Measures for Mitigating the Drought Adverse Consequences and Ensuring Accumulation of the Y2007 Grain Resources". Following this resolution, the Ministry of Agrarian Policy developed a mechanism for determining farmers' losses due to adverse weather conditions. Compensation was provided for losses of winter and spring wheat and triticale, winter and spring barley, winter rye, winter and spring rape, sunflower, soy, buckwheat, millet, peas, corn and sugar beet.

31.- Resolution #3023-III of 7 February 2002.

equipment.[32] Under a second support mechanism, the government procures domestically produced machinery and equipment and provides them to agricultural producers on the basis of a financial lease arrangement.[33] The support mechanisms have been generally ineffective. Insufficient funding has been allocated under the first support mechanism and many agricultural producers have been unable to obtain the necessary financing. In addition, farmers tend to prefer to buy the more efficient machinery and equipment manufactured abroad. In 2006, the Ukragroleasing Company, which carries out the financial leasing operations on behalf of the government, was allowed to purchase foreign machinery and equipment (in addition to Ukrainian-manufactured equipment) within allocated funding limits. Overall, the agricultural machinery support programmes have not resulted in increased domestic production of agricultural machinery and machinery modernization on farms.

Interest rate subsidies

Demand for interest rate subsidies is likely to increase. The government's interest rate subsidy programme compensates agricultural producers for interest payments made on credit procured from private banks. This programme is not legislatively mandated. Instead, it is financed each year through the allocations determined by the law of Ukraine on the state budget (for a given year).[34] The funding to this programme has steadily increased in recent years. During 2007–2008, the funding of interest rate subsidies increased from UAH 0.67 billion to UAH 1 billion. The provision of UAH 1.2 billion was anticipated in the 2009 state budget. Unlike the farm mechanization programme, financing under the interest rate subsidy programme allows the purchase of foreign machinery and equipment.[35] In previous years, the programme included limits on the maximum interest rates eligible for reimbursement. However, the government decided to remove these limits in 2008 in light of the worsening situation in Ukraine's credit market.[36] As a result, it can be expected that demand from agricultural producers will soon exceed the allocated budget resources, and questions with respect to the distribution of the limited resources will emerge.

Intervention operations

The Agrarian Fund is the principal government institution responsible for grain market interventions but conflict with the State Committee on Material Reserves exists. The Law of Ukraine "On State Support to Ukraine's Agriculture" regulates the conduct of commodity market interventions. Following the harvesting campaign, the Agrarian Fund typically purchases commodities, including grains, according to state price regulations[37] and sells them later if domestic supply runs short.
In constrast, state reserves, are stockpiled by the State Committee on Material Reserves. As a

32.- The law stipulates that Ukrainian raw materials, spare parts and machinery components must account for more than 50% of the cost of machinery and equipment in order for the machinery and equipment to be classified as domestically produced goods. The terms for this measure were approved by Order #236 of 14 July 2003 of the Ministry of Agrarian Policy. The procedure for using state funds allocated for partial compensation for the cost of Ukrainian-made agricultural machinery was approved by Government Resolution #959 of 28 July 2004 "On Approving the Procedure for Using the State Budget's Money Allocated for Partial Compensation of the Cost of Complex Agricultural Machinery of National Production".

33.- The procedure for purchasing domestically produced machinery and equipment for agriculture on financial leasing terms was approved by Government Resolution #1904 of 10 December 2003.

34.- The procedure for using money under this programme was approved by Government Resolution #126 of 27 February 2008 "On Approving the Procedure of Using Money Provided by the Y2008 State Budget for Financial Support to Agro-Industrial Enterprises through the Credit Subsidy Mechanism".

35.- The list of such machinery was approved by Order #648-r of 17 April 2008 "On Approving the List of New Agricultural Machinery and Equipment of Foreign Production Whose Equivalents Are Not Produced in Ukraine and which are Bought by Agricultural Enterprises in 2008 Using the Credit Subsidy Mechanism".

36.- Amendments were made by Government Resolution #561 of 18 June 2008.

37.- A list of such commodities is determined by Item 3.3.1 of Article 3 of the Law of Ukraine "On State Support to Ukraine's Agriculture".

rule, Ukraine keeps minimum stocks at a three-month consumption level for all major food grains. Normally, the state reserves are used in emergency cases only. As a result, these stocks are purchased and sold for the most part in order to maintain minimum quality standards in storage.[38] Following the amendment to the legislation on state reserves in 2004,[39] the State Committee on Material Reserves can also take measures to stabilize the market of strategically important products (including grain) with the approval of the Ukraine Cabinet of Ministers.[40] There have been cases after the good grain harvests when the Cabinet of Ministers has ordered the State Committee on Material Reserves to purchase grain from the market, including feedgrain that the State Committee does not usually store as it primarily stores food stocks.[41]

Grain market interventions have generally been ineffective in offseting serious price fluctuations. The Law of Ukraine "On State Support to Ukraine's Agriculture"[42] specifies accumulation rates for the commodities to be stockpiled in the food reserves under given price regulations (see Appendix A, Table A.11). However, provisions have never been fulfilled since the approval of this law. The Agrarian Fund's grain stocks have not exceeded 500,000 tonnes since the fund's creation, i.e. roughly 6% of the estimated domestic food consumption of grains. Often the funding is insufficient to buy all grain from the market if intervention prices are higher than market prices. In MY 2004/2005, state market intervention agencies (primarily the State Committee on Material Reserves) bought 3rd grade wheat for UAH 800/metric tonne[43] (USD 158/tonne), while market prices were lower.

2.2.2 Administrative measures

Local administrations can control flour/bread margins in the bakery sector. Local administrations are allowed to set maximum profit margins for bakeries. Typically, 10% is the maximum profit margin, 5% is commonly applied, and there are cases in which margins are less than 5%.[44] At the same time, local administrations often provide subsidies to bakeries for the purchase of grain/flour early in the season or provide grain at fixed prices from the government stocks.

Export quotas were the government's primary response to rising food prices. Due to the ineffectiveness of market interventions in influencing grain prices as described above, the government turned to administrative measures such as export quotas on grains and oilseeds to stem the rising food costs observed since mid-2006, which costs accelerated dramatically towards the end of 2007.[45] Although

38.- Item 2 of Article 12 of Ukraine's Law "On the State Material Reserves".

39.- Item 5 of Ukraine's Law "On Amending Some Legislative Acts of Ukraine", 1713-IV of 12 May 2004.

40.- Item 4 of Article 8 of Ukraine's Law "On the State Material Reserves".

41.- For example, Resolution #532 of 28 April 2004 "On Procurement of the Y2004 Crop Food Grain" was passed for the purpose of providing for the purchase of 1 million tonnes of grain by the State Committee on Material Reserves.

42.- Item 9.3.1 of Article 9 of the Law of Ukraine "On State Support to Ukraine's Agriculture".

43.- http://www.apk-inform.com/showart.php?id=16849&sid=584097&markup=0&?&sections=1&search=800%20ã?í/ò&mode=2&ds=1&d1=14.04.0208&d2=21.07.2008&start=81

44.- World Bank. 2008. *Competitive agriculture or state control: Ukraine's response to the global food crisis*. Washington DC, Sustainable Development Unit, Europe and Central Asia Region. p. 8.

45.- The Law of Ukraine "On Foreign Economic Activity" includes provisions allowing for the imposition of export quotas on certain goods. Specifically, it provides for the possible introduction of automatic licensing (the license is issued automatically if the documents are submitted correctly) or non-automatic licensing (for certain volumes of quotas). The grounds for introducing export restrictions can be "a significant disbalance with regard to certain goods on the domestic market", including agricultural products. Although this provision stipulates that restrictions can be introduced when a disbalance is present in the domestic market, it has been suggested that restrictions can also be introduced in the event of an essential risk of a disbalance.

the measures had some effect in slowing down the growth rate of grain prices, they could not stem the overall upward price trend.

The decision-making process with regard to grain export quotas provoked criticism by agricultural producers and traders. A resolution introducting automatic licensing was rapidly replaced in the first half of October 2006 by a resolution that introducted non-automatic licensing of a specific volume of export quotas for wheat, barley, corn and rye. This took many producers and traders by surprise because the draft of the resolution had not been published by the Ministry of Economy within the timeframe required by Ukraine's legislation on regulatory policy. The measure effectively undermined the execution of export contracts that had already been signed earlier in the marketing year. Despite attempts to judicially contest the decision,[46] the government retained the quota regime in the domestic market throughout both MY 2006/2007 (with short interruptions) and MY 2007/2008.

The process of distributing export quotas provided strong incentives for rent-seeking. A call for applications for export quotas is normally announced by the Ministry of Economy.[47] Following the announcement, traders must submit their application packages (within 11 days) accompanied by copies of export contracts, a trader's state registration certificate and a letter from the Ministry of Agrarian Policy confirming that the trading company has grain in its possession. Upon review of the applications, a special commission in the Ministry of Economy allocates the quotas among traders in proportion to the volumes that are requested.

Introducing export quotas in the future will be limited by WTO requirements. As a WTO member, Ukraine can impose export quotas on agricultural products only in the case of proven threats to food security. In addition, it needs to notify trade partners in advance. To these ends, the Law of Ukraine "On State Support to Ukraine's Agriculture" was amended.[48] The limits on the administrative regulation of the Ukrainian grain market will make international markets more predictable.

2.2.3 Fiscal measures

Quasi-fiscal state support is more important to farmers than direct agricultural budget support. The total amount of tax benefits enjoyed by farmers in Ukraine (via the fixed agricultural tax (FAT), VAT and other quasi-fiscal support measures) was UAH 8 billion in 2008 and was far greater than the UAH 4.5 billion worth of direct funding provided by the agricultural budget support measures (Appendix A, Table A.12)

VAT exemptions

Farmers have benefited from significant VAT exemptions.[49] Three types of VAT exemptions are granted to agricultural producers: (i) a zero VAT rate is applied to producer sales of milk and meat to processing plants; (ii) VAT amounts due to be paid by milk and meat processors to the government are directed as subsidies to agricultural producers that supplied milk and meat for

46.- http://www.uga-port.org.ua/cgi-bin/valnews_portal.sh?lpos02006101924.shtml

47.- The process is governed by Regulation #1179 of 26 October 2007, with changes and amendments of 23 April 2008.

48.- Law of Ukraine "On Amending the Law of Ukraine 'On State Support to Ukraine's Agriculture'" #401-V of 30 November 2006.

49.- Law "On Value-Added Tax".

processing; and (iii) VAT generated after the sale of other agricultural produce (grains, oilseeds and other crops) and due to the government is transferred to farmers' special accounts that can be used for agricultural inputs and other farm production purposes. The amount of VAT benefits for agricultural producers was estimated at UAH 5.71 billion in 2007 and was expected to reach UAH 7 billion in 2008. Such generous tax support results in significant foregone budget revenues considering the fact that VAT accounted for 35.8% of the revenues of the state budget in 2007.[50] The continuation of tax support has been uncertain for a number of years. Despite efforts of the executive branch to introduce a reduced VAT rate for agriculture, the Ukraine Parliament has prolonged the VAT exemptions every year since 2000. According to the current Law "On Value-Added Tax", VAT exemptions would remain valid until January 1 of the year after the year of ratification of the WTO entry protocol by Ukraine's Parliament. In other words, they were scheduled to expire on 1 January 2009; however, some of VAT tax benefits were prolonged into 2010. The differences between the current and future VAT regimes are summarized by the World Bank in Table A.13 of Appendix A. It is expected that the future VAT regime will be neutral in terms of its impact on the budget and the overall demand for agricultural products, although different VAT rates will likely complicate accounting and tax reporting. In addition, some farmers, including grain producers, may actually suffer losses from a lower VAT rate in the event that they are not able to offset the 9% VAT charged on farm outputs (grains oilseed, etc.) by the 20% VAT charged on farm inputs.[51]

Persistent arrears of VAT refunds to exporters heavily hurt agricultural exporters. Reimbursement of the VAT on exported products in Ukraine is required by the Ukrainian legislation and this is in line with international practice. The VAT refunds are constantly delayed by the Tax Administration of Ukraine and reimbursement procedures are cumbersome and lengthy. A typical grain export company in Ukraine loses an estimated 10% of the export price due to VAT refund delays (see Table A.14 in Appendix A). These losses are known along the supply chain and are transmitted from traders to farmers in the form of reduced grain purchasing prices. The government has been trying to reduce the outstanding VAT refunds; however, these almost doubled during the first six months of 2008 – up to UAH 16.9 billion compared with UAH 18.9 billion for all of 2007.[52] Total VAT refunds to the agricultural sector amounted to UAH 1 billion[53] during this period and the growth of VAT arrears could not be explained by poor tax revenues.[54] Nonetheless, VAT refund debt increased and was estimated at UAH 7.9 billion (including UAH 3.6 billion of overdue debt) at the end of June 2008.[55] A settlement of VAT refunds is hampered by complicated taxation procedures, difficulties in tracing the legitimacy of VAT payments along the fragmented agrifood supply chain and misconduct among tax officials.

50.- http://www.minfin.gov.ua/file/link/99073/file/Budget_2007.pdf

51.- World Bank. 2006. Improving Agricultural Fiscal Policy in Ukraine. Washington DC, Sustainable Development Unit, Europe and Central Asia Region. pp. 15–16.

52.- http://www.sta.gov.ua/tax/control/uk/publish/article?art_id=127802&cat_id=45661&search_param=%D0%B2%D1%96%D0%B4%D1%88%D0%BA%D0%BE%D0%B4%D1%83%D0%B2%D0%B0%D0%BD%D0%BD%D1%8F+%D0%9F%D0%94%D0%92&searchForum=1&searchDocarch=1&searchPublishing=1 (in the Ukrainian language)

53.- http://www.sta.gov.ua/tax/control/uk/publish/article?art_id=127683&cat_id=90622&search_param=%D0%B2%D1%96%D0%B4%D1%88%D0%BA%D0%BE%D0%B4%D1%83%D0%B2%D0%B0%D0%BD%D0%BD%D1%8F+%D0%9F%D0%94%D0%92&searchForum=1&searchDocarch=1&searchPublishing=1 (in the Ukrainian language)

54.- According to the State Statistics Committee, the importation of goods to Ukraine increased by 50% during the period January–April 2008 compared with the same period in 2007; exports increased just 31%. As a result, VAT revenues from imports increased faster than VAT refunds due to exporters. Furthermore, retail volumes expanded from UAH 131 billion during January–June 2007 to UAH 200 billion during January–June 2008 (by almost 53%). Because VAT is a consumer tax, the growth of retail trade means an automatic increase in VAT paid to the government.

55.- http://www.top.rbk.ua/ukr/newsline/2008/06/26/388716.shtml (in the Ukrainian language)

FAT

The benefits of FAT will continue to decrease in the future. FAT was introduced in 1999 to substitute for 12 other direct taxes and levies (profit tax, personal income tax, land tax, local taxes, Pension and Social Fund fees, etc.) from which agriculture is exempted. FAT resulted in significant tax savings to agricultural producers. Farmers who specialize in livestock production likely benefit more from FAT than crop farmers as the tax payments are determined on land area and its value as of July 1997. In 2005, the contribution to the pension fund was excluded from FAT. The government is now directly compensating the pension fund for its losses due to the Free Trade Agreement (FTA). The FAT had been expected to be operational until the end of 2009 but was continued into 2010.

2.3 The impact of EU integration and WTO membership

The outlook for EU integration has changed in recent years. In 2004–2005, the government declared an ambitious plan to join the EU before 2015. Since then, the government's goals have been modified according to economic realities. The Government of Ukraine now aims at concluding negotiations on a FTA with the EU that would establish an expanded free trade zone (so-called FTZ+) with a minimum number of exceptions. The negotiations are still ongoing and are not likely to end before the end of 2010.

An expanded FTZ+ with the EU could improve market access for Ukrainian grain exports. Ukrainian grain exports to the EU fluctuated considerably between 2000 and 2008 (see Appendix A, Figure A.12). Prior to 2003, the EU import tariffs applied to grain imports were determined using the Margin of Preference (MOP) formula agreed as part of the WTO agreement. The latter established tariffs as the difference between 155% of the EU intervention price and the border price (including transportation costs) of imported grains from North America. Following the dramatic increase in Ukrainian wheat exports in 2002, the EU replaced its existing import tariffs on grains with a tariff quota system. In January 2003, tariff quotas of 2.981, 0.30 and 0.05 million tonnes were introduced for low- and medium-quality wheat, feed barley and malting barley, respectively, compared with total import volumes of 13.95 million tonnes of wheat and 1.23 million tonnes of barley in 2002.[56] Compensation was provided by splitting the quotas among traditional supplier countries that are WTO members, including Canada and the United States, and "third countries" (mainly Ukraine, the Russian Federation and Kazakhstan). Because Ukraine was not a WTO member at that time, it did not receive any compensation. The tariff quotas have been marginally increased since 2003 to take into account the accession countries to the EU. In 2009, the third country quotas were as follows:

- low- and medium-quality wheat – 2.3 million tonnes per year at a tariff of EUR 12 per tonne
- barley – 306,000 tonnes per year at a tariff of EUR 16 per tonne
- corn – 242,000 tonnes per year at a tariff of EUR 0 per tonne

The EU tariff quota system has been vulnerable to misuse. The EU import quota is split into quarterly tranches that run from the 1st of January, April, July and October. Import traders must apply for licenses on a weekly basis and pay a fee relative to the volume of imports requested. The EU then assigns the licenses proportionally on the basis of the size of import volumes requested on the application. If supply meets demand, the license requests are granted in full. However, if demand outstrips supply, the license requests are only partically granted. This system has been

56.- The tariff is set at EUR 12/tonne for low- and medium-quality wheat within the quota and EUR 95/tonne outside the quota, which renders the crop prohibitively expensive.

vulnerable to abuse. Assuming that the EU would license only a fraction of the volumes requested by applicants, traders submitted applications to import volumes greater than those for which they actually planned. When the EU licensed in full the volumes requested in a trader's application, the trader would find him/herself unable to fulfill the contractual obligation to import the volume requested and granted by the license. In recent years, the EU has tightened its regulations governing the tariff quota system in order to prevent such misus.

Provided it removes the effects of the existing tariff quotas and possible use of export refunds (subsidies) by the EU, the establishment of a FTZ+ between the EU and Ukraine could enable increased Ukrainian grain exports. Ukrainian grain export levels since the introduction of the tariff quota system have been substantially lower than their peak level in 2002 (see Appendix A, Figure A.12). Many grain exports have been diverted to traditional EU export markets, such as the North Africa region. The effective liberalization of grain trade between the EU and Ukraine could allow Ukraine to supply feed wheat deficit markets in Southern Europe in the event that EU intervention stocks are tight. EU intervention stocks tend not to increase in years with lower crop harvests as the market price is set higher than the floor intervention price. In addition, the EU has been tightening its regulations governing market interventions.

WTO requirements will condition the future policy environment for the grain sector. Following the acquisition of WTO membership, Ukraine can access the WTO's trade dispute settlement mechanisms, actively participate in multilateral trade negotiations and consider membership applications of countries intending to join the WTO. At the agricultural policy level, WTO membership will result in the following key changes:

- The size of the Aggregate Support Measures will be limited to UAH 3.043 billion. The WTO de-minimus rule when applied to the financing of both product and non-product support measures[57] will have no immediate impact on current support levels to the agriculture sector, including the grain sector, in the context of high world prices for agricultural products. However, the future growth in budgetary expenditures for programmes that fall under the WTO's "amber box" of trade-distorting support measures will be limited.

- Grain import tariffs have been reduced by 10–15%. The government had already implemented required import tariff cuts even before WTO accession as a result of the pressure exerted during WTO negotiations to do so.[58] The size of the required tariff cuts differed depending on the type of grain (see Appendix A, Table A.15). The reductions are expected to have a limited impact on the grain market given Ukraine's status of a net grain exporter. In addition, the grain trade with the Russian Federation and Kazakhstan, the two main sources of grain imports into Ukraine, is already governed by FTAs. With regard to the livestock sector, however, reduced import tariffs will make imported meat products much more competitive (see Appendix A, Tables A.16 and A.17). The increased competition may limit the future growth of the livestock sector and hence domestic demand for feedgrains. Initial trade data show that importation of meat products increased by 50% in the first six months of 2008 compared with the same period in 2007.

57.- Item 6 of Article 6 of the WTO Agriculture Agreement.

58.- The Ukraine Parliament adopted the draft law #2351-1 of 13 May 2008 that provides for the reduction of import duty rates. However, as the law did not fully comply with the WTO commitments taken by Ukraine, the Ukraine President vetoed the law. Since Ukraine acquired membership in the WTO, the import duties are regulated by the Letter of Ukraine's State Customs Service of 15 May 2008 #11/1-14/5335-EP. According to the letter, the duty rates determined by Appendix 1 to the Protocol on Ukraine's Entry into the WTO are applied to goods originating from the countries to which Ukraine grants the most favoured nation status.

3. Key Grain Sector Constraints

The grain sector has strong growth potential. High global food prices present a major opportunity for Ukraine. It is one of the few grain exporting countries that, through increased acreages and yields (combined with relatively stable domestic consumption), can generate large exportable surpluses and, hence, increase its share of the global grain market. In addition, the more open trade environment that will be created through Ukraine's WTO membership and its ongoing integration process with the EU can be expected to improve overall market access for Ukraine's grain exports. It will also help to improve the grain sector's overall growth and competitiveness by attracting increased foreign investments, facilitating the introduction of new agricultural practices, and making imported machinery, equipment and inputs more affordable.

Some promising trends can be observed. The structure of the agriculture sector in Ukraine has undergone substantial changes in recent years. Large-scale, modern, private agricultural producers are gradually displacing less efficient, traditional participants. The data presented in Table A.18 of Appendix A shows this ongoing commercialization process within the agriculture sector. While the total number of medium and large agriculture enterprises dropped during the period 2003–2006, the average farm size increased by 13%. Output, productivity and profitability levels for several crops can be expected to improve due to the increased use of key agricultural inputs and to increasing investments in farm machinery, as well as to the use of quality seeds by these operators. For example, the application of mineral fertilizers is predicted to increase 3–5 times by 2015. However, in order to realize the grain sector's full potential, a number of structural constraints at both the farm- and government-level will have to be removed.

3.1 Farm-level constraints

Grain yields have suffered due to low investments in recent years. The ineffectiveness of the government's grain market interventions and the imposition of administrative measures such as grain export quotas to stem rising food prices depressed domestic farmgate prices and caused significant uncertainty in the market. Grain producers have responded to the declining profitability of grain production primarily by reducing investments and (to a lesser degree) adjusting the size of areas planted. Figure A.13 in Appendix A demonstrates how declining yields resulting from lower investments have been closely linked to declining margins in grain production: if the grain growing margin sinks in the current year, yields decrease in the following year and vice versa. In addition to weather risks, this trend makes grain production more vulnerable.

The unfolding global financial and economic crisis is likely to limit future on-farm investments in the grain sector. Although the crisis has not significantly affected the winter and spring crops in MY 2008/2009 (winter crops had largely been planted before the crisis unfolded in October 2008), it is expected that in the future size of the area dedicated to grain and grain yields will reduce as a result of limited financing. The high cost of financing in crisis conditions may affect farmers' ability to buy good-quality seeds and fertilizers and invest in land, machinery, logistics, storage and processing capacities, and they will be forced to grow low-input crops like sunflower.

Poor infrastructure raises marketing costs. Better infrastructure is needed to allow grains to

be efficiently exported from Ukraine to the world market and to prevent traffic bottlenecks. In addition, a reduction in marketing cost is needed to generate higher farmgate prices for grain producers. However, the following elements continue to hamper logistics in Ukraine:

- Roads: Within a 250–300 km radius of the ports, delivering grain by truck is more profitable for grain owners. However, the current quantity and quality of access roads to ports do not allow for increased traffic.

- Railways: Transportation is constrained by a shortage of railcars. UkrZaliznytsya (the state railway monopoly) has tried to address the problem by raising fines for the downtime of railcars to quicken their turnover. However, it will be impossible to resolve this problem in the future without a substantial increase in the number of grain carriers.

- Ports: Both public and private investments continue to be made in Ukraine's ports. The ports currently allow the handling of an estimated 24–26 million tonnes of grain for export. The current port capacity is expected to handle Ukrainian, Russian and Kazakhstan grain exports and transit, though problems may still arise at the time of peak shipments (August–October).

- Storage/Drying: Many grain farmers currently find elevator services for storage and drying expensive. Ukraine's grain storage capacity is currently estimated to total around 30 million tonnes.[59] This is sufficient to meet the demand for storage, but problems emerge in peak crop years. Rising grain storage tariffs during the peak periods badly affect grower incomes. A number of large agricultural companies (agroholdings) have thus begun constructing their own elevators.

Compliance with food safety and phytosanitary measures, and quality standards is becoming more important. To seize the increased market opportunities resulting from Ukraine's WTO membership and its integration process with the EU, agricultural producers in Ukraine will need to invest in new technologies for improved product safety and quality as these become increasingly important in the key grain import markets. There have been precedents when the issues of product safety and quality created problems for exporters to the EU, Brasil, the United States and other trading partners. Although the need for improvements in the areas of food safety and quality are more evident in the livestock sector, grain producers will have to adapt as well. For example, low corn quality is a limiting factor for faster export expansion.

Insufficient access to financial and risk management services remains a problem for many producers. Despite several initiatives aimed at developing credit, commodity exchange and insurance markets in Ukraine, agricultural producers' access to the following services continues to be constrained:

- Credit: The introduction in 2002 of a system of warehouse receipts for grain was in part aimed at improving access to private credit resources by allowing grain producers to use grain as collateral for loans, or to sell, trade or use the receipts for delivery against financial instruments such as futures contracts. However, the system is still facing a number of challenges that continue to limit farmers' access to credit by undermining the trust of the financial institutions in the system, including:

- Contradictions in the legal framework: Rights, liabilities and duties of each party to the single

59.- In 2007, grain storage enterprises in Ukraine numbered 659, with a total capacity amounting to 30.8 million tonnes compared with a total capacity of 606 million tonnes between 2000 and 2001.

and double warehouse receipt (producer, warehouse, bank, etc.) are defined differently under different laws in Ukraine. Table A.19 in Appendix A summarizes inconsistencies between the Law "On Grain and the Grain Market in Ukraine" and the Law "On Certified Commodity Warehouses and Simple and Double Warehouse Certificates".

- An inadequate monitoring system: Although private and independent mechanisms for verifying the quality and quantity of stored commodities exist, these mechanisms are costly for grain owners. In addition, verifying agents often have limited access to the state-owned storage facilities.
No reliable performance guarantees: Holders of warehouse receipts do not receive adequate compensation if the stored goods do not match in quantity or quality with what is specified on the receipt (due to either negligence or fraud).

- Futures exchange market: Agricultural market operators cannot hedge effectively against price fluctuations using futures contracts due to the absence of a well-developed futures exchange market. Although Ukraine has 30 exchanges that declare trade in agricultural products,[60] in reality the exchanges are either engaged in activities unrelated to the grain market or fully depend on government decisions. Although the government established an Agricultural Exchange, the latter cannot be considered an exchange in the traditional sense of the word. Rather, it constitutes a focal point for registering the Agrarian Fund's contracts. The Agricultural Exchange's activities are thus largely determined by the Agrarian Fund. Under these conditions, the exchange fails to attract private investors by limiting the liquidity of exchange contracts.

- Insurance: Despite the government's insurance subsidy programme, agricultural producers for the most part opt out of paying premiums for private crop insurance because they do not expect that claims will be paid in the event of crop failures. In addition, reliance on government assistance to disaster-hit farmers removes an important incentive to participate in private crop insurance schemes while perpetuating public expenditures.

Preconditions for efficiently functioning land markets are not in place. Rapid development of agroholdings in Ukraine during 2006–2008 allowed about ten of them to obtain low-priced financing through initial public offerings (IPO) on the London, Frankfurt, and Warsaw stock exchanges. As these companies predominantly rent the land on which they farm, one can argue that the lack of land markets in Ukraine is no longer an issue. This is not correct as the absence of an appropriate legal and regulatory framework and the subsequent continuation of the moratorium on land sales prevent effective allocation of land resources. Key primary legislation such as the Law "On Land Market" and the Law "On State Land Cadastre" has not yet been approved by the Ukraine Parliament. In addition, despite the fact that proper legal provisions are in place, the unified electronic real estate and land registration system is still not operational. Overall, the process for registering land and land lease agreements is both cumbersome and expensive. As a result of these constraints and a generally weak governance environment, land ownership rights remain uncertain in Ukraine. This condition not only prevents formal land markets from taking off, but also further constrains the access of agricultural producers to credit by undermining their use of land as collateral. This limits the commercialization process of the agriculture sector in Ukraine, which thus far has been supported by the growing land-lease market.

60.- http://www.sabu.org.ua/members/list.php

3.2 Government-level constraints

The government lacks a coherent vision for the development of the agriculture sector in Ukraine. Despite a number of recent strategic programming initiatives,[61] the government has not yet developed a broadly shared understanding of agricultural market development and the role of the public and private sectors. As a result, agricultural policy in Ukraine in recent years has been limited to ad hoc measures implemented at various government levels with a substantial degree of arbitration and damage to the private sector players.

Growth-enhancing investments are insufficiently promoted through current public expenditures in agriculture. Public spending, including both direct agricultural budget support measures and quasi-fiscal measures, has grown considerably in recent years. With regard to agricultural budget support measures, those measures classified as "non-market distorting", have increased from 47.2% in 2007 to 55.6% in 2008. However, substantial resources are allocated to market interventions, while budget support measures for on-farm investments, public goods (such as research and development, education and training) and rural development, although increasing, remain underfinanced. As such measures have a greater impact on sector growth and competitiveness, the overall effectiveness of budget support measures remains little. It should also be underlined that the public support programmes are generally difficult to access by farmers of small operations. As a result, a significant share of the benefits accrues to the largest agricultural enterprises. With regard to quasi-fiscal support, the VAT benefits enjoyed by farmers may be offset through lower prices paid by exporters who have not been able to receive an export VAT refund from the government.

Market interventions do not stabilize grain prices. The reasons for the limited impact of the government's market interventions are multifold. First, budgetary funding for the interventions is either too low or not disbursed in due time (see Table A.20 of Appendix A). Second, the intervention procedures (e.g. intervention beginning date, criteria for purchases in case of short funding) are poorly described in Ukraine's Law "On State Support to Ukraine's Agriculture". Third, the choice and combination of various intervention mechanisms[62] (see Table A.21 of Appendix A) used by the government and multiple state agents responsible for grain interventions, and frequent changes in the list of commodities covered by state price regulations send distorting signals to the market. Generally, there is limited information at the farmers' level on the specific agency conducting a purchase on behalf of the government in his/her location and on purchase prices. All these factors contribute to an untransparent operation of the government's interventions in the grain market.

Administrative measures and interference deter private investments in grain sector development.

61.- The government has established a programme for the Agroindustrial Complex and Development of Rural Areas. This programme is based on three pillars: (i) rural development, (ii) competitiveness of agriculture, including quality and safety issues, and (iii) natural resource management and environmental sustainability. In addition, the Ministry of Agrarian Policy has drafted a National Programme for Rural Development until 2015 aimed at "enhanced competitiveness on domestic and foreign markets, ensuring food security for the country, and the preservation of the rural way of life and peasantry as the carrier of Ukrainian identity, culture, and spirituality". However, there has been no specific funding earmarked for this programme.

62.- Changes in the intervention regime corresponded with changes in the goals of the interventions. In the period 2001–2005, supporting farm incomes was a priority. As a result, mortgage purchases were the government's preferred intervention tool as it allowed farmers to redeem grain and to sell it for higher prices in the market when prices rise seasonally. While the State Reserves made grain mortgage purchases through tenders in 2004, the Agrarian Fund made the purchases during the following year through the Agricultural Exchange. As international commodity prices increased, it became less critical to support farm incomes. The government subsequently turned to intervention purchases that assured accumulation of state food reserves to protect against eventual grain shortages in the market. Both intervention and mortgage operations were used in MY 2006/2007, but only intervention operations were used in MY 2007/2008. Both intervention and forward purchases were envisioned for MY 2008/2009, with some consideration for renewed mortgage operations.

As explained earlier, margin fixing can be used in the bakery industry. The temptation to regulate/limit grain movement from one region to another using sanitary, phytosanitary or other reasons is still high as local authorities are largely responsible for maintaining food security stocks. These measures undermine investment and effective supply response by producers to commodity prices.

VAT benefits at farm level may have an adverse impact on the agriculture sector. Given that VAT amounts are dependent on the farm production level, the VAT benefits have accrued to a small, well-connected group of large agricultural producers. In addition, they have created a significant economic distortion by increasing the tax burden on non-farmers. If the quasi-fiscal measures were redirected through the state budget and its programmes towards more growth-enhancing investments, they would generate significantly higher returns.

Public services to agriculture do not fully support grain sector growth and competitiveness. Key public services to agriculture such as agricultural information services, research and education, extension and advisory services, and food safety and quality control systems are inadequate due to low financing.

- Agricultural information services: Good market information, especially on prices and crop forecasting, is essential for adequate decision-making on the part of the government, farmers, financial institutions and processors. However, untransparent price formation as a result of information asymmetries[63] continues to depress farmgate prices. In addition, current information on grain supply and demand balances (S&D balances) cannot be used for reliable crop forecasting mainly due to the absence of a uniform methodology for calculating S&D balances and formal procedures for approving and using S&D balances. Currently, data on grain stocks are prepared by a variety of actors, including the Ministry of Agrarian Policy, the State Statistics Committee, the Ministry of Economy, international organizations and private consulting firms.

- Research and education: Ukraine's knowledge system continues to suffer from excess human and physical capacity that is difficult to maintain under the current operational budget levels. As a result, the system is unable to develop and deliver the technologies and skills required for a competitive agriculture sector.

- Extension and advisory services: Public extension and advisory services have historically been underfunded and are further constrained by producers' unwillingness to pay for these services. As a result, they are currently unable to deliver the technical support needed by producers and processors to face up to the challenge of an increasingly competitive market environment. New emerging needs include a need for support in preparing application packages for public support programmes, developing business plans, introducing good agricultural practices, and complying with food safety and quality standards.

- Food safety and quality control systems: Current food safety and quality control systems limit grain sector growth and competitiveness. Despite ongoing government actions,[64] domestic

63.- Small farmers do not have access to government statistics and analysis on crop perspectives, supply, demand and stocks, while traders and processors along the supply chain can obtain this information from various sources, including private sector market analysts.

64.- The alignment process started with the passing of the Laws of Ukraine "About Standardization" (Vestnik of the Supreme Council of Ukraine, 2001, #2408-III) and "About Conformity Verification". In 2005, the Law of Ukraine "About Standards, Technical Agenda and Conformity" (Vestnik of the Supreme Council of Ukraine, 2005, #3164-IV) were passed. The alignment process will continue to be supported in the context of the Partnership and Cooperation Agreement between Ukraine and the EU, which has been in force since 1 March 1998.

food safety and quality standards are yet to be aligned with EU standards. Appendices D and E provide an overview of the existing gaps between Ukraine, EU and international standards as they relate to the grain sector. Remaining GOST standards reduce export competitiveness because they give producers little flexibility to follow market trends. Inefficient food safety control and quality assurance systems, which are characterized by multiple inspections, arbitrary compliance procedures and weak laboratory services, further constrain the sector. These conditions not only constrain access to foreign markets such as the EU, but also prevent private investments in the introduction of new technologies.[65]

65.- M. Betliy, O. Borodina, S. Borodin, *et al*. 2006. *Ukrainian Rural Sector on the way to European agglomeration*. O. Borodina (ed.). Uzhgorod, IBA.

4. Priority Recommendations for a Public Private Dialogue

Removal of the structural constraints facing the grain sector is needed but immediate dialogue should focus on the common interests of the public and private sectors. Increased dialogue between the government and private grain sector stakeholders is essential for sector development. The topics for such dialogue are numerous but many of them are divisive, such as the reimbursement of VAT on exports, the application of wheat standards to low-quality wheat, and government inspection procedures and fees. Therefore, it would be best to centre immediate dialogue on topics of common interests, while continuing research and analysis on more disputable issues. Topics where consensus could be found include:

1. Removal of potential barriers to future grain trade between the EU and Ukraine to improve access to the EU market. This will require well-coordinated actions by government and private sector actors;

2. Creation of a single transparent government information system for reporting grain production, use and trade, which will lead to improved market transparency; and

3. Alignment of public support programmes of the grain sector with WTO requirements.

4.1 Alignment of public support programmes of the grain sector with WTO requirements

Shift resources away from market-distorting support measures that undermine the long-term competitiveness of the grain sector. WTO membership provides an opportunity to establish an incentive framework that is more effective in resolving the structural constraints faced by the grain sector by enabling private sector-led growth and competitiveness. In line with WTO requirements, the government should gradually phase out most of its subsidy programmes that currently fall under the WTO's amber box of market-distorting measures and replace them with less market-distorting "green box" measures. Farmers and other affected grain sector stakeholders should be informed about the phase-out schedule, the government's support criteria and support programme performance measures.

Specifically, the government should shift its crop production-linked support to farmers to direct payments that are decoupled from crop choice. The same trend has been observed in recent Common Agricultural Policy (CAP) reforms of the EU. In addition, the government should continue to increase budgetary resources for farm investment programmes, rural development and public services. Farm investment programmes should function as competitive grant programmes that cofinance on-farm investments made by farmers who use both their own resources and credit sources. Rural development programmes, on the other hand, need to focus on promoting income diversification in rural areas through investments in rural social and physical infrastructure. Importantly, international experience has shown that rural development investments generate the highest returns when local authorities, communities and the private sector can actively participate in programme planning and implementation.

Refrain from direct interventions and controls in the grain market. The government should remove its administrative controls on profit margins in the bakery sector. In addition, it should avoid resorting to market distorting measures such as export restrictions when trying to stabilize commodity markets. Less distorting alternatives such as direct transfers to low-income social groups could be used by the government when trying to address the social impact of high food prices.

End current quasi-fiscal support in the form of tax benefits for agriculture. The government should end the VAT exemptions for agricultural producers and introduce a reduced VAT rate for agriculture. Payment of the export VAT refund arrears has to be addressed through practical measures such as simplified export VAT refund procedures, the establishment of a special fund for VAT refunds, debt restructuring or allowing non-refunded export VAT to be offset against other taxes and duties to the government.

Address the weaknesses in public support programme planning, implementation, monitoring and evaluation to improve the impact of public expenditures in agriculture. A more coherent and strategic approach is needed to link policy objectives with the budget process. In this context, existing plans and programmes that deal with agricultural sector development need to be consolidated. In addition, measurable objectives with clear targets, monitoring of targets and frameworks should be introduced and made known to farmers and other grain sector stakeholders.

4.2 Removal of potential barriers to future grain trade between the EU and Ukraine

Invest in improved marketing infrastructure. While maintaining the current level of investment in port infrastructure, the government should increase public investment in key infrastructure such as roads (in particular rural roads), railways (in particular the number of grain carriers) and waterways in order to limit post-harvest losses and better connect producers to export markets in the EU. This public investment could also act as a catalyst for private investment along other links of the supply chain. Rural development programmes in which local authorities, communities and the private sector actively participate could be effective vehicles for planning and implementing these investments. In addition, the government should promote private investment in drying and storage capacities through competitive investment grant programmes.

Develop effective food safety and quality control systems. In order to capture a higher market value and prevent stringent product safety and quality standards from acting as a non-tariff barrier to trade with the EU, the government should continue to align the domestic legal and regulatory framework for food safety and quality with EU requirements. The gaps identified in Appendices D and E of this report could serve as a reference guide to this end. The aligment of the legal regulatory framework should be accompanied by the development of a lean institutional framework for enforcing food safety and quality standards. The current fragmentation and distribution of official food control competences among the Ministries of Agrarian Policy, Healthcare and Economy result in a disjointed approach and inefficient use of physical and human resources. An integrated approach to food control with greater communication and coordination among relevant government bodies should be developed. The food safety system needs to evolve towards a risk-based system that shifts more responsibilities to the private-sector food producers. The existing laboratory structure (veterinary, sanitary, phytosanitary and conformity certification) should also

be rationalized with adequate public funding provided for laboratory testing to lower the cost of compliance for private producers.

Widen the scope and efficiency of extension and advisory service delivery. The scope of extension and advisory services needs to be broadened in order to provide the private sector with the support it needs to adapt to changing market requirements and to seize upon increasing trade opportunities in a more open trade environment. For example, awareness is generally low among agricultural producers and processors of the implications for their operations of rising food safety and quality standards as a result of Ukraine's WTO membership and integration process with the EU. Increased public funding will be needed for preparing public extension and advisory services to meet the new, emerging requirements. However, a minimum level of cost recovery should be introduced as well. In addition, the government should develop public-private partnerships for service delivery, involving the public sector, non-governmental organizations, associations and private suppliers. Research and educational institutions should become an integral part of this knowledge transfer system. Regional centres of excellence for research and higher education should be developed and links between these centres, extension and advisory services, and sector stakeholders should be strengthened.

Facilitate creation of a functioning agricultural futures exchange market. Grain trade could be further enabled through a well-developed agricultural futures exchange market. In the initial period, the government could provide a public share in the statutory fund of the futures exchange market, but a clear timeframe for the sale of this share in the future should be in place from the outset. The future development of the agricultural exchange market will depend to a significant degree on the development of other parts of the financial and risk management system in Ukraine such as the credit and insurance markets. With regard to the development of credit markets in Ukraine, the government should improve the warehouse receipt system by establishing an integrated and transparent legal and regulatory framework that uniformly defines rights, liabilities and duties of all the parties to the system, strengthening the monitoring of and certification system for grain elevators, and establishing an indemnity (guarantee) fund.

With regard to insurance markets, the government should establish an appropriate regulatory framework for a private agricultural insurance system and encourage farmer participation in it. A weather index-based insurance system could serve as a model. In addition, it should build agricultural producers' trust in private agricultural insurance by standardizing approaches to determining coverage and tariffs of insurance products and by improving the information flow to producers. Also, it should improve rule of law to better guarantee consumer rights.

Establish a partnership for the active promotion of grain trade. Through joint trade missions, seminars and conferences, a private-public partnership for the active promotion of Ukrainian grain exports to the EU and other countries could be instrumental in developing links between, for example, Ukrainian grain exporters and the feed-importing industry in the EU and the milling industry in North Africa. In order to be successful, however, the network of agribusiness associations in the grain sector needs to institutionalize the dialogue with the government.

4.3 Creation of a single, transparent government information system for reporting grain production, use and trade

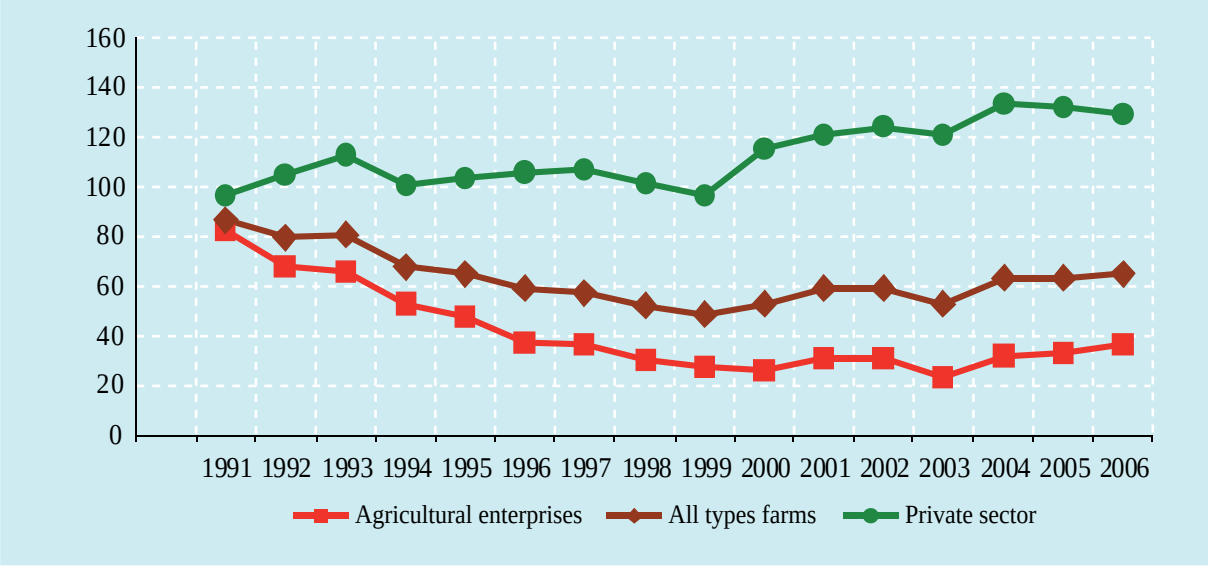
Develop a harmonized approach to monthly grain crop forecasting. By enhancing transparency and objectivity in assessments of the grain market, a harmonized approach to forecasting and calculating grain supply and demand balances would better inform government measures in the grain market. An important initiative could be the establishment of a working group focused on the development of a single government grain crop and supply and demand forecasting point. Headed by the Ministry of Agrarian Policy or another agency, this working group would need to include representatives of the Ministry of Economy, the State Statistics Committee, the Ukrainian Hydrometeorological Centre (which possesses key input data on crop assessment and forecasts) and Ukraine's National Academy of Sciences. In addition, the working group could include representatives of key grain sector stakeholders, including farm and trade associations, private advisory companies, and international organizations for consultation purposes. Regular forecasts and estimates of grain supply and demand produced by this working group could serve as a trustworthy basis for public-private dialogue in the grain sector.

Prepare and adopt necessary legal and regulatory provisions for the implementation of a harmonized approach. To be effective, it is critical that all responsible agencies follow a harmonized approach to grain crop forecasting in their activities. To this end, appropriate legal and regulatory provisions that outline the formal process and procedure for preparing, approving and using grain supply and demand balances need to be put in place. The preparation of such provisions should be part of the working group's activities.

Improve public access to market information. The public dissemination of data and information related to agricultural product markets needs to be improved. Information should include market prices, agricultural commodity purchases by the Agrarian Fund or the State Reserves, decisions on export licenses, grain consumption and stocks, etc. Public access to this information would help remove the information asymmetries that currently distort decision-making processes by grain market participants.

APPENDIX A:
Grain Production, Prices and Exports

Figure A.1. Trends in agricultural output (1990 = 100%) (%)



Source: The State Statistics Committee of Ukraine

Table A.1. Grain supply and demand balances, 2002–2009

Total grain	2008/2009*		2007/2008	2006/2007	2005/2006	2004/2005	2003/2004	2002/2003
	25-June	20-May						
Opening stocks '000 tonnes	***3,894***	***3,894***	***2,827***	***2,702***	***2,466***	***1,342***	***2,027***	***2,030***
Acreage seeded '000 ha	15,586	15,572	15,467	14,771	15,225	15,790	17,485	15,868
Acreage harvested '000 ha	15,125	14,950	13,553	14,018	14,433	14,032	11,282	14,500
Yield tonnes/ ha	2.87	2.74	2.08	2.45	2.55	2.71	1.8	2.5
Crop '000 tonnes	43,452	40,975	28,202	34,398	36,823	37,957	20,320	36,273
Imports '000 tonnes	165	165	177	186	185	160	3725	693
SUPPLY '000 tonnes	**47,511**	**45,034**	**31,206**	**37,286**	**39,474**	**39,459**	**26,072**	**38,996**
Food industry '000 tonnes	8,545	8,535	7,985	8,015	8,070	8,200	7,820	8,780
Feed usage '000 tonnes	12,130	12,760	11,210	12,090	10,615	12,400	10,535	12,165
Seeds '000 tonnes	2,932	2,930	2,792	2,770	2,830	2,815	2,520	3,220
Exports '000 tonnes	16,160	14,005	3,700	9,879	13,241	11,283	2,888	10,739
Losses '000 tonnes	1,935	1,830	1,625	1,705	2,015	2,295	967	2,065
DEMAND	41,702	40,060	27,312	34,459	36,771	36,993	24,730	36,969
Ending stocks '000 tonnes	***5,809***	***4,974***	***3,894***	***2,827***	***2,703***	***2,466***	***1,342***	***2,027***
Stocks/use (%)	13.9	12.4	14.3	8.2	7.4	6.7	5.4	5.5

** UkrAgroConsult estimate.*
Source: UkrAgroConsult

Table A.2. Area under grain, oilseed and other crops, 2007–2008 ('000 ha)

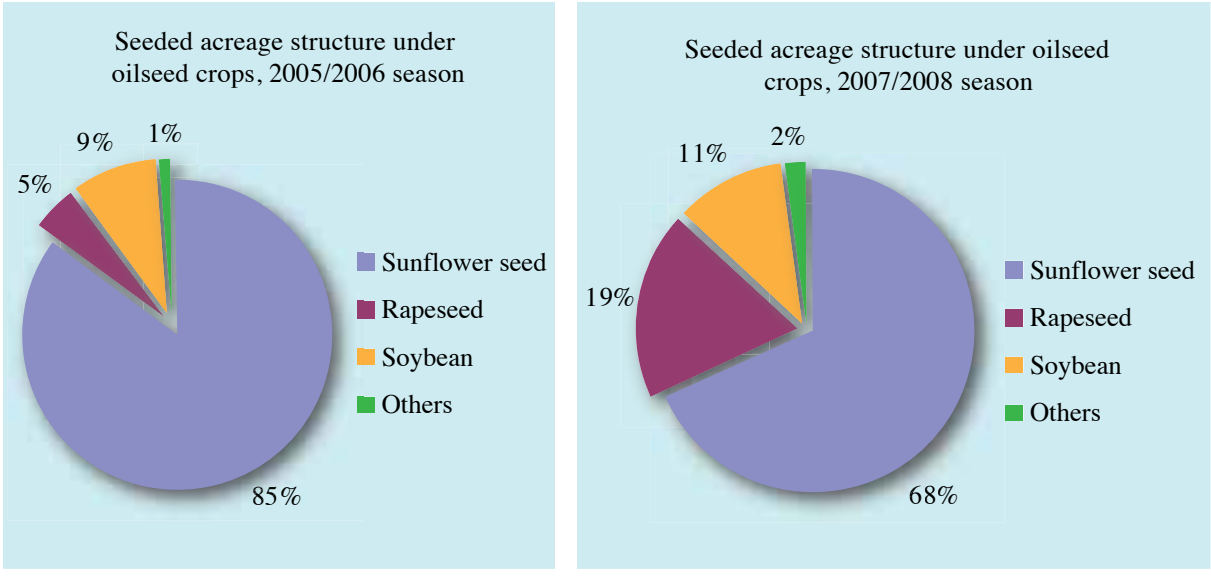
Crop	2008	2007	Increase/decrease
Rapeseed	1,750	1,145	+ 605
Wheat	7,000	6,511	+ 489
Corn	2,500	2,200	+ 300
Sunflower seed	4,320	4,170	+ 150
Rye	465	352	+ 113
Millet	130	106	+ 24
Oat	425	407	+ 18
Others	160	151	+ 9
Total area increase			+ 1,708
Barley	4,300	5,055	–755
Sugar beet	410	635	–225
Peas	225	368	–143
Soybean	600	665	–65
Buckwheat	310	337	–27
Total area decrease			–1,215

Source: UkrAgroConsult

Figure A.2. Sunflower harvested area and yield

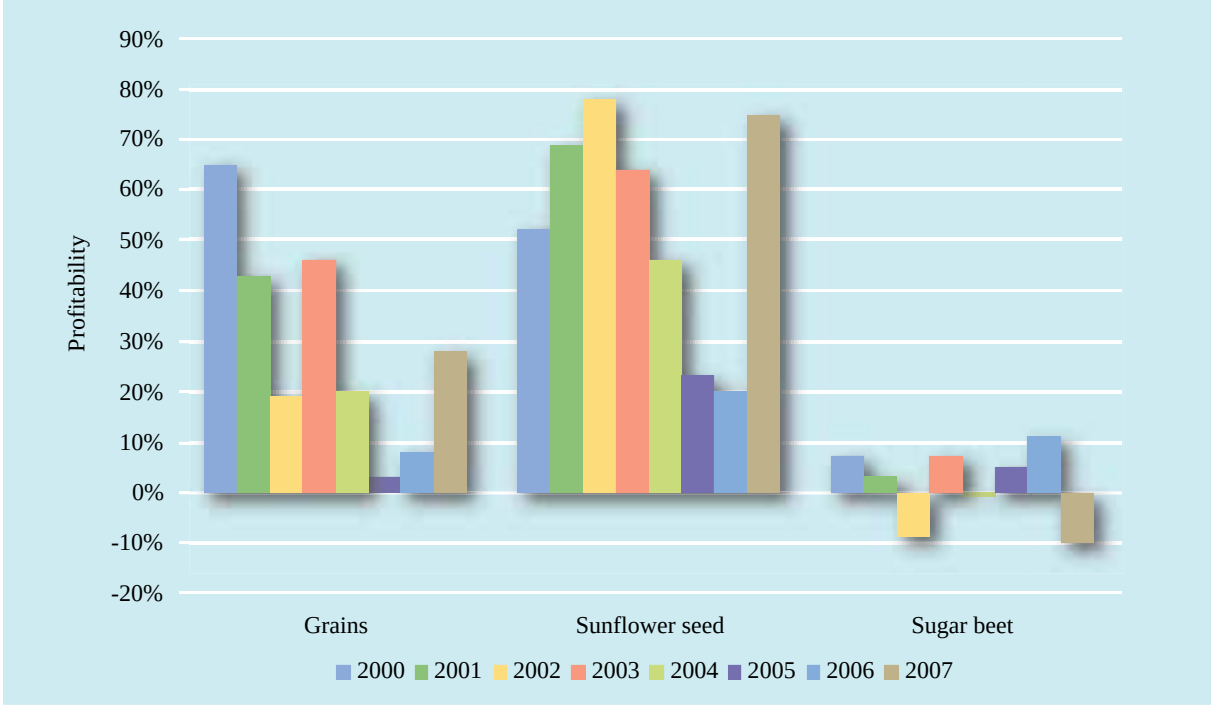
Source: LMC International with data from the United States Department of Agriculture (USDA)

Figures A.3. Gains in productivity of rapeseed and other oilseeds, 2005–2008 (%)



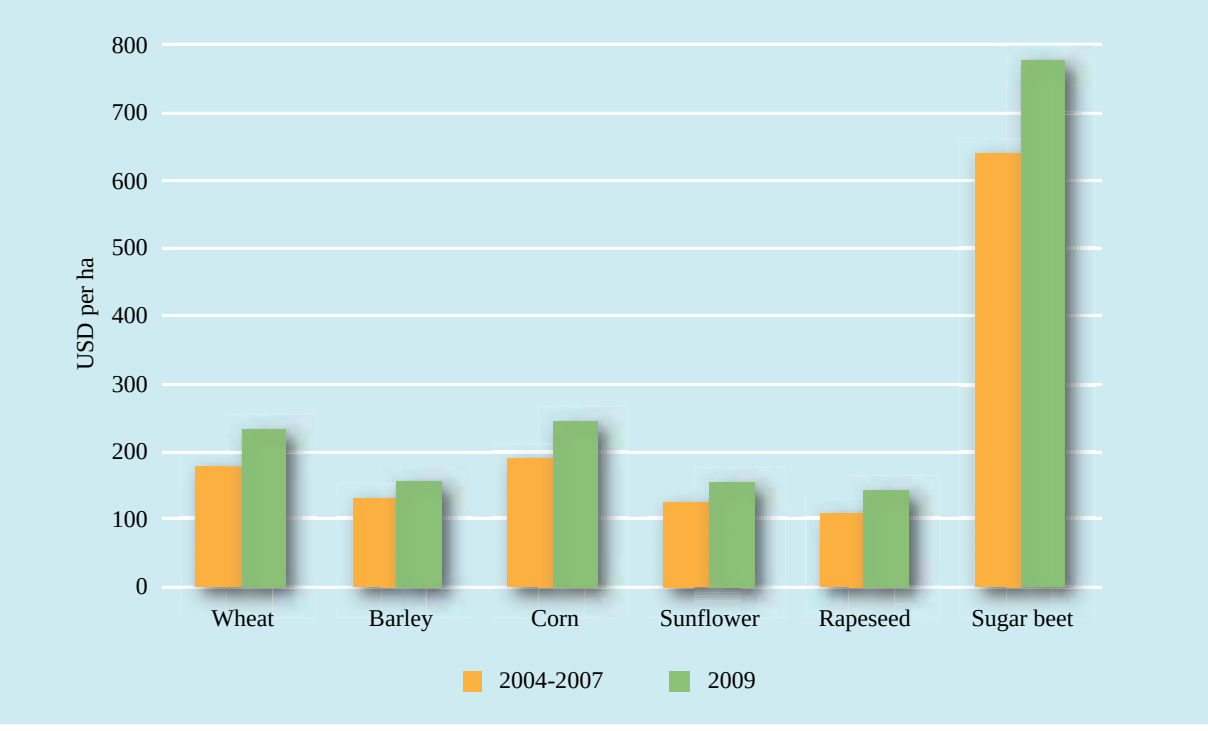
Source: UkrAgroConsult

Figure A.4. Profitability of grains, sunflower seed and sugar beet (%)



Source: LMC International with data from the State Statistical Committee of Ukraine

Figure A.5. Direct crop input costs for large-scale agricultural enterprises



Source: LMC International with data from the State Statistical Committee of Ukraine

Figure A.6. Direct crop input costs for small-scale agricultural enterprises

Source: LMC International with data from the State Statistical Committee of Ukraine

Table A.3. Wheat supply and demand balances, 2002–2009

Wheat	2008/2009*		2007/2008	2006/2007	2005/2006	2004/2005	2003/2004	2002/2003
	25-June	20-May						
Opening stocks '000 tonnes	***3,047***	***3,047***	***1,895***	***1,976***	***1,287***	***928***	***1,428***	***1,261***
Acreage seeded '000 ha	7,005	7,000	6,511	5,633	6,794	6,077	7,226	7,441
Acreage harvested '000 ha	6,860	6,750	5,971	5,211	6,453	5,633	2,625	6,784
Yield tonnes/ha	3.18	2.96	2.29	2.65	2.78	2.93	1.62	2.91
Crop '000 tonnes	21,830	20,000	13,700	13,809	17,910	16,529	4,250	19,756
Imports '000 tonnes	5	5	2	10	10	5	3400	403
SUPPLY '000 tonnes	**24,882**	**23,052**	**15,597**	**15,795**	**19,207**	**17,462**	**9,078**	**21,420**
Food industry '000 tonnes	6,000	6,000	5,750	5,600	5,750	5,800	5,700	6,200
Feed usage '000 tonnes	4,200	4,200	3,800	3,200	3,000	3,900	1,000	4,700
Seeds '000 tonnes	1,400	1,400	1,300	1,200	1,100	1,350	1,100	1,450
Exports '000 tonnes	***8,200***	***7,000***	***1,000***	***3,300***	***6,481***	***4,325***	***50***	***6,542***
Others consumption and losses	1,100	1,000	700	600	900	800	300	1,100
DEMAND '000 tonnes	**20,900**	**19,600**	**12,550**	**13,900**	**17,231**	**16,175**	**8,150**	**19,992**
Ending stocks '000 tonnes	3,982	3,452	3,047	1,895	1,976	1,287	928	1,428
Stocks/use %	19.1	17.6	24.3	13.6	11.5	8	11.4	7.1

** UkrAgroConsult estimate.*
Source: UkrAgroConsult

Table A.4. Barley supply and demand balances, 2002–2009

Barley	2008/2009*		2007/2008	2006/2007	2005/2006	2004/2005	2003/2004	2002/2003
	25-June	20-May						
Opening stocks '000 tonnes	***675***	***675***	***520***	***310***	***670***	***185***	***245***	***455***
Acreage seeded '000 ha	4,300	4,300	5,055	5,379	4,511	4,695	5,795	4,577
Acreage harvested '000 ha	4,200	4,180	4,150	5,194	4,266	4,460	4,719	4,287
Yield tonnes/ha	2.45	2.36	1.48	2.18	2.07	2.38	1.58	2.29
Crop '000 tonnes	***10,280***	***9,860***	***6,150***	***11,300***	***8,825***	***10,615***	***7,450***	***9,828***
Imports '000 tonnes	5	5	5	5	20	15	40	20
SUPPLY '000 tonnes	**10,960**	**10,540**	**6,675**	**11,615**	**9,515**	**10,815**	**7,735**	**10,303**
Food industry '000 tonnes	700	700	550	550	450	500	350	800
Feed usage '000 tonnes	3,000	3,750	3,000	3,800	3,300	3,900	4,600	4,675
Seeds '000 tonnes	1,000	1,000	1,000	1,100	1,200	930	900	1,200
Exports '000 tonnes	***5,000***	***4,100***	***1,100***	***5,145***	***3,955***	***4,315***	***1,520***	***2,883***
Losses '000 tonnes	300	300	350	500	300	500	180	500
DEMAND '000 tonnes	**10,000**	**9,850**	**6,000**	**11,095**	**9,205**	**10,145**	**7,550**	**10,058**
Ending stocks '000 tonnes	***960***	***690***	***675***	***520***	***310***	***670***	***185***	***245***
Stocks/use %	9.6	7	11.3	4.7	3.4	6.6	2.5	2.4

** UkrAgroConsult estimate.*
Source: UkrAgroConsult

Table A.5. Corn supply and demand balances, 2002–2009

Corn	2008/2009*		2007/2008	2006/2007	2005/2006	2004/2005	2003/2004	2002/2003
	25-June	20-May						
Opening stocks '000 tonnes	***124***	***124***	***169***	***127***	***212***	***82***	***97***	***96***
Acreage seeded '000 ha	2,530	2,500	2,202	1,890	1,762	2,564	2,266	1,461
Acreage harvested '000 ha	2,370	2,300	1,900	1,800	1,648	1,680	2,016	1,151
Yield '000 tonnes	3.6	3.7	3.32	3.42	3.99	4.14	2.85	2.72
Crop '000 tonnes	***8,530***	***8,500***	***6,300***	***6,156***	***6,570***	***6,950***	***5,745***	***3,127***
Imports '000 tonnes	30	30	30	26	15	0	30	6
SUPPLY '000 tonnes	**8,684**	**8,654**	**6,499**	**6,309**	**6,797**	**7,032**	**5,872**	**3,229**
Food industry '000 tonnes	620	620	600	580	550	550	600	600
Feed usage '000 tonnes	4,000	4,000	3,650	3,830	2,750	3,000	3,400	1,200
Seeds '000 tonnes	145	145	125	130	160	120	140	160
Exports '000 tonnes	***2,700***	***2,700***	***1,500***	***1,100***	***2,510***	***2,300***	***1,250***	***852***
Losses '000 tonnes	450	450	500	500	700	850	400	320
DEMAND '000 tonnes	**7,915**	**7,915**	**6,375**	**6,140**	**6,670**	**6,820**	**5,790**	**3,132**
Ending stocks '000 tonnes	***769***	***739***	***124***	***169***	***127***	***212***	***82***	***97***
Stocks/use %	9.7	9.3	1.9	2.8	1.9	3.1	1.4	3.1

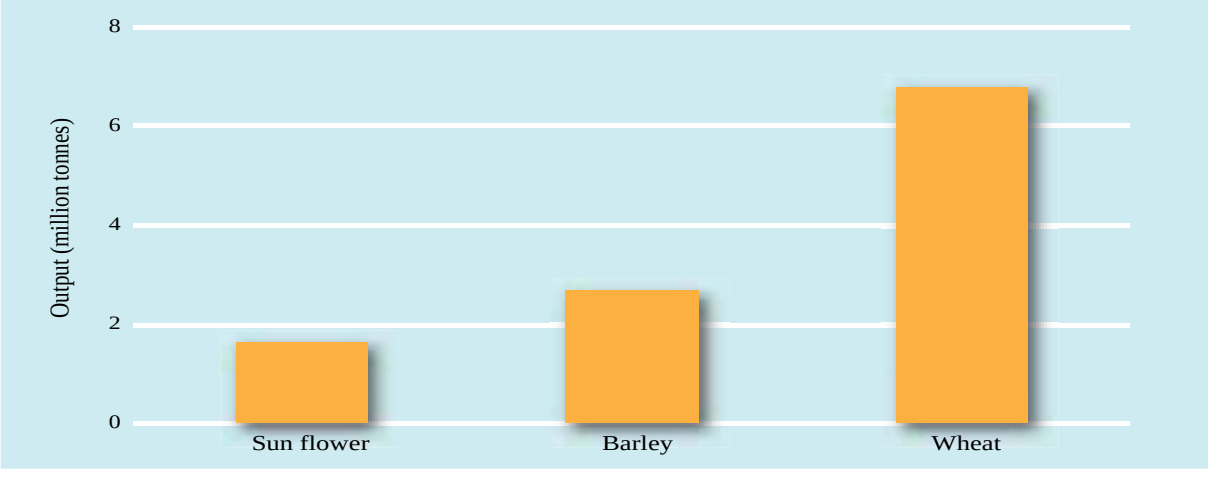
** UkrAgroConsult estimate.*
Source: UkrAgroConsult

Table A.6. Poultry and livestock inventories ('000 head)

Animal	1990	2000	2001	2002	2003	2004	2005	2006	2007	2008
Cattle	24,623	9,424	9,421	9,183	7,886	7,158	6,514	6,175	5,863	5,790
Pigs	19,426	7,652	8,370	9,033	7,469	6,640	7,053	8,055	7,266	7,150
Poultry, million	246	124	137	148	144	154	162	167	168	170

Source: LMC International estimates

Figure A.7. Potential additional crop output



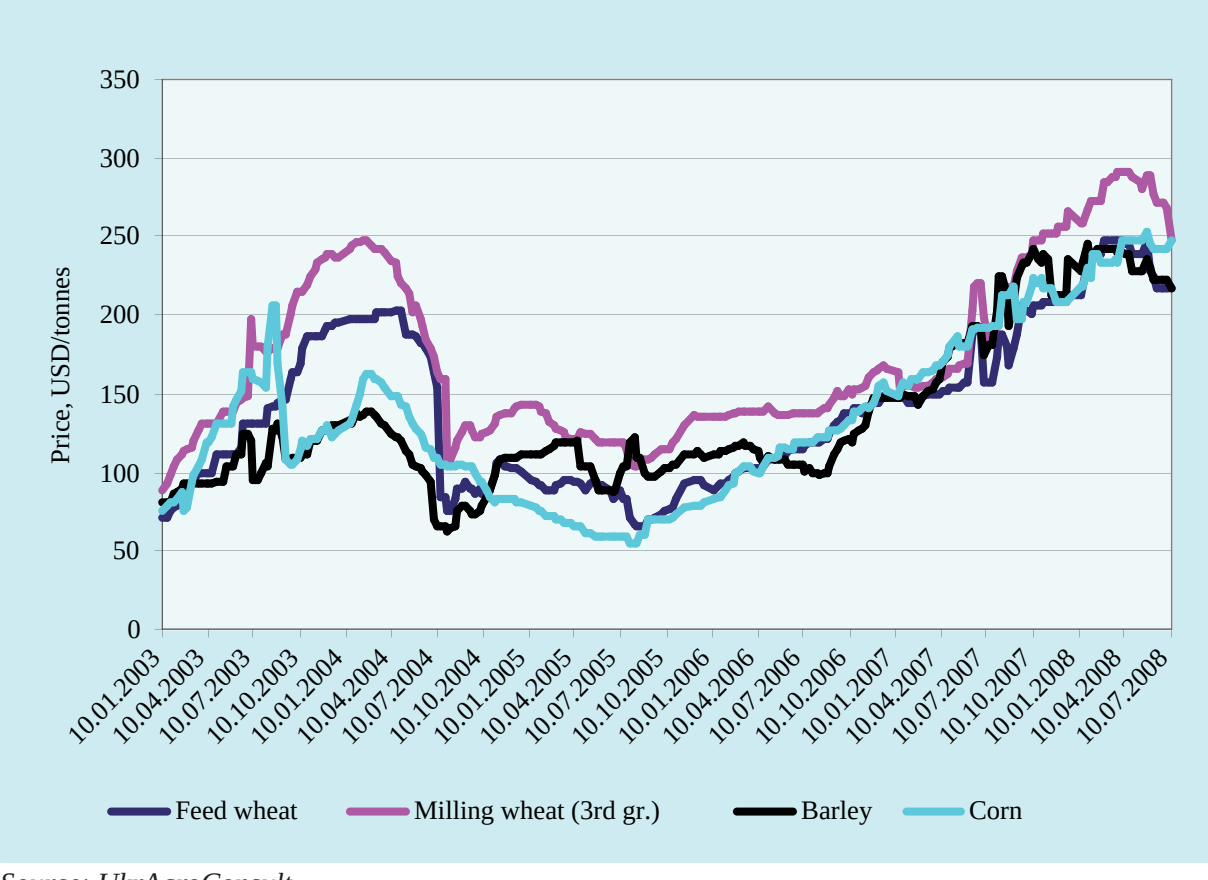
Source: UkrAgroConsult

Table A.7. Simplified calculation of domestic grain prices in terms of the net exporting and the net importing situation in the market (USD/tonne)

Domestic grain price	Export	Import
Price, ex works (EXW)[66]	120	
Price, carriage paid to (CPT) port	140	
World price	150 free on board (FOB)	150 delivered at frontier (DAF) Russian Federation
Price, free on rail		160
Including VAT		192
With delivery to inland elevator		210

Source: UkrAgroConsult

Figure A.8. Behaviour of prices of key grain crops in the domestic market, EXW



Source: UkrAgroConsult

66.- Exporter profit at the expense of VAT refund.

Table A.8. Chronology of government decisions on grain export restrictions during 2006–2008 and export quotas ('000 tonnes)

Government decision	Period	Wheat	Barley	Corn	Rye
Government Resolution #1364 of 28 September 2006		Automatic licensing			
Government Resolution #1418 of 11 October 2006	17 October 2006–31 December 2006	400	600	600	3
Government Resolution #1701 of 8 December 2006	14 December 2006–30 June 2007	3	600	500	3
Government Resolution #185 of 13 February 2007	15 February 2007–30 June 2007	228	606	30	
Government Resolution #290 of 22 February 2007	26 February 2007–7 June 2007		Quotas cancelled	Quotas cancelled	
Government Resolution #748 of 16 May 2007	8 June 2007–30 June 2007	Quotas cancelled			
Government Resolution #844 of 20 June 2007	1 July 2007–31 October 2007	3	3	3	3
Government Resolution #1287 of 31 October 2007	20 June 2007–31 December 2007				
Government Resolution #1179 of 26 September 2007	1 January 2008–31 March 2008	200	400	600	3
Government Resolution #271 of 28 March 2008	1 April 2008–30 April 2008			Automatic licensing	
Government Resolution #418 of 23 April 2008	1 January 2008–1 July 2008	1,200	900		
Government Resolution #470 of 21 May 2008	Both quotas and licenses were cancelled.				

Source: UkrAgroConsult

Figure A.9. Ukraine wheat prices and world wheat prices

Source: UkrAgroConsult

Figure A.10. Ukraine barley prices and world barley prices

Source: UkrAgroConsult

Figure A.11. Ukraine corn prices and world corn prices

Source: UkrAgroConsult

Table A.9. Cross-sectoral and grain sector agribusiness associations

Association	Field of activity
CROSS-SECTORAL ASSOCIATIONS	
Union of Agricultural Enterprises of Ukraine	Agricultural production
Association of Farmers and Private Land Owners of Ukraine	Agricultural production
Ukrainian Agrarian Confederation	Comprises associations, producers, processors and exporters of agricultural produce
Ukrainian Agribusiness Club	Production, processing and export of agricultural produce
National Agricultural Chamber of Ukraine	Agricultural production, advisory activity, wholesale markets of agricultural produce
SECTOR-SPECIFIC ASSOCIATIONS	
Ukrainian Grain Association	Grain production and export
All-Ukrainian Bakers' Association	Bread baking
Union of Poultry Raisers of Ukraine	Poultry meat production
UkrKhlibProm Association	Bread baking
TvarynProm Corporation	Meat production
Union of Agrarian Commodity Exchanges of Ukraine	Trade in agricultural produce

Source: UkrAgroConsult

Table A.10. Financial support for crop production in 2008

Crop	Support rate, UAH/ha
Winter wheat, triticale, rye	100
Spring wheat, triticale, oats, peas, buckwheat, millet	100
Soybeans, at least 1st generation	80
Soybeans, 2nd and 3rd generations	50
Rice	220
Sugar beet	750
Long-fibred flax and retted hemp stalks	640

Source: UkrAgroConsult

Table A.11. Targeted stock levels for regulated commodities (including grains)

Year	Accumulation rate, %*
2007	12
2008	14
2009	16
2010	20

** Of domestic consumption.*
Source: UkrAgroConsult

Table A.12. Financial support measures for agricultural producers (UAH billion)

Support measure	2005	2006	2007	2008
Total of VAT benefits*	3.78	4.12	5.71	8
Amount of direct budgetary support for agricultural producers**	1.78	2.80	4.04	4.5

*Source: * Data of the Agriculture Ministry, 2008 – forecast. ** Estimate on the basis of the data of the Laws of Ukraine "On State Budget".*

Table A.13. Key features of the current and future VAT regimes for agriculture

Features	Current VAT regime	Future VAT regime
VAT rate for agricultural products, %	20	10 during first year and 9 afterwards
VAT rate for milk and meat, %	0	10 (9)
VAT rate charged on purchase of inputs, %	20	20
Restrictions on use of accumulated VAT	Purchase of production inputs only	No restrictions
Mode of calculation	Sales VAT deducted by VAT charge on inputs	Sales VAT deducted by VAT charge on inputs. If the latter VAT does not offset the former, it is not compensated from the budget
Payment to the budget	Stay on farm accounts	Stay on farm accounts

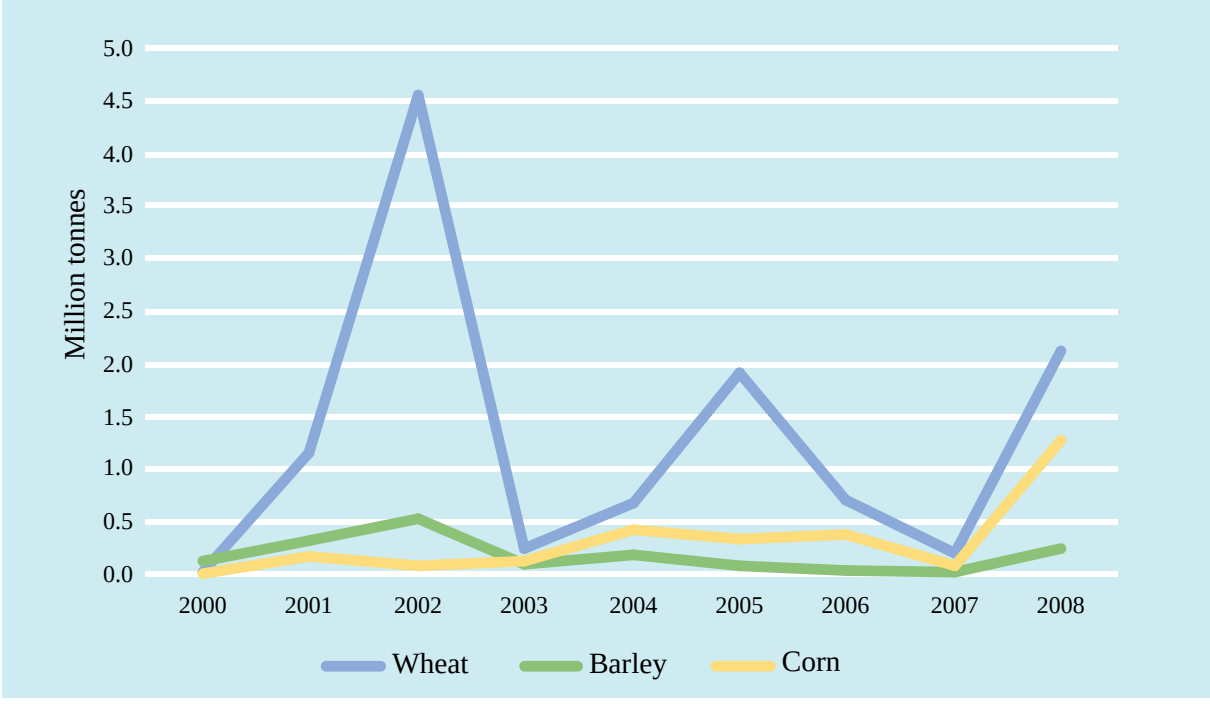
Source: World Bank, 2006

Table A.14. Estimated losses resulting from VAT refund delays

Share of paid VAT in export price*	16.67%
Refund delay term**	6 months
Crediting rates***	12%
Exporter losses (16.67x0.5x12), % to export price	10%

*Note: * Share of the tax credit due to be refunded can be larger or smaller, depending on whether exporters include the future VAT refund into their purchase price under domestic contracts.*
*Note: ** Aggregated conservative indicator according to a poll among a number of export companies.*
*Note: *** The crediting rate is given in United States dollar terms on the assumption that exporters will take a foreign currency credit for refinancing the unrefunded VAT; the rate will be higher when credited in hryvnia.*
Source: Author's estimates

Figure A.12. Grain exports to the EU, 2000–2008



Note: The data compiled from Eurostat. Data for 2008 only covers the months between January and October. The annual total was estimated by taking for each crop the average percentages for the months of November and December during the period 2000–2007 and adding these to the January–October numbers.
Source: LMC International using Eurostat data

Table A.15. Import duty reductions on key grain crops

Code in nomenclature of Foreign Economic Activity Goods	Crop	Old duty		Commitments before WTO accession
		Ad valorem, %	Specific, EUR/mt	%
1001 10 00 90	Wheat and mixture of wheat and rye		40	10
1002 00 00 00	Rye		20	20
1003 00 90 00	Barley		20	5
1004 00 00 00	Oats		20	5
1005 90 00 00	Corn	25	20	10

Source: UkrAgroConsult

Table A.16. Current import tariff reductions (implemented prior to WTO accession, 2008)

Commodity position	Price, EUR/mt	Previous customs tariff			Commitment (WTO, ad valorem only) %
		Specific duty rate, EUR/mt	Ad valorem equivalent of specific rate %	Ad valorem rate %	
0202000000 Beef, frozen	575				
0202309000 – other	568			20	15
0203000000 Pork fresh, cooled or frozen	999				
0203211000 – hogs	793	600	76	10	10
0203290000 – other	1,281	1,000	78		10
0203291300 – loin and its cuts	1,618	1,000	62		10
0203295500 – boned	1,266				
0206000000 Food by-products of cattle, hogs, sheep, goats, horses, donkeys, mules or hinnies, fresh, cooled or frozen	517	500	97		15
0206220000 – liver	527				
0207000000 Meat and food by-products of poultry of commodity position 0105, fresh, cooled or frozen	279	400	143	10	10
0207141000 – boned	261	400	154	10	10

Source: UkrAgroConsult based on Ukrainian legislation

Table A.17. Effect of import duty reductions in the livestock sector

Commodity position	Import price	Previous wholesale price	New wholesale price*		Possible reduction of wholesale price
	EUR/mt	EUR/mt*	EUR/mt	UAH/kg	UAH/kg
0202000000 Beef, frozen:	575				
0202309000 – other	568	818	784	6.08	–0.26
0203000000 Pork fresh, cooled or frozen:	999				
0203211000 – hogs	793	1,671	1,046	8.11	–4.84
0203290000 – other	1,281	2,737	1,691	13.11	–8.11
0203291300 – loin and its cuts	1,618	3,142	2,136	16.56	–7.79
0203295500 – boned	1,266				
0206000000 Food by-products of cattle, hogs, sheep, goats, horses, donkeys, mules or hinnies, fresh, cooled or frozen:	517	1,220	713	5.53	–3.93
0206220000 – liver	527				
0207000000 Meat and food by-products of poultry of commodity position 0105, fresh, cooled or frozen:	279	815	368	2.85	–3.46
0207141000 – boned	261	793	344	2.67	–3.48

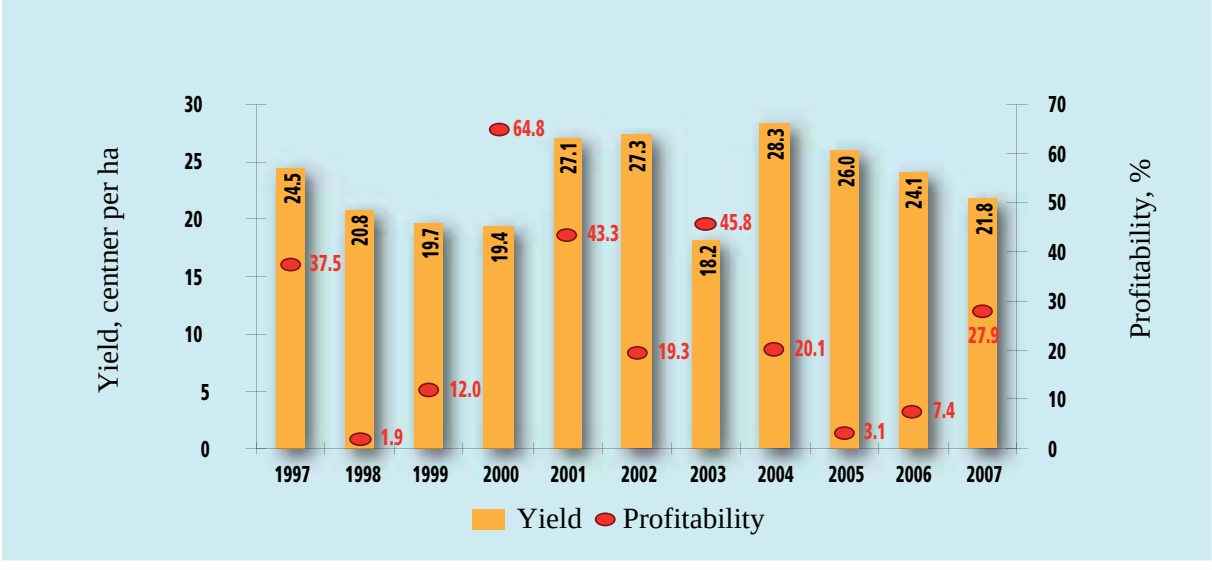
** Including VAT.*
Note: Calculation using the UAH/USD rate of 7.75.
Source: UkrAgroConsult

Table A.18. Structural changes in agricultural enterprises

	2003	2005	2006	Change, 2006 over 2005, %
General land use				
Number of enterprises	10,258.00	8,366.00	7,460.00	–11
Cultivated area, million ha	18.95	16.30	15.60	–4
Average farm size, ‘000 ha	1,847.00	1,943.00	2,085.00	+7
Cattle inventories				
Number of enterprises	8,032.00	5,689.00	4,777.00	–16
Total population, million head	2.48	1.63	1.50	–8
Average farm size, head	308.00	287.00	314.00	+9
Hog inventories				
Number of enterprises	6,997.00	5,108.00	4,610.00	–10
Total population, million head	1.42	1.63	2.03	+25
Average farm size, head	203.00	319.00	441.00	+38
Poultry inventories				
Number of enterprises	n.a.	595.00	554.00	–7
Total population, million head	n.a.	46.00	67.00	+46
Average farm size, head	n.a.	77.00	120.00	+56

Source: UkrAgroConsult using official statistics data

Figure A.13. Correlation between grain production profitability and yield



Source: UkrAgroConsult

Table A.19. Contradictions between the laws of Ukraine regarding the functioning of the system of warehouse receipts for grain

	The Law of Ukraine "On Certificated Commodity Warehouses and Simple and Double Warehouse Certificates"	The Law of Ukraine "On Grain and the Grain Market in Ukraine"	Essence of contradiction
1	Article 1. The register of simple and double warehouse receipts or simply the register of warehouse receipts is a document that defines the accounting system for recording information about simple and double warehouse receipts issued and cancelled by certified warehouses and for recording information about the owners of the receipts.	Article 1. The register of warehouse documents dealing with grain is an accounting system that records information about the warehouse documents issued by grain warehouses for grain and records information about the owners of such documents.	The definition of the concept "register" differs.
2	Article 10. The warehousing contract is a written document. The contract in writing is considered to be observed if the acceptance of goods by the warehouse is confirmed by the issuance of a simple or double warehouse receipt.	Article 26. The warehousing contract for grain is a written document that is to be confirmed when a warehouse receipt is issued to the owner of the grain. Article 37. The grain warehouse operator is to confirm acceptance of grain by issuing one of the following documents: • double warehouse receipt; • simple warehouse receipt; • warehouse slip. Article 43. If a grain warehouse operator accepts grain for storage without issuing a simple or double warehouse receipt, it should issue the warehouse slip as a confirmation of the acceptance of grain for storage.	The list of documents confirming the acceptance of goods by a warehouse operator and the procedure for drawing up a contract differ (warehouse slips are cancelled).
3	Article 13. The certified warehouse operator is obliged to examine at its own expense the goods accepted for storage in order to confirm the quantity and external condition of the goods.	Article 1. Paragraph. 10. The procedure for storing grain is a complex series of steps and actions that includes acceptance and finishing as well as storage and grain shipment. Article 28. Payment for the storage of grain and the terms out of payment are established by the grain warehousing contract.	The party to assume the expense of weighing grain at the time of acceptance at the grain warehouse differs.

4	Article 22. The owner of the warehouse portion of the double warehouse receipt separated from the warehouse receipt is not entitled to dispose of this receipt without the consent of the pawnbroker (the owner of the pledge receipt). The owner of the warehouse portion of the double warehouse receipt separated from the pledge receipt is not entitled to demand delivery of the goods or a part of them from the certified warehouse until the moment when the obligation secured with the pledge receipt is terminated. Article 14. The pledge of goods accepted for storage under a double warehouse receipt contract takes place following the separation and transfer of the pledge part of the warehouse receipt (pledge receipt) from the depositor to the pawnbroker at the drawing up of the corresponding pledge contract. At the time of the registration of the pledge, the depositor gives to the pawnbroker an extract from the warehouse books confirming that the warehouse double receipt is valid and was not lost. The period of validity of the extract from the register of warehouse receipts is 3 calendar days, during which time the certified warehouse operator suspends operations concerning the goods and receipts mentioned in the extract. Within 3 working days the pawnbroker should inform in writing the certified warehouse operator that issued the double warehouse receipt that the goods were accepted as a deposit. During the entire time of pledge of goods, restoration of the rights under a lost double warehouse receipt, provided by Article 24, is forbidden.	Article 40. Warehouse and pledge receipts can be transferred together or separately by means of endorsements. The endorsement should contain: the name and address (place of residence) of a legal entity or citizen, which become the new holders of the warehouse or pledge receipt; date of the endorsement; and the signature of the authorized employee of the legal entity (or citizen), authenticated with the stamp of the legal entity or a notary. Article 39. The owner of the warehouse receipt can exclusively dispose of grain, but the stored grain cannot be removed from the grain warehouse prior to the credit repayment, which has been granted under the pledge receipt.	The procedure for transferring the double warehouse receipt and receiving a credit is different.

5	Articles 18, 24. In the event that the person with the property right to the goods does not claim the goods when the storage period ends, the certified warehouse operator has the right within 90 days, and based on a court decision, to sell the goods at a competitive price. After the sale of the goods and reimbursement of expenses incurred due to the sale, as verified by the court, has been made to the certified warehouse operator, the certified warehouse operator must transfer the sale proceeds to the bearer of the warehouse receipt. In the event that the bearer of the warehouse receipt is absent, the certified warehouse operator must deposit sale proceeds in a bank until such time as the funds are claimed by the person who has the property rights to the goods. In the event that the time period allowed by the law for claiming the sale proceeds elapses and the owner of the warehouse receipt has not made a claim to the certified warehouse operator, the sale proceeds pass to the certified warehouse operator. A duplicate of a lost double warehouse receipt is not to be issued. Restoration of the rights owing to the owner of a lost double receipt can be made on the basis of a court decision. The certified warehouse operator must return the goods or issue a simple warehouse receipt in lieu of the lost double warehouse receipt but not before 3 working days from the date of receipt of the court decision have elapsed. In the event that a simple warehouse receipt is lost, the restoration of the receipt and of the rights of the person who delivered the goods for storage is not possible.	Not defined by legislation. According to Decree 510 Article 38. If a warehouse document gets lost, it is necessary to immediately inform in writing the grain warehouse operator storing the goods. In the case of the loss of a warehouse document, a duplicate of the simple or double warehouse receipt is not to be issued. Restoration of the rights of the owner of the lost simple or double warehouse grain receipt is made on the basis of a court decision.	In the case of the loss of a simple warehouse receipt, the owner of the goods cannot restore the property rights.

6	Article 21. The concession of rights as established by a simple warehouse receipt is done by making a preliminary inscription on the simple warehouse receipt according to Article 25 of this law and then transferring the receipt to another holder.	Article 42. The simple warehouse receipt is transferred by handing it over to the new owner.	The procedure for the transfer of a warehouse receipt is different.
7	Article 21. The owner of a simple warehouse receipt can transfer the warehouse receipt as a deposit. Thus, the simple warehouse receipt is withdrawn from the owner of the goods and remains in the possession of the pawnbroker. In the event that the owner of the simple warehouse receipt intends to transfer goods as a deposit, the simple warehouse receipt should be cancelled, and substituted by the double warehouse receipt issued by a certified warehouse operator who then makes the appropriate changes in the register of warehouse receipts.	Article 42. A pledge of the grain delivered for storage under the simple warehouse receipt shall be made by transfer to the pawnbroker of this receipt with an endorsement made according to the terms of Article 40 of this law. By request of the debtor, the duplicate of the simple warehouse receipt can be issued with a notation about the pledge. In the case of a pledge of the grain deliverd for storage under the simple warehouse receipt regime, the simple warehouse receipt is treated according to the rules established for a pledge receipt, and the duplicate of a simple warehouse receipt is treated according to the rules established for a warehouse receipt.	1. The second paragraph conflicts with the first paragraph. 2. Procedures for the transfer of a pledge are different. 3. A warehouse receipt is transferred in pledge (that is, it has the property of a security).
8	Article 26. The sale of pledged goods subject to collection is carried out according to the procedure stipulated by the Law of Ukraine «About pledges».	Article 39. When the credit terms specified in the pledge receipt reach maturity, the grain warehouse operator is obliged to sell the stored grain as per the procedure established by the law for the sale of pledged grain, and upon the written request of the owner of the pledge receipt.	The procedure for the sale of pledged grain is different.

Table A.20. Grain purchases for the state food reserves ('000 tonnes)

Season	Plan of purchases	Actually purchased
2005/2006	1,500*	135
2006/2007	400	176
2007/2008	580	425
2008/2009	881	352**

*Notes: * The plan was calculated proceeding from the total consumption volume, including feedgrains. ** As of 5 September 2008.*
Source: Due to a lack of official reporting on purchases, the data represent an analysis of the information available from public sources

Table A.21. Chronology of mortgage, intervention and forward purchases

Season	Mortgage purchase*	Intervention purchase*	Forward purchase
2001/2002	X		
2002/2003	X		
2003/2004	X	X	
2004/2005	X	X	
2005/2006	X	X	
2006/2007	X	X	
2007/2008		X	
2008/2009		X	X

*Note: * Prior to MY 2004/2005 inclusive, the purchases were made by Khlib Ukrainy, and later by the Agrarian Fund with the exception of MY 2004/2005, when the State Reserves conducted intervention purchases.*
Source: Author's own assessment based on Ukrainian legislation and regulatory documents

APPENDIX B:
Gross margin analysis of arable crops in Ukraine

1. Methodology

A farmer's choice of crops to grow in any particular year is heavily influenced by expectations for costs and revenues. The objective of this gross margin analysis is to identify the crops that can be expected to offer farmers the best prospects in the near and longer term. The analysis is conducted for three time periods:

- 2004 to 2007 (actual)
- 2009 (forecast)
- Long-term equilibrium or "trend"

Gross margins provide the clearest indicator of accounting profitability per ha of arable land. Owing to the difficulty of attributing indirect (machinery and labour) costs to individual crops, gross margins are typically presented net of direct costs only. However, the two sets of gross margins are presented:

Gross Margin I = Total Revenue - Total Direct Costs

Gross margins (and costs and revenue) are expressed as USD per ha

Gross Margin II = Total Revenue - Total Direct and Indirect Costs

Gross margins (and costs and revenue) are expressed as USD per ha

2. Total revenues

The total revenue for each alternative crop is equal to:

$$Total\ Revenue = Price^{*}\ Yield$$

The following revenues are excluded from the analysis:

- Government payments: Such payments are only important when they affect crop choices. In Ukraine, government payments are considered too small to actually influence crop planting choices.[67]
- Credit for inputs.

2.1 Prices

The price analysis uses the following farmgate prices for each of eight featured crops and three main agro-ecological zones in the Ukraine (Forest, Forest-Steppe, Steppe):

- 2004 to 2007 (actual): Average estimated farmgate prices for the last four crop years are used.
- 2009 (forecast): Nearby market price quotations (November 2008) are used as a guide to the price expectations for each crop. These are adjusted to local farmgate prices in each region using empirical price differentials.
- Long-term equilibrium or "trend": To allow for the short-term volatility of commodity prices, estimates of future prices under an established longer-term equilibrium are used. The 2009 trend value is adjusted to local farmgate prices in each agro-ecological zone using empirical price differentials. The analysis allows for the significant influence of biofuels on crop prices. The effect of growing biofuel demand on commodity prices is captured by valuing long-term prices at their energy parity equivalent. The analysis uses the long-term price for 2009 based on an oil price projection of USD 50 per barrel.

Price levels for the eight crops and three main agro-ecological zones for 2004–2007, 2009 (forecast), and the long-term trend are presented in Tables B.1, B.2 and B.3.

67.- It should be noted that, as the administrative bureaucracy is now in place, the levels of support can be increased quickly if desired and consequently, change the crop margins if the payments continue to be applied at different rates to different crops.

Table B.1. Average prices of grains, oilseeds and sugar beet, 2004–2007 (USD/tonne)

Modern sector	Barley	Maize	Common wheat	Rye	Soybeans	Rapeseed	Sunflower	Sugar beet
Ukraine	117	113	149	115	246	271	246	32
Forest	113			114				32
Forest-Steppe	118	113	149	119		272	247	
Steppe	117	112	148		246	270	246	

Traditional sector	Barley	Maize	Common wheat	Rye	Soybeans	Rapeseed	Sunflower	Sugar beet
Ukraine	117	113	149	115	246	271	246	32
Forest	113			114				32
Forest-Steppe	118	113	149	119		272	247	
Steppe	117	112	148		246	270	246	

Source: LMC International

Table B.2. Prices of grains, oilseeds and sugar beet, 2009 (USD/tonne)

Modern sector	Barley	Maize	Common wheat	Rye	Soybeans	Rapeseed	Sunflower	Sugar beet
Ukraine	109	145	193	138	406	440	353	34
Forest	99			136	400			34
Forest-Steppe	103	138	185	142	408	443	354	
Steppe	114	155	197		406	436	352	

Traditional sector	Barley	Maize	Common wheat	Rye	Soybeans	Rapeseed	Sunflower	Sugar beet
Ukraine	109	145	193	138	406	440	353	34
Forest	99			136	400			34
Forest-Steppe	103	138	185	142	408	443	354	
Steppe	114	155	197		406	436	352	

Source: LMC International

Table B.3. Long-term trend in prices of grains, oilseeds and sugar beet (USD/tonne)

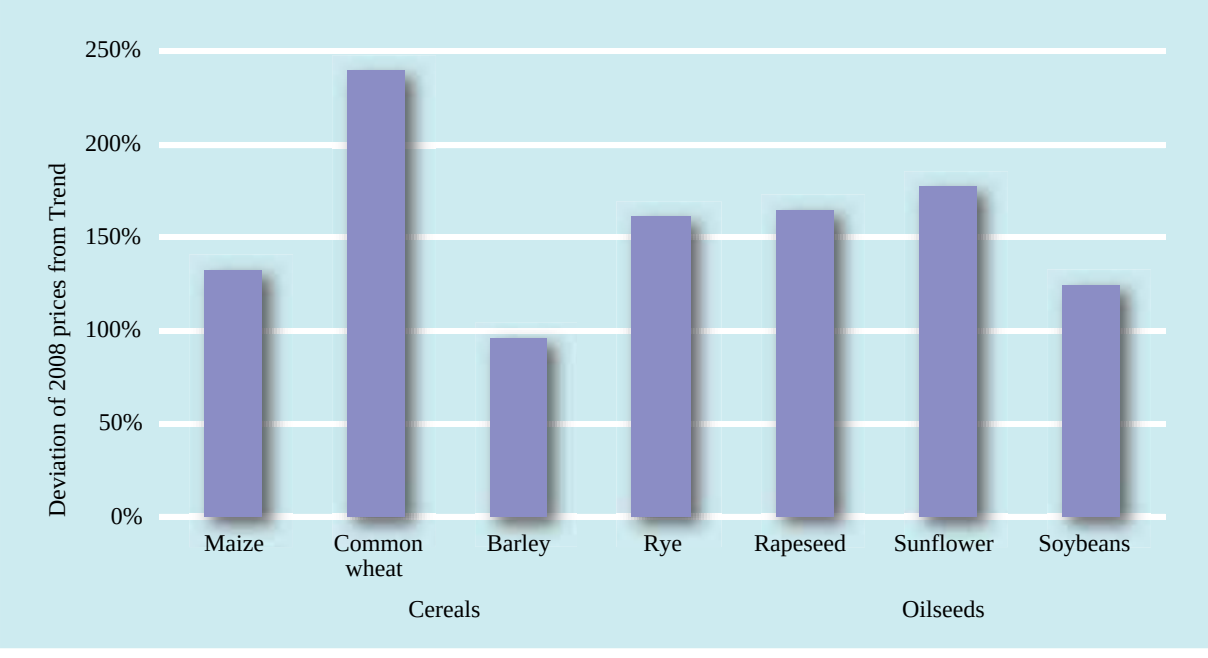
Modern sector	Barley	Maize	Common sheat	Rye	Soybeans	Rapeseed	Sunflower	Sugar beet
Ukraine	128	103	151	127	297	290	328	34
Forest	123			125	293			34
Forest-Steppe	129	104	152	130	299	290	329	
Steppe	128	103	151		297	289	327	

Traditional sector	Barley	Maize	Common sheat	Rye	Soybeans	Rapeseed	Sunflower	Sugar beet
Ukraine	128	103	151	127	297	290	328	34
Forest	123			125	293			34
Forest-Steppe	129	104	152	130	299	290	329	
Steppe	128	103	151		297	289	327	

Source: LMC International

Figure B.1 presents the nearby market prices of each of the eight crops expressed as a percentage of their long-term trend value, using trend values from both before and after the introduction of biofuels. The figure shows that nearby market crop prices are currently valued above long-term trend levels, with the price of wheat especially high at present. While prices have declined significantly since their highs earlier in 2008, they remain above trend levels.

Figure B.1. Short-term crop prices of cereals and oilseeds relative to their trend values



Source: LMC International

2.2 Yields

The traditional and modern farm sectors differ mainly in terms of input cost structures and yields realized. However, the methods employed to derive yield levels are similar for both sectors. The analysis of yields uses the following yields for each of eight featured crops and three agro-ecological zones in Ukraine (Forest, Forest-Steppe, Steppe):

- 2004 to 2007 (actual): Yields are an average of actual yields for the last four crop years for each agro-ecological zone.
- 2009 (forecast) and long-term trend (forecast): For these two periods, trend yields are used that are derived from long-term time series. Trends are based on the period since 1995, after the upheaval due to market reforms. The national trend yield figure is adjusted for each agro-ecological zone by the empirical yield differential of each zone against the national average. This adjustment is necessary as a long-term series of yields by zone are not available for accurate trend estimates. With regard to the yield differential between the traditional and modern sectors, local data sources are used wherever possible. Trend national average yields are adjusted by the revealed differential when appropriate.

Yield levels for the eight crops by main agro-ecological zone for 2004–2007, 2009 (forecast), and the long-term trend are presented in Tables B.4 and B.5.

Table B.4. Average yields of gains, oilseeds and sugar beet, 2004–2007 (tonnes/ha)

Modern sector	Barley	Maize	Common wheat	Rye	Soybeans	Rapeseed	Sunflower	Sugar beet
Ukraine	2.7	5.3	4.1	2.5	1.5	2	1.7	28.7
Forest	2.9			2.1	1.3			28.7
Forest-Steppe	3.3	6.7	4.4	3.3	1.7	2.2	2	
Steppe	2.3	3.1	4		1.5	1.7	1.7	
Traditional sector	Barley	Maize	Common wheat	Rye	Soybeans	Rapeseed	Sunflower	Sugar beet
Ukraine	1.3	2.6	2.1	1.2	0.8	1	0.9	14.4
Forest	1.4			1	1.3			14.4
Forest-Steppe	1.6	3.3	2.2	1.7	0.9	1.1	1	
Steppe	1.1	1.5	2		0.8	0.8	0.8	

Source: LMC International

Table B.5. 2009 yield and long-term trend in yields of grains, oilseeds and sugar beet (tonnes/ha)

Modern sector	Barley	Maize	Common wheat	Rye	Soybeans	Rapeseed	Sunflower	Sugar beet
Ukraine	2.9	6.1	4.1	2.5	1.7	2.2	1.8	33
Forest	3.2			2.1	1.4			33
Forest-Steppe	3.6	7.8	4.4	3.3	2	2.4	2	
Steppe	2.5	3.6	4		1.7	1.8	1.7	
Traditional sector	Barley	Maize	Common wheat	Rye	Soybeans	Rapeseed	Sunflower	Sugar beet
Ukraine	1.5	3.1	2.1	1.3	0.9	1.1	0.9	16.5
Forest	1.6			1	0.7			16.5
Forest-Steppe	1.8	3.9	2.2	1.7	1	1.2	1	
Steppe	1.2	1.8	2		0.9	0.9	0.9	

Source: LMC International

2.3 Total revenues

Total revenues for each of eight featured crops by main agro-ecological zone (Forest, Forest-Steppe, Steppe) for 2004–2007, 2009 (forecast), and the long-term trend are presented in Tables B.6, B.7 and B.8.

Table B.6. Average revenues from grains, oilseeds and sugar beet, 2004–2007 (USD/ha)

Modern sector	Barley	Maize	Common wheat	Rye	Soybeans	Rapeseed	Sunflower	Sugar beet
Ukraine	294	579	610	289	375	548	421	924
Forest	326			239				924
Forest-Steppe	365	751	653	385		600	484	
Steppe	246	317	585		375	458	406	
Traditional sector	Barley	Maize	Common wheat	Rye	Soybeans	Rapeseed	Sunflower	Sugar beet
Ukraine	147	289	305	145	187	274	210	462
Forest	163			120				462
Forest-Steppe	182	375	326	193		300	242	
Steppe	123	159	292		187	229	203	

Source: LMC International

Table B.7. Revenues from grains, oilseeds and sugar beet, 2009 (USD/h

Modern sector	Barley	Maize	Common wheat	Rye	Soybeans	Rapeseed	Sunflower	Sugar beet
Ukraine	318	892	793	350	703	954	629	1,115
Forest	312			283	574			1,115
Forest-Steppe	368	1,081	809	476	807	1,055	720	
Steppe	282	558	782		703	783	607	
Traditional sector	Barley	Maize	Common wheat	Rye	Soybeans	Rapeseed	Sunflower	Sugar beet
Ukraine	159	446	397	175	351	477	315	558
Forest	156			142	287			558
Forest-Steppe	184	541	405	238	403	527	360	
Steppe	141	279	391		351	391	303	

Source: LMC International

Table B.8. Long-term trend in revenues from grains, oilseeds and sugar beet (USD/ha)

Modern sector	Barley	Maize	Common wheat	Rye	Soybeans	Rapeseed	Sunflower	Sugar beet
Ukraine	373	636	622	321	514	627	585	1,115
Forest	390			260	420			1,115
Forest-Steppe	460	811	664	436	590	691	669	
Steppe	315	370	598		514	518	564	
Traditional sector	Barley	Maize	Common wheat	Rye	Soybeans	Rapeseed	Sunflower	Sugar beet
Ukraine	186	318	311	160	257	314	292	557
Forest	195			130	210			557
Forest-Steppe	230	405	332	218	295	346	335	
Steppe	157	185	299		257	259	282	

Source: LMC International

3. Costs

Direct costs are expenses directly attributable to the production of a particular crop. They include the costs of purchased seed, fertilizer and crop protection chemicals, plus any irrigation costs.

Indirect costs include the labour and machinery costs incurred in growing each crop (e.g. the cost of land preparation, seed drilling, fertilizing, spraying and harvesting). Cost estimates are based on the typical number of labour and machine hours that are required at each stage of the production process from planting through harvest. By doing this in a systematic way, and allowing for difference in labour costs and farm technology (in particular the size and work rate of machines that are typically used), indicative labour and machinery costs for each crop can be derived.
The following costs are excluded from this analysis:

- Land costs: These costs are the same for whatever crop the farmers choose to plant.

- Farm overhead costs, e.g. administration costs: The costs are not attributable to the production of any one crop.

4. Gross margins

The gross margins for each of eight featured crops by main agro-ecological zone (Forest, Forest-Steppe, Steppe) for 2004–2007, 2009 (forecast), and the long-term trend are presented in Tables B.9, B.10 and B.11. Data are provided for Gross Margin I and Gross Margin II for both the modern and traditional farm sectors in each zone.

The data show that gross margins are sometimes negative, especially when indirect costs are included. This is not unusual and is one of the reasons why analysis of gross margins often focuses only on the direct costs of farming (Gross Margin I). However, even though the inclusion of indirect costs generates these uncomfortable results – which means that farmers do not fully account for depreciation, return on capital, etc., and/or do not value their labour at its full opportunity cost – there are important differences in the indirect costs associated with farming individual crops.

Although sugar beet may generate large gross margins, sugar beet production, nevertheless, has much higher indirect costs than the production of grains or oilseeds. This is because the machinery used for beet farming, especially harvesting, is rather specialized. The indirect costs of sugar beet production are, thus, unavoidable, even in the short term, to a greater degree than for grain and oilseed production.

Table B.9. Average gross margins of grains, oilseeds and sugar beet, 2004–2007 (USD/ha)
Gross Margin I

Modern sector	Barley	Corn	Wheat	Rye	Soybeans	Rapeseed	Sunflower	Sugar beet
Ukraine	**164**	**390**	**432**	**56**	**311**	**550**	**410**	**467**
Forest	208			35				295
Forest-Steppe	239	580	480	98		600	604	
Steppe	112	101	403		311	475	359	
Traditional sector	Barley	Corn	Wheat	Rye	Soybeans	Rapeseed	Sunflower	Sugar beet
Ukraine	**51**	**147**	**155**	**17**	**127**	**240**	**145**	**136**
Forest	76			11				50
Forest-Steppe	90	254	178	29		256	203	
Steppe	24	-16	142		127	216	130	

Gross Margin II

Modern sector	Barley	Corn	Wheat	Rye	Soybeans	Rapeseed	Sunflower	Sugar beet
Ukraine	**27**	**254**	**299**	**-47**	**222**	**359**	**225**	**194**
Forest	70			-69				22
Forest-Steppe	115	443	349	-3		411	412	
Steppe	-34	-33	270		222	278	176	
Traditional sector	Barley	Corn	Wheat	Rye	Soybeans	Rapeseed	Sunflower	Sugar beet
Ukraine	**-57**	**37**	**41**	**-74**	**58**	**68**	**25**	**-115**
Forest	-33			-80				-201
Forest-Steppe	-8	143	66	-60		87	78	
Steppe	-92	-124	27		58	40	11	

Source: LMC International

Table B.10. Gross margins of grains, oilseeds and sugar beet, 2009 (USD/ha)
Gross Margin I

Modern sector	Barley	Corn	Wheat	Rye	Soybeans	Rapeseed	Sunflower	Sugar beet
Ukraine	**161**	**650**	**562**	**109**	**615**	**925**	**588**	**565**
Forest	169			65				431
Forest-Steppe	219	862	593	195		1,015	842	
Steppe	118	281	542		615	780	523	
Traditional sector	Barley	Corn	Wheat	Rye	Soybeans	Rapeseed	Sunflower	Sugar beet
Ukraine	**34**	**258**	**199**	**33**	**268**	**412**	**241**	**155**
Forest	45			20				89
Forest-Steppe	68	379	219	60		447	421	
Steppe	9	51	186		268	357	196	

Gross Margin II

Modern sector	Barley	Corn	Wheat	Rye	Soybeans	Rapeseed	Sunflower	Sugar beet
Ukraine	**-20**	**464**	**377**	**-35**	**502**	**685**	**376**	**173**
Forest	-13			-80				39
Forest-Steppe	55	675	411	54		779	622	
Steppe	-75	98	356		502	534	313	
Traditional sector	Barley	Corn	Wheat	Rye	Soybeans	Rapeseed	Sunflower	Sugar beet
Ukraine	**-114**	**105**	**36**	**-96**	**178**	**192**	**98**	**-212**
Forest	-102			-110				-279
Forest-Steppe	-65	225	59	-67		230	272	
Steppe	-149	-100	22		178	132	53	

Source: LMC International

Table B.11. Long-term trend in gross margins of grains, oilseeds and sugar beet (USD/ha)
Gross Margin I

Modern sector	Barley	Corn	Wheat	Rye	Soybeans	Rapeseed	Sunflower	Sugar beet
Ukraine	**215**	**394**	**391**	**80**	**427**	**598**	**544**	**564**
Forest	247			42				431
Forest-Steppe	312	592	447	155		651	792	
Steppe	150	93	357		427	516	480	
Traditional sector	Barley	Corn	Wheat	Rye	Soybeans	Rapeseed	Sunflower	Sugar beet
Ukraine	**61**	**130**	**113**	**19**	**174**	**249**	**219**	**155**
Forest	84			9				88
Forest-Steppe	114	244	146	40		265	396	
Steppe	25	-43	93		174	225	174	

Gross Margin II

Modern sector	Barley	Corn	Wheat	Rye	Soybeans	Rapeseed	Sunflower	Sugar beet
Ukraine	**34**	**209**	**206**	**-64**	**313**	**358**	**331**	**172**
Forest	65			-103				38
Forest-Steppe	148	405	265	14		415	571	
Steppe	-42	-90	171		313	269	270	
Traditional sector	Barley	Corn	Wheat	Rye	Soybeans	Rapeseed	Sunflower	Sugar beet
Ukraine	**-87**	**-23**	**-49**	**-110**	**84**	**28**	**75**	**-213**
Forest	-63			-122				-279
Forest-Steppe	-19	90	-14	-87		48	247	
Steppe	-133	-195	-70		84	0	32	

Source: LMC International

APPENDIX C:
Agricultural support programmes of the ministry of agrarian policy

Financed from the State Budget

Table C.1. Agricultural support programmes and their approved state budget levels (UAH thousand)

Code of programme classification	Name of expense	Amount actually used in 2005	Amount actually used in 2006	Amount allocated for 2007	Amount allocated for 2008
2800000	The Ministry of Agrarian Policy	5,498,839	7,100,850	8,466,782	11,016,680
Including separate programmes of state support associated with the grain sector					
2801170	Radical improvement of soil used by agricultural enterprises	9,965			100,000
2801180	Agrochemical certification of agricultural land	5,000	3,650	5,000	7,900
2801200	Measures for pest and disease control in agriculture	4,994	4,659	5,000	5,000
2801210	The budgetary support for animal husbandry, including beekeeping, identification and registration of agricultural animals and financial support for plant growing production by subsidizing; calculated per ha of crops	629,349	1,609,893	2,332,507	2,721,772
	Including:				
	Support for plant growing production		971,747	935,000	
	Subsidies per ha of winter crops		519,927	586,895	
	Subsidies per ha of spring crops		436,544	163,106	
	Subsidies per ha of crops planted on irrigated land		15,276		
	Support for sericulture development	1,000			
	Support for flax production	7,900			
	Partial compensation of expenses for the electric power that is used by agricultural enterprises for the irrigation of crops planted on irrigated land and for flooding land for rice cultivation	27,100		35,000	

	Partial compensation of expenses for fertilizers for domestic production			150,000	
2801220	Plant breeding in the plant breeding branch	64,955	87,210	90,000	90,000
2801240	Financial support to agricultural enterprises through partial compensation of interest payments for short-term and long-term credit	415,068	319,498	667,000	1,000,000
2801280	Financial support to agricultural enterprises in areas with especially complex climatic conditions	20,000	34,967	35,000	35,000
2801330	Setting up and maintenance of a reserve stock of high-quality and hybrid seeds	31,288	4,478	70,000	20,000
2801430	Partial compensation for expense of domestically produced, technologically advanced agricultural machinery	151,307	20,068	131,811	100,000
2801490	Measures applicable to the operation of financial leasing of domestically produced agricultural machinery			270,000	
2801540	Compensation to the Pension Fund for the losses it incurs due to the application of a special rate for pension payments under the FAT	1,207,400	1,669,917	1,381,125	1,167,126
2801560	Formation of state food reserves and the carrying out of pledge and intervention purchases by the Agrarian Fund	406,624	344,363	785,000	
2801570	Financing of the Agrarian Fund	4,826	7,668	18,424	18,788
2801580	Partial compensation for insurance premiums (payments) actually paid by operators in the agrarian market	5,833	9,961	50,000	200,000
2801810	Reconstruction of ethanol distilleries for biofuel production			15,000	
2806000	National joint stock company Ukragroleasing		163,976		
2806020	Measures applicable to the operation of the financial leasing of domestically produced agricultural machinery	118,284			
2806040	Purchasing of agricultural machinery under terms of financial leasing and measures of support to financial leasing operations	8,920			
2806060	Reconditioning of agricultural machinery and equipment that is recovered from financial leasees who are declared bankrupt or who break the terms of a leasing contract	3,934			

2806070	Increase in the statutory capital of the national joint stock company Ukragroleasing allocated for the purchase of agricultural machinery, trucks and equipment for processing of agrarian products, with the subsequent transfer of leasing terms.		163,976		

Note: The table includes programmes of financing from the state budget, but does not include programmes of budgetary crediting.
Source: Author's calculations on the basis of the information contained in the Law of Ukraine "On State Budget" and data of the Ministry of Agrarian Policy of Ukraine.

APPENDIX D[68]: Gaps between Ukrainian, EU and international safety standards

Table D.1. Comparative analysis of levels of toxic elements permitted in cereal crops

Cereals	Element	Maximum permitted element contamination, mg/kg		
		MBR #5061-89, DSTU 3768:2004,[69] DSTU 3769:1998,[70] DSTU 4525:2006,[71]	Codex Alimentarius Commission standards	EEC Commission Regulation #1881/2006
1	2	3	4	5
Wheat, barley, corn	Lead	0.5 (for food, technical needs and exports), 5.0 for feeding	0.2	0.2
Wheat	Cadmium	0.1 (for food, technical needs and exports), 0.3 for feeding	0.2	0.2
Barley, corn	Cadmium	0.1 (for food, technical needs and exports), 0.3 for feeding	0.1	0.1
Wheat, barley, corn	Arsenic	0.2 (for food, technical needs and exports), 0.5 for feeding	Not regulated	Not regulated
Wheat, barley, corn	Mercury	0.03 (for food, technical needs and exports), 0.1 for feeding	Not regulated	Not regulated
Wheat, barley, corn	Copper	10.0 (for food, technical needs and exports), 30.0 for feeding	Not regulated	Not regulated
Wheat, barley, corn	Zinc	50.0 (for food, technical needs and exports), 50.0 for feeding	Not regulated	Not regulated

68.- This appendix largerly benefited from the background work under the Canada-Ukraine Grain Project

69.- Ukrainian National Standard. Wheat. Technical Conditions, DSTU 3768:2004, Kiev, 2004.

70.- Ukrainian National Standard. Feed Barley. Technical Conditions, DSTU 3769:1998, Kiev, 1998.

71.- Ukrainian National Standard. Corn. Technical Conditions, DSTU 4525:2006, Kiev, 1998.

Table D.2. Comparative analysis of levels of micotoxins permitted in cereal crops

Micotoxin title	Maximum permitted micotoxins contamination, mg/kg	
	MBR #5061-89	EEC Commission regulation #1881/2006
Wheat, DSTU 3768:2004		
Aflatoxin B1	0.005 (for food, technical needs and exports), 0.025–0.1 for feeding	0.002
Zearalenone	1.0 (for food, technical needs and exports), 2.0–3.0 for feeding	0.1
T-2 toxin	0.1 (for food, technical needs and exports), 0.2 for feeding	0.06 (totalled toxin T-2 and HT-2)
B1, B2, G1 and G2 aflatoxins totaled	Not regulated	0.004
Dezoxinivalenol (vomitoxin) For soft wheat For hard wheat	0.5–1.0 (for food, technical needs and exports), 1.0–2.0 for feeding	 1.750 1.250
Ochratoxin A	Not regulated	0.005
Palutin	0.5 for feeding	Not regulated
Barley, DSTU 3769:1998		
Aflatoxin B1	0.005 (for food, technical needs and exports), 0.025–0.1 for feeding	0.002
B1, B2, G1 and G2 aflatoxins totalled	Not regulated	0.004
Zearalenone	1.0 (for food, technical needs and exports), 2.0–3.0 for feeding	0.1
T-2 toxin	0.1 (for food, technical needs and exports), 0.2 for feeding	0.06 (totalled toxin T-2 and HT-2)
Dezoxinivalenol (vomitoxin)	1.0 (for food, technical needs and exports), 1.0–2.0 for feeding	1.250
Ochratoxin A	Not regulated	0.005
Palutin	0.5 for feeding	Not regulated
Corn, DSTU 4525:2006		
Aflatoxin B1	0.005 (for food, technical needs and exports), 0.025–0.1 for feeding	0.005
B1, B2, G1 and G2 aflatoxins totalled	Not regulated	0.01 (for sort corn and using it as food ingredient)

Fusariose toxins (totalled B1, B2)	Not regulated	2.0
Zearalenone	1.0 (for food, technical needs and exports), 2.0–3.0 for feeding	0.2
T-2 toxin	0.1 (for food, technical needs and exports), 0.2 for feeding	0.06 (totalled toxin T-2 and HT-2)
Dezoxinivalenol (vomitoxin)	0.2-1.0 (for food, technical needs and exports), 1.0–2.0 for feeding	1.750
Ochratoxin A	Not regulated	0.005
Palutin	0.5 for feeding	Not regulated

Table D.3. Comparative analysis of levels of radioactive nuclides permitted in cereal crops

Radioactive nuclide	Maximum permitted contamination, mg/kg		
	GN 6.6.1.1-130	CODEX STAN 193-1995 Rev.2-2006	EC Decree #737/90/ EEC and Union Regulation (EBPATOM) #3954/97
Strontium Sr-90	50.0	100	Not regulated
Cesium Cs-137	20.0	1,000	600
Cesium Cs-134-137	Not regulated	1,000	600
Plutonium Pu-238, 129, 240 Americium Am-241	Not regulated	1	Not regulated
Ruthenium Ru-106 Iodine I-129, 131 Uranium U-235	Not regulated	100	Not regulated
Sulfur S-35 Cobalt Co-60 Strontium Sr-90 Ruthenium Ru-106 Cesium Cs-134 Cerium Ce-144 Iridium Ir-192	Not regulated	1,000	Not regulated
Hydrogen H-3 Carbon C-14 Technetium Tc-99	Not regulated	10,000	Not regulated

Table D.4. Comparative analysis of maximum levels of pesticides permitted in cereal crops

Name of pesticide	Maximum permitted level, mg/kg		
	SSanR&N 8.8.1.2.3.4.000-2001	CAC/MRL 01	EU consolidated text, 2004, EU Directives 2008/17/EEC
1	2	3	4
Agelon	0.1 cereal crops	Not regulated	Not regulated
Azynfos-methyl	0.2 cereal crops	Not regulated	0.05 cereal crops
Aquo-N–2–methylpyridinemanganese chloride	0.08 wheat	Not regulated	Not regulated
Actellic	1.0 (during harvesting) 5.0 (during treatment)	Not regulated	Not regulated
Alachlor	Not allowed in corn	Not regulated	Not regulated
Aldicarb	Not allowed	0.02 barley, wheat 0.05 corn	0.05 cereal crops
Aldrin	Not allowed	0.02 cereal crops	0.01 cereal crops
Alpha-cypermethrin	0.01, not allowed for the beginning of realization	Not regulated	Not regulated
Aluminium phosphide	0.1 cereal crops	0.1 cereal crops	Not regulated
Amidosulfur	0.1 cereal crops	Not regulated	Not regulated
Afos	Not allowed	Not regulated	Not regulated
Ambush	0.1 cereal crops	Not regulated	Not regulated
Anilat	1.0	Not regulated	Not regulated
Atrazine	0.1 corn, cereal crops	Not regulated	Not regulated
Adenit A500	0.03 corn	Not regulated	Not regulated
Acetatrine	0.03 corn	Not regulated	Not regulated
Acetine A880	0.03 corn	Not regulated	Not regulated
Acetochlore	0.03 corn	Not regulated	Not regulated
Acetochloreantidot	0.03 corn	Not regulated	Not regulated
Acetochloreantidot AA-67	0.03 corn	Not regulated	Not regulated
Acetozine	(Control of Acetochlore and Atrazine)	Not regulated	Not regulated
Afugan	Not allowed	Not regulated	Not regulated
Basagran	0.1 cereal crops	Not regulated	Not regulated
Basagran – New	0.1 cereal crops	Not regulated	Not regulated
Basudin	0.1 cereal crops	Not regulated	Not regulated
Bayleton	0.5 cereal crops	Not regulated	Not regulated

Baytex	0.15 cereal crops	Not regulated	Not regulated
Bayalan	0.2 cereal crops	Not regulated	Not regulated
Banvel	Not allowed	Not regulated	Not regulated
Banlen	0.05 cereal crops	Not regulated	Not regulated
Bendiocarb	0.05 corn	Not regulated	Not regulated
Benomil (it's metabolite is karbendazim DDD – 0,01)	0.5 cereal crops	Not regulated	0.1 cereal crops
Bentazone	0.1 cereal crops	0.2 corn 0.1 wheat	0.1 cereal crops
Beta-cypermetrin	Not allowed in wheat	Not regulated	Not regulated
Binapacril	Not regulated	Not regulated	0.01 cereal crops
Bitertanol baycor, baymal sebatol	Not regulated	0.05 barley , wheat	0.05 cereal crops
Bifentrin	Not allowed in corn 0.2 wheat	0.5 wheat 0.05 barley 0.05 corn	0.5 wheat, barley 0.05 corn
Boricid	(Control of Polycarbacin)	Not regulated	Not regulated
Bromidion	Not regulated	5.0 cereal crops	Not regulated
Bromoxynil	0.05 cereal crops	Not regulated	Not regulated
Bromopropylat	Not regulated	Not regulated	0.05 cereal crops
Butan	0.5 control of Butylat	Not regulated	Not regulated
Butylat	0.5 corn	Not regulated	Not regulated
Valexon	0.05 cereal crops	Not regulated	Not regulated
Vernolat	0.5 corn	Not regulated	Not regulated
Vernolat – antidot	0.5 corn	Not regulated	Not regulated
Vinclozolin	Not allowed	Not regulated	0.05 cereal crops
Gamma-hexachlorinecyclo-hexane(gamma-isomer HCCH)	0.5 corn 0.2 wheat	0.01 corn, wheat	Not regulated
Gvardian	0.03 corn	Not regulated	Not regulated
Hexaconasol	Not regulated	Not regulated	0.1 barley, wheat 0.02 corn
Hexachlorane	0.2 cereal crops	Not regulated	0.01 cereal crops
Hexachlorinebenzol	0.01 wheat	Maximum Permitted Level (MPL) is not determined or the previous norm is cancelled	0.01 cereal crops
Geptachlorine	Not allowed	0.02 cereal crops	Not regulated

Gerban	0.1 cereal crops	Not regulated	Not regulated
Geterofos	Not allowed	Not regulated	Not regulated
Hexachlorcyclohexan gamma-isomer	0.5 cereal crops	Not regulated	0.1 cereal crops
Glyphosat	0.3 corn 3.0 wheat	20.0 barley 1.0 corn 5.0 wheat	20.0 barley 0.1 corn 5.0 wheat
Glyphosat-trimesium	0.3 barley	Not regulated	Not regulated
Glufosinate-ammonium	0.1 corn seeds 0.02 milling grain	0.1 corn	Not regulated
Guazatin	0.05 milling grain	Not regulated	Not regulated
Humic acids	Regulation is not needed for corn	Not regulated	Not regulated
Sodium salts of humic acids	Regulation is not needed for cereal crops	Not regulated	Not regulated
Dactal	Not allowed	MPL is not determined or the previous norm is cancelled	Not regulated
2,4 –D Dichlorinephenoxyacetic acid	Not allowed in corn, wheat	0.05 corn 2.0 wheat	0.05 cereal crops
DDD, DDE, DDT	0.02 milling grain, corn	0.1 milling grain	0.05 cereal crops
Deltametrin	0.01 cereal crops	2.0 cereal crops	1.0 cereal crops
Demeton (-0 and –S isomers)	0.35 milling grain	MPL is not determined or the previous norm is cancelled	Not regulated
Decis	Control of Deltametrin	Not regulated	Not regulated
Decis-forte	Control of Deltametrin	Not regulated	Not regulated
Decis duplet	Control of Deltametrin	Not regulated	Not regulated
Decis-quick	Control of Deltametrin	Not regulated	Not regulated
DET agains cockroaches, bed-bugs, fleas, ants	Control of Deltametrin	Not regulated	Not regulated
Diazinone	0.1 cereal crops 0.1 barley	0.02 corn	0.02 cereal crops
4,7-Dioxy -5-methylundecanol -2	Regulation is not needed	Not regulated	Not regulated

N-(1,1-dikso-tiolan-3-methyl)-Ditiocarbamat potassium	0.2 cereal crops	Not regulated	Not regulated
Dianat	Not allowed	Not regulated	Not regulated
Diamin D 600	Not allowed, control of 2.4 – D	Not regulated	Not regulated
Diapren	0.25 control of 2Ì-4CP	Not regulated	Not regulated
Diquat	Not regulated	5.0 barley 0.05 corn 2.0 wheat	10.0 barley 1.0 corn 0.05 wheat
Dicamba	Not allowed in corn	Not regulated	Not regulated
Dimethanamid	0.02 corn	Not regulated	Not regulated
Potassium salt of dihydro-asparaginic acid of dimethyl ether	Not allowed in corn	Not regulated	Not regulated
Dimethyldiethanol ammonium dimethyl - phosphoric sour	0.05 barley	Not regulated	Not regulated
Dimetoat	Not regulated for milling grain	0.05 wheat	0.3 wheat
Disulfoton	Not regulated	0.2 barley 0.2 wheat 0.02 corn	0.2 barley 0.1 wheat 0.02 corn
Difenacin	Strict control during storage and usage	Not regulated	Not regulated
Difenoconazol	Not allowed in barley	Not regulated	Not regulated
Diflubenzuron	0.1 corn	Not regulated	Not regulated
1,3-Diftorpropanol -2	Not allowed	Not regulated	Not regulated
Dichlobutrazol	0.1 wheat	Not regulated	Not regulated
Dichloralurea	Not allowed	Not regulated	Not regulated
Dichlorhydrate N_1-(3-dimethylaminopropil (amidin trychloracet)	Regulation is not needed for wheat, barley	Not regulated	Not regulated
Dichlorprol (2,4 –DP)	0.05 cereal crops	Not regulated	Not regulated
1,2- Dibromoethane	Not regulated	Not regulated	0.01 cereal crops
Dichlorethan	7.0 cereal crops	Not regulated	0.01 cereal crops
Dyhlofos	0.02 cereal crops	5.0 cereal crops	2.0 cereal crops
Dinitroortonrezol DNOC	Not allowed	Not regulated	0.05 cereal crops
Dosanex	0.1 cereal crops	Not regulated	Not regulated
Dursban	0.1 cereal crops	Not regulated	Not regulated
Dual	0.05 corn	Not regulated	Not regulated

Isoxaflutol	0.02 corn	Not regulated	Not regulated
Imidacloprid	Not allowed in corn	0.05 cereal crops	Not regulated
Imazalil	Not regulated	0.01 wheat	Not regulated
Iprodion	Not regulated	2.0 barley	0.5 wheat 1.0 barley 0.02 corn
Carbofos	3.0 corn	Not regulated	Not regulated
Cambio	Not allowed	Not regulated	Not regulated
Camphechlor	Not regulated	Not regulated	0.1 cereal crops
Carbaryl	Not allowed in corn	0.02 corn 2.0 wheat	0.5 cereal crops
Carbendazim	0.2 cereal crops	Not regulated	0.1 cereal crops
Carboxyn	Not allowed in corn	Not regulated	Not regulated
Carbosulphan	Not allowed in corn	0.05 corn	0.05 cereal crops
Carbofuran	Not regulated	0.5 corn	0.1 cereal crops
Cafpon	Not allowed (control of 2,4 – A)	Not regulated	Not regulated
Quintocen	Not allowed in cereal crops	0.01 cereal crops	0.02 cereal crops
Clopyrapid	0.1 corn	Not regulated	Not regulated
Clofentezin	Not regulated	Not regulated	0.02 cereal crops
Cowboy	Not allowed	Not regulated	Not regulated
Compasan	0.5 cereal crops	Not regulated	Not regulated
Compas	Not allowed	Not regulated	Not regulated
Cotoran	0.5 barley	Not regulated	Not regulated
Kresoxim-methyl	Not regulated	0.1 barley 0.05 wheat	0.05 cereal crops
Croneton	0.05 cereal crops	Not regulated	Not regulated
Kroton-lakton- sirets	0.2 cereal crops	Not regulated	Not regulated
2-Byten-4-olyd-2-okso-2,5-dihydro-furan	0.2 corn, wheat	Not regulated	Not regulated
Cuprosan	5.0 control of copper	Not regulated	Not regulated
Curomazine	Not regulated	Not regulated	0.05 cereal crops
Laddok	Control of Atrazine and Basagran	Not regulated	Not regulated
Laddok-new	Control of Atrazine	Not regulated	Not regulated
Lancet	Not allowed, control of 2,4 – D	Not regulated	Not regulated
Lentagran	0,5 corn	Not regulated	Not regulated

Lentagran –comby	Control of Atrazine	Not regulated	Not regulated
Lindan	Not regulated	Not regulated	0.01 cereal crops
Lintur	Not allowed	Not regulated	Not regulated
Linuron	Not allowed	Not regulated	Not regulated
Lontrel	0.1 cereal crops	Not regulated	Not regulated
Lontrim	Not allowed, control of 2,4 – D	Not regulated	Not regulated
LotusD	Not allowed, control of 2,4 – D	Not regulated	Not regulated
Lyambda-cigalotrin	0.01 corn, wheat	Not regulated	0.05 barley 0.02 cereal crops
Maloran	0.1 cereal crops	Not regulated	Not regulated
Maloran-special	0.05, control of Chlorbrommuron and Dual	Not regulated	Not regulated
Malathion	3.0 cereal crops	8.0 cereal crops	8.0 cereal crops
Mecoprop 2Ì-4CP	0.25 barley	Not regulated	Not regulated
Mercaptofos	0.35 cereal crops	Not regulated	Not regulated
Metakryfos	Not regulated	Not regulated	0.05 cereal crops
Metalaxil	Not allowed in corn 0.1 cereal crops	0.05 cereal crops	0.05 cereal crops
Metalaxil-Ì (isomeric form)	0.1 corn	Not regulated	0.02 cereal crops
Methidathion	Not allowed	0.1 corn	Not regulated
Metoxyfenozid	Not regulated	0.02 corn	Not regulated
Metolachlor	Control of Dual	Not regulated	Not regulated
Metopren	0.5 cereal crops	5.0 cereal crops	Not regulated
Metofen	Not allowed, control of 2,4 – D	Not regulated	Not regulated
Miklobutanil	Not allowed in cereal crops	Not regulated	0.02 cereal crops
Milgo	0.1 cereal crops	Not regulated	Not regulated
Miltox-special	1.0, control of Cineb	Not regulated	Not regulated
Methallyl chloride	3.5 cereal crops	Not regulated	Not regulated
Metaldegid	0.7 cereal crops	Not regulated	Not regulated
Metation	1.0 cereal crops	Not regulated	0.02 cereal crops 0.1 corn
Metafos	Not allowed	Not regulated	Not regulated
Metsulfuron-methyl	Not regulated	Not regulated	0.05 cereal crops
Neocydol	Control of Basudin	Not regulated	Not regulated

Nikosulfuron	0.2 corn	Not regulated	Not regulated
Nitrogen	Not allowed	Not regulated	Not regulated
Nitrofen	Not allowed	Not regulated	0.01 cereal crops
Oxydemeton-methyl	Not regulated	Not regulated	0.1 barley
N-Oxide 2,6-dimethylpiridine	Not allowed wheat	Not regulated	Not regulated
Oxicarboxin	0.2 wheat	Not regulated	Not regulated
Paraivat dichloride	Not allowed	0.1 corn	Not regulated
Parathion	Not regulated	Not regulated	0.05 cereal crops
Parathion-methyl	Not regulated	Not regulated	0.02 cereal crops
Pendimethalin	Not allowed in corn, wheat	Not regulated	0.05 cereal crops
Penconazol	Not regulated	Not regulated	0.05 cereal crops
Perimethrin	0.1 corn, barley	2.0 cereal crops	2.0 cereal crops
Picloram potassic salt	Not allowed in corn	Not regulated	Not regulated
Piridat	0.05 corn	Not regulated	0.05 cereal crops
Pirimifos-methyl	1.0 wheat 5.0 barley, corn (during storage)	7.0 cereal crops	5.0 cereal crops
Piretrins; registered product Pirigrain BioS	1.0 wheat	0.3 wheat	Not regulated
Policarbacin	0.2 cereal crops	Not regulated	Not regulated
Piperonyl butoxide	Not regulated	30.0 cereal crops	Not regulated
Pirimicarb	Not regulated	0.05 barley, 0.05 wheat	Not regulated
Polistimulin A-6	Not allowed, control of 2,4 – D	Not regulated	Not regulated
Plantvax	0.2 cereal crops	Not regulated	Not regulated
Plondrel	0.1 cereal crops	Not regulated	Not regulated
Pesticide 242 (chloropicrin)	0.1 (grain processing)	Not regulated	Not regulated
Pressing	Not allowed	Not regulated	Not regulated
Primicide	0.1 corn	Not regulated	Not regulated
Prime extra	Control of Dual and Atrazine	Not regulated	Not regulated
Prime extra Gold	Control of Dual and Atrazine	Not regulated	Not regulated
Primsulfuron-methyl	0.05 corn	Not regulated	Not regulated
Prometrin	0.1 corn	Not regulated	Not regulated

Propazine	0.2 cereal crops	Not regulated	Not regulated
Propargit	Not regulated	0.1 corn	Not regulated
Propachlore	0.3 corn	Not regulated	Not regulated
Propiconazol	0.1 barley, wheat	0.05 barley, wheat	0.05 cereal crops
Protrazine	Control of Atrazine	Not regulated	Not regulated
Profenofos	Not regulated	Not regulated	0.05 cereal crops
Prochloraz	0.1 cereal crops	2.0 cereal crops	1.0 barley 0.5 wheat 0.05 corn
Pentachlore-nitrobenzole	Not allowed	Not regulated	Not regulated
Ramrod	0.3 cereal crops	Not regulated	Not regulated
Resmetrin	Not regulated	Not regulated	0.05 cereal crops
Rincord	0.05 cereal crops	Not regulated	Not regulated
Treaters containing mercury	Not allowed	Not regulated	Not regulated
Ronstar PL	Control of Propanid	Not regulated	Not regulated
Romucid	0.1 cereal crops	Not regulated	Not regulated
Rotaprim	Control of Atrazine	Not regulated	Not regulated
Rimsulfuron	0.01 corn	Not regulated	Not regulated
Sangor	0.1 control of Picloran Not allowed in corn	Not regulated	Not regulated
Carbon bisulfude	10 cereal crops	Not regulated	Not regulated
Sirotsyn	Control of Cineb.	Not regulated	Not regulated
Simazine	1.0 cereal crops	Not regulated	Not regulated
Simicydin	0.1 corn	Not regulated	Not regulated
Cyfluthrin	Not regulated	0.05 corn	Not regulated
Spinosad (in the process of registration)	Not regulated	1.0 cereal crops	Not regulated
Spiroxamine	0.1 wheat	Not regulated	0.05 cereal crops 0.3 barley
Sulphosulfuron	0.005 wheat	Not regulated	0.05 cereal crops
Surpass	0.5 corn	Not regulated	Not regulated
Suffix BV	0.2 cereal crops	Not regulated	Not regulated
Terbuconazole	Not regulated	0.2 barley 0.05 wheat	Not regulated
Tiabendazol	0.2 cereal crops	Not regulated	0.05 cereal crops
Terbufos	Not regulated	0.01 corn, wheat	Not regulated
Tiametoxan	0.4 corn	Not regulated	Not regulated
Tiofanat-methyl	1.0 cereal crops	Not regulated	Not regulated

Tiofos	Not allowed	Not regulated	Not regulated
Tiram	Not allowed	Not regulated	Not regulated
N-Beta-metoxyethyl -chloracetate-Î- toluidid	0.5 corn	Not regulated	Not regulated
Toluin	0.5 corn	Not regulated	Not regulated
Thifensulfuron-methyl	0.05 corn	Not regulated	Not regulated
Thordon 101	Not allowed control of 2,4 – D	Not regulated	Not regulated
Triazofos	Not allowed	0.05 cereal crops	Not regulated
Tridemoh	Not regulated	Not regulated	0.2 barley 0.05 wheat, corn
Triadimenol	Not allowed in milling grain	0.5 barley 0.2 cereal crops	0.2 wheat, barley 0.1 corn
Triadimefon	0.5 barley	0.5 barley 0.1 cereal crops	0.2 wheat, barley 0.1 corn
Triasulfuron	Not regulated	Not regulated	0.05 cereal crops
Trifloxystrobin	Not regulated	0.5 barley 0.2 wheat	Not regulated
Triticonazole	Not allowed	Not regulated	Not regulated
Triforin	0.05 cereal crops	0.1 milling grain	0.1 wheat, barley 0.05 corn
Trichlorephon	0.1 corn, milling grain	Not regulated	0.1 cereal crops
Trezor	Not allowed, control of 2,4 – D	Not regulated	Not regulated
Famoxadone	0.1 cereal crops	0.2 barley 0.1 wheat	0.02 cereal crops
Fenamifos	Not regulated	Not regulated	0.02 cereal crops
Fenvalerat	0.1 corn 0.02 wheat, barley	2.0 cereal crops	0.05 wheat 0.2 barley
Fenitrotion	1.0 cereal crops	10.0 cereal crops	0.5 wheat, barley 0.05 corn
Fenpropimorf	Not regulated	0.5 barley	0.5 barley, wheat 0.05 corn
Fenbukonazol	Not regulated	0.2 barley 0.1 wheat	Not regulated
Fenoksaprop-P-etyl	Not allowed	Not regulated	Not regulated
Fention	0.15 cereal crops	Not regulated	0.05 cereal crops
Fentoat	0.1 wheat	Not regulated	Not regulated

Fipronil	0.002 corn	0.002 barley, wheat 0.01 corn	Not regulated
Phytobacteriomicin	Not allowed	Not regulated	Not regulated
Flamprom-m-methyl	0.06 wheat	Not regulated	Not regulated
Fludioxonil	Not allowed in cereal crops	0.05 cereal crops	Not regulated
Fluzilazol	Not allowed in cereal crops	0.1 barley	Not regulated
Fluometuron	0.5 barley	Not regulated	Not regulated
Fluorglicofen-ethyl	0.01 wheat	Not regulated	Not regulated
Flupoxan	0.1 wheat	Not regulated	Not regulated
Flutriafol	0.1 wheat, barley	Not regulated	Not regulated
Flucytrinat	Not allowed	Not regulated	0.05 cereal crops
Fozalon	0.2 cereal crops	Not regulated	Not regulated
Foxim	0.05 corn 0.02 cereal crops	Not regulated	Not regulated
Forat	Not allowed	0.05 wheat, corn	Not regulated
Formothion	Not regulated	Not regulated	0.02 cereal crops
Frontier 900	0.02 cereal crops	Not regulated	Not regulated
Fumaran	Not allowed in corn	Not regulated	Not regulated
Furathiocarb (metabolite-carbofuran)	Not allowed	Not regulated	0.05 cereal crops
ChlorebrominEUR on	0.1 corn	Not regulated	Not regulated
Chlordane	Not allowed	0.02 corn, wheat	0.02 cereal crops
Chloremekvatchloride	0.1 wheat	2.0 barley 3.0 wheat	Not regulated
Chlorothalonil	Not regulated	0.1 barley, wheat	Not regulated
Chlorofos	0.1 cereal crops	Not regulated	Not regulated
Chlorpirifos	0.1 wheat, cereal crops	10.0 wheat	0.2 barley 0.05 cereal crops
Chlorsulfoxim	0.005 corn	Not regulated	Not regulated
Chlorsulfoxim -methyl	Not allowed	Not regulated	Not regulated
Chlortoluron	Not allowed	Not regulated	Not regulated
Calcium cyanide, Potassium cyanide, Composition of Calcium cyanide and Potassium cyanide	Not allowed	MPL is not determined or the previous norm is cancelled	Not regulated
Cynidon-ethyl	0.1 cereal crops	Not regulated	0.1 cereal crops

Cydial	0.1 wheat	Not regulated	Not regulated
Cypermethrin	0.04 corn 0.1 wheat	0.5 barley 0.05 corn 0.2 wheat	2.0 barley, wheat 0.01 corn
Cyprodinil	Not regulated	3.0 barley 0.5 wheat	Not regulated
Cyproconazole	0.05 barley	Not regulated	Not regulated
Chistolan	Not allowed	Not regulated	Not regulated
Endosulfan	Not regulated	0.1 corn 0.2 wheat	Not regulated
Epoxiconazole	0.05 barley	Not regulated	Not regulated
Esbiotrin	Not regulated Strict control during storage and usage	Not regulated	Not regulated
Esfenvalerate	Not allowed in wheat 0.02 barley	2.0 wheat	Not regulated
Etamon	0.05 barley	Not regulated	Not regulated
Etefon	0.5 wheat	1.0 barley 1.0 wheat	0.2 wheat 0.5 barley 0.05 corn
Ethylentiourea (Product of metabolism of cineb,kyprozan,ditan -45, kyprocin, policarbacin, polimarcin)	0.02 cereal crops	Not regulated	Not regulated
Ethylendichlorid	7.0 cereal crops	MPL is not determined or the previous norm is cancelled	Not regulated
Ethylene oxide	Not regulated	Not regulated	0.02 cereal crops
Ethyofencarb	0.05 cereal crops	Not regulated	Not regulated
5-Ethyl-5- hidroksimetil -2- (furil-2)-1,3-dioxan	0.1 wheat	Not regulated	Not regulated
Etrimfos	0.2 cereal crops	Not regulated	Not regulated
Ehoprophos	Not regulated	0.02 corn	Not regulated

APPENDIX E:
Ukraine and EU grain quality standards

Table E.1. Ukraine Wheat Quality Standards [72]

Soft Wheat Requirements

Parameter	Parameter and standard for soft wheat as per grade					
	Grade 1	**Grade 2**	**Grade 3**	**Grade 4**	**Grade 5**	**Grade 6**
Standard composition	**I–IV types**			**I–IV types, VII type admitted**		
Test weight, g/litre, min.	760	755	730	710	710	Not limited
Moisture, max. %	14.5	14.5	14.5	14.5	14.5	14.5
Grain admixture, max. %	5.0	5.0	8.0	10.0	15.0	15.0
Including germinated grains	1.0	1.0	3.0	3.0	5.0	In the range of total grain admixture
Foreign admixture, max. %	1.5	2.0	3.0	4.0	5.0	5.0
Including						
Broken kernels	0.2	0.2	0.5	0.5	1.0	1.0
Fusariose kernels	0.3	0.5	1.0	1.0	1.0	1.0
Stemmed kernels	0.3	0.5	0.5	0.5	0.5	0.5
Mineral admixture, including stones, slag and ore	0.3	0.3	0.5	1.0	1.0	1.0
	0.15	0.15	0.2	0.2	In the range of total mineral admixture	
Impurities including	0.2	0.3	0.5	0.5	0.5	0.5
Smut and ergot,	0.05	0.04	0.1	0.1	0.1	0.1
Acroptylon repens, Lolium temulentum, Sophora alopecuroides L, Thermopsis lanceolata (totally)	0.05	0.05	0.1	0.1	0.1	0.1
Coronilla varia	0.1	0.1	0.1	0.1	0.1	0.1
Heliotropium ellipticum var. lasiocarpum	0.1	0.1	0.1	0.1	0.1	0.1
Trichodesma incanum	Not permitted					
Smut grains, max. %	5.0	5.0	5.0	8.0	8.0	10.0

72.- As per DSTU 3768:2004 text.

Mass fraction of protein, on dry matter, min. %	14.0	13.0	12.0	11.0	10.0	Not limited
Wet gluten, min. %	30	27	23	18	18	Not limited
Gluten Quality Group	I	I–II	I–II	I–II	I–III	Not limited
Units of gluten device	45–75	45–100	45–100	20–100	20–100	Not limited
Falling number, min. seconds	200	200	150	100	Max. 100	Not limited

Notes: Wet gluten mass characteristics and its quality are not mandatory for soft wheat grades. The indicators are provided as reference in the case of wheat delivery contracts to millers (flour production).

During wheat grade determination, the falling number is the preferred indicator.

Hard Wheat Requirements

Parameter	**Parameter and standard for soft wheat as per grade**				
	Grade 1	**Grade 2**	**Grade 3**	**Grade 4**	**Grade 5**
Standard composition	**V and VI types**			**V and VI types, VII type is admitted**	
Other types of wheat grains, max. %	10	10	10	10	Not limited
Including white-grained wheat kernels	2	4	8	10	Not limited
Test weight, g/litre, min.	750	750	730	710	Not limited
Moisture, max. %	14.5	14.5	14.5	14.5	14.5
Glassiness, min. %	70	60	50	40	Not limited
Grain admixture, max. %	5.0	5.0	8.0	10.0	15.0
Including germinated grains	1.0	1.0	3.0	3.0	In the range of total grain admixture
Foreign matter, max. %	2.0	2.0	3.0	5.0	5.0
Including					
Broken kernels	0.2	0.2	0.5	1.0	1.0
Fusariose kernels	0.3	0.5	0.5	1.0	1.0
Stemmed kernels	0.5	0.5	0.5	0.5	0.5
Mineral admixture, including stones, slag and ore	0.3	0.3	0.5	0.5	1.0
	0.15	0.15	0.2	0.3	In the range of total mineral admixture
Impurities including	0.2	0.3	0.5	0.5	0.5

Smut and ergot, Acroptylon repens, Lolium temulentum, Sophora alopecuroides L, Thermopsis lanceolata (totally)	0.05	0.05	0.1	0.1	0.1
	0.05	0.05	0.1	0.1	0.1
Coronilla varia	0.1	0.1	0.1	0.1	0.1
Heliotropium ellipticum var. lasiocarpum	0.1	0.1	0.1	0.1	0.1
Trichodesma incanum	Not permitted				
Smut grains, max. %	5.0	5.0	5.0	5.0	10.0
Mass fraction of protein, on dry matter, min. %	15.0	14.0	12.0	11.0	Not limited
Falling number, min. seconds	200	200	151	100	Not limited

Wheat for further export is to be in healthy condition, of normal smell and colour, not to be infected by pests and to meet with the following requirements:

Export Soft and Hard Wheat Requirements

Parameter	Wheat for milling	Wheat for feeding and other wheat
Test weight, g/litre	Min. 730	Not limited
Moisture, %	Max. 14.5	Max. 14.5
Mass fraction of protein, on dry matter, %	Min. 10.0	Max. 10.0

The wheat requirements regarding type, grain admixtures, foreign matter and other requirements are to be specified in the contract between the seller and the buyer.

Table E.2. Ukraine Barley Quality Standards[73]

Parameter	Requirements for barley used for:				
	Food	**Malt in spirits production**	**Feeding**	**Brewing**	
	Grade 1	Grade 2	Grade 3	Grade 1	Grade 2
Colour	Yellow with various tints	Colour of health grain. Dark grains are permitted		Light-yellow or yellow	Light-yellow, yellow or grey-yellow
Moisture, max. %	14.5	15.5	15.5	14.5	15.0
Test weight, g/litre, min.	600	570	Not limited	Not limited	
1,000 kernels weight, g, min.	Not limited			40.0	38.0
Protein, max. %	Not limited			11.0	11.5
Foreign matter, max. %	2.0	3.0	5.0	1.0	2.0
Including:					
Mineral admixture	0.3	0.5	1.0	0.5	0.5
Including					
Stones	0.1	0.1	0.5	0.1	0.1
Slag and ore	0.05	0.05	0.1	0.05	0.05
Damaged kernels	0.2	In the range of total foreign admixture			
Wild oats	1,0	In the range of total foreign admixture			
Corncockle	0.3	0.3	0.5	0.3	0.3
Fusariose kernels	1.0	1.0	1.0	Not permitted	
Impurities	0.2	0.2	0.2	0.2	0.2
Including					
Smut and ergot					
Acroptylon repens, Lolium temulentum, Sophora alopecuroides L, Thermopsis lanceolata (totally)	0.05	In the range of total foreign matter			
Heliotropium ellipticum var. lasiocarpum and Trichodesma incanum	Not permitted				

73.- As per DSTU 3769-98: Feed Barley. Technical Conditions.

Grain admixture, max. %	7.0	3.0	15.0	2.0	5.0
Including					
Barley kernels put in grain admixture	2.0	In the range of total foreign matter			
Germinated kernels	2.0	In the range of total foreign matter			
Other grain kernels and seeds put in grain admixture	3.0	In the range of total foreign matter			
Including					
Rye and oat kernels	0.5	In the range of total foreign matter			
Small kernels, max. %	5.0	5.0	Not limited	5.0	7.0
Size, min. %	Not limited			85.0	70.0
Germination ability, min. % (for grain delivered not earlier than 45 days after harvesting)	Not limited	92.0	Not limited	95.0	92.0
Vitality, min. % (for grain delivered not earlier that 45 days after harvesting)	Not limited	92.0	Not limited	95.0	95.0
Pests, infectiousness	Not permitted, excluding tick infectiousness not higher than 1st degree				

Note 1: *Size is a ratio of weight of barley kernels remaining on a separator with oval holes 2.5 mm x 20 mm (bolter Nr 2a – 25x20 as per TC 5.897-111722(1)) to main grain mass in percents.*

Note 2: *Recommended malting barley quality according to extract content, min. % – 79.0 for the 1st grade and 77.0 for the 2nd grade – is written into the contract between the seller and the buyer.*

Table E.3. Ukraine Corn Quality Standards[74]

Corn Technical Conditions. Quality parameters:

- Corn is divided into types as per botanical and biological characteristics, colour and grain form.
- Depending on its intended use, corn is divided into five groups as follows:

Parameter	Parameter and norm for corn for various usages				
	Food concentrates and products	Baby nutrition	Groats and flour	Starch and syrup	Feeding
Type	I–VIII types				I–IX types
Moisture, max. %	15.0	15.0	15.0	15.0	15.0
Particularly after drying, min. %	13.0	13.0	13.0	13.0	13.0
Grain admixture, max. %	7.0	3.0	7.0	7.0	15.0
Including					
Germinated kernels	2.0	Not permitted	2.0	In the range of grain admixture	5.0
Other grains, kernels and seeds, % of admixture	Not permitted				2.0
Foreign matter, max. %	1.0	1.0	2.0	3.0	5.0
Including					
Damaged kernels	0.5	Not permitted	1.0	1.0	1.0
Mineral admixture	0.3	0.3	0.3	0.3	1.0
Including stones, slag and ore	0.1	0.1	0.1	In the range of mineral admixture	
Impurities	0.2	Not permitted	0.2	0.2	0.2
Including					
Smut and ergot	0.15	Not permitted	0.15	0.15	0.15
Russian centaury and Coronilla	0.1	Not permitted	0.1	0.1	0.1

74.- National Standard of Ukraine DSTU 4525:2000: Corn. Technical Conditions.

Heliotropium ellipticum var. lasiocarpum and Trichodesma incanum, castor-oil plant, ambrosia	Not permitted				
Size, min. % for corn of VII–VIII types	80.0, not limited	Not limited			
Germination ability, min. %	Not limited	55.0	Not limited	55.0	Not limited
Pests infectiousness	Not permitted		Not permitted excluding tick infectiousness not higher than 1st degree		

Table E.4. EU Grain Quality Standards[75]

	Durum wheat	Common wheat	Barley	Maize	Sorghum
A.Maximum moisture content	14.5%	14.5%	14,5%	13.5%	13.5%
B.Maximum percentage of matter which is not basic cereal of unimpaired quality:	12%	12%	12%	12%	12%
1.Broken grains	6%	5%	5%	5%	5%
2.Impurities consisting of grains (other than indicated at 3)	5%	7%	12%	5%	5%
of which:					
(a)shrivelled grains				–	–
(b)other cereals	3%		5%	–	–
(c)grains damaged by pests					
(d)grains in which the germ is discoloured			–	–	–
(e)grains overheated during drying	0.50%	0.50%	3%	0.50%	0.50%
3.Mottled grains and/or grains affected with fusariosis,	5%	–	–	–	–
of which:					
– grains affected with fusariosis	1.5 %	–	–	–	–
4.Sprouted grains	4%	4%	6%	6%	6%

75.- Source: EC Commission Regulation #824/2000 dated 19 April 2000 about creating grain accepting procedures by intervention agencies and choosing of grain quality analyses (consolidates version added in 2003, 2004, 2005 and 2006).

5.Miscellaneous impurities (Schwarzbesatz),	3%	3%	3%	3%	3%
of which:					
(a)extraneous seeds:					
– noxious	0.10%	0.10%	0.10%	0.10%	0.10%
– other					
(b)damaged grains:					
– grains damaged by spontaneous heating or too extreme heating during drying	0.05%	0.05%			
– other					
(c)extraneous matter					
(d)husks					
(e)ergot	0.05%	0.05%	–	–	–
(f)decayed grains			–	–	–
(g)dead insects and fragments of insects					
C.Maximum percentage of wholly or partially piebald grains	27%	–	–	–	–
D.Maximum tannin content*	–	–	–	–	1%
E.Minimum specific weight (kg/hl)	78	73	62		–
F.Minimum protein content*:					
– 2002/2003 marketing year and onwards	11.5%	10.5%			
G.Hagberg falling number (seconds)	220	220			
H.Minimum Zeleny index (ml)	–	22	–	–	–
* As a percentage of dry matter.					

ANNEX A
Perspectives and Options for EU Grain Trade with Ukraine

Summary

Mr Mandelson (the then EU Trade Commissioner) said that EU farmers should not fear competition from Ukraine, which has a highly productive agricultural sector and is one of the world's largest wheat growers. *"As far as wheat is concerned there is plenty of demand to go round at the moment," he said.*[76]

In January 2008, the EU Trade Commissioner said that wheat should not be a problem in an EU-Ukraine Free Trade Agreement (FTA). As negotiations progress, it is yet to be seen whether these words will take precedence over the EU's need to ensure stable domestic markets and traditional sensitivity to liberalising agricultural imports from competitors.

The purpose of this report is to facilitate the understanding of the options and perspectives for Ukrainian grain exports to the EU through the EU-Ukraine FTA. A brief explanation of the EU decision making process (Section I) is followed by a description of EU grain policy and trade outlook (Section II) and EU grain tariffs (Section III). Section IV highlights some of the grain import preferences granted by the EU in other trade liberalisation agreements. Section V then presents four options for improving access to EU grain markets. Section VI briefly concludes.

Of the four options, new grain Tariff Rate Quotas (TRQs) would appear to be the most interesting, with the standard approach to EU trade agreements suggesting that a quota of over 1 million tonnes of wheat should be requested by the Ukraine, though the final outcome of the FTA is difficult to predict. For maize, the same approach would be a TRQ exceeding 500,000 tonnes and just 100,000 tonnes for barley. A recent EU trade liberalisation with Moldova, creating important zero duty TRQs for wheat, maize and barley based on recent trade flows, then doubling the TRQ volumes over the next five years, is noted with interest, though unfortunately so is the clear indication in the agreement that this was possible due to Moldova's small size.

Options looking at a renegotiation of the 2002 WTO TRQs or a simple tariff cut would both have to overcome significant hurdles to be useful to the FTA's objective of increasing trade opportunities for Ukrainian grain exports. A final option reflects on whether some form of volume flexibility in addition to a base TRQ might help improve market access.

76.- Financial Times, 17 January 2008.

SECTION I. EU organization and approach for trade negotiations

1.1 Policy Making Process

The European Council (which is composed of EU Member States) gives the European Commission a mandate to negotiate through the "133 Committee" – EU Member State (MS) Trade Ministry Representatives. For the EU-Ukraine Free Trade Agreement (FTA), the European Council adopted the negotiating directives in January 2007 as part of an "Enhanced Agreement" between the EU and Ukraine. The Enhanced Agreement will cover all aspects of EU-Ukraine relations with the goal of "creating a stable and prosperous European neighbourhood through closer economic ties".[77]

The FTA negotiations were officially launched on 18 February 2008 following Ukraine's accession to the World Trade Organisation (WTO). Six rounds of negotiations have already been held and the next round is scheduled to take place on 7–11 July 2009 in Kiev.[78] The European Commission describes the objectives of the FTA as:

> "...a deep and comprehensive FTA, going far beyond WTO rules, which will not only include significant reductions in tariffs but also a high degree of regulatory approximation. The removal of non-tariff barriers through regulatory alignment, including effective enforcement, will be the most important way in which the two markets can be integrated."[79]

The role of the European Commission is to negotiate a solution that is acceptable to the Commission, Council and Ukraine. The European Commission periodically reports to the 133 Committee on progress and also eventually for draft approval.

In order for the final FTA to be adopted, a Qualified Majority Vote (QMV) is needed in the European Council or 255 of 355 votes (or 91 votes are needed to block agreement). A country's number of votes are a function of its size. For example, Germany (58 votes), Poland (28) and Romania (16) could form a blocking minority.

In other words, unanimity is not needed from Member States to get an FTA approved, but it is important that there is neither significant opposition nor that countries start to coalesce around a blocking minority.

1.2 Key Actors

Within the European Commission, the Directorate General (DG) for Trade is responsible for the overall co-ordination of the FTA. The DG for Agriculture is responsible for agriculture. Within the DG for Agriculture, the international section is responsible for the agriculture component of the FTA negotiations. The Cereals Management Committee is a weekly meeting of MS grain officials who give their opinions on European Commission proposals for management of cereals regime (e.g. fixing export subsidy levels) to ensure stable markets.

77.- http://ec.europa.eu/enterprise/international_relations/facilitating_trade/free_trade/index_en.htm#ukraine

78.- http://ec.europa.eu/enterprise/international_relations/docs/fta/overview_ongoing_trade_negotiations_en.pdf

79.- http://ec.europa.eu/enterprise/international_relations/facilitating_trade/free_trade/index_en.htm#ukraine

There are also important informal channels for MS and interested parties to communicate with the European Commission, particularly through high level commission officials and the country's EU Commissioner.

National agriculture ministries play an important role, with the French Ministry believed to be the most influential. There is no formal role for farm groups, but the Commission will talk to them and be aware of their views. They are best able to defend their interests through their national agriculture ministry, with whom most farm groups co-operate very closely.

Key farm groups at the European level include the following organizations (appear in no particular priority):

1. The Committee of Professional Agricultural Organisations and the General Confederation of Agricultural Co-operatives in the European Union (COPA-COGECA, http://www.copa-cogeca.be);
2. COCERAL,[80] representing European agricultural trade interests including cereals, rice, feedstuffs, oilseeds, olive oil, oils and fats and agrosupply trade;
3. ONIC,[81] representing French cereal interests. As of 1 April 2009, ONIC and five other French agricultural organizations merged to form FranceAgriMer, a newly created organisation that will now represent French cereal growers and exporters and will have a key role in administering agricultural policy in France; and
4. The European Feed Manufacturers' Federation (FEFAC, http://www.fefac.org/home.aspx), representing the European Compound Feed Industry at the level of the European Institutions.

The European farm and industry groups also often make their views known to policy makers through press releases, position papers, market research publications and other tools. For instance, Copa-Cogeca announced in a press release dated 24 April 2009 that the organisation is extremely concerned about Morocco's request to revise the existing entry price system for fresh fruit and vegetables and to increase import quotas of fruit and vegetables entering the EU.[82] Just because some farm groups oppose trade liberalisation does not mean they can block it completely, the same argument also applies to Member States, but both do have an important influence on the outcome of any trade negotiations.

The European compound feed industry (represented by FEFAC) seems to be a natural ally for the Ukrainian grain exporters. The feed industry views the future challenge as not so much the management of grain surpluses as in the past but how to cope with shortages. While they call for improved access to world markets (for example the elimination on quantitative restrictions on grain imports through the current system of Tariff Rate Quotas, TRQs) and would strongly support improved trade opening for Ukrainian grain, they recognise that this is a sensitive issue that cannot be separated from the broader context international trade agreements on market access.

80.- Comité du Commerce des céréales, aliments du bétail, oléagineux, huile d'olive, huiles et graisses et agrofournitures.

80.- Office National Interprofessionnel des Grandes Cultures (http://www.onigc.fr).

82.- Press release dated 24 April 2009 entitled "Copa-Cogeca is extremely concerned about the association agreement negotiations between Morocco and the EU".

(http://www.copa-cogeca.be/Download.ashx?ID=509035&fmt=pdf accessed on 25 May 2009.)

1.3 Reflections

There is a need to develop support within the Council to prevent a blocking minority from forming. It therefore might be useful to:

- Develop links with the EU feed industry (particularly in key markets such as Spain) even though their weight in lobbying is realistically not large;

- Explain to French wheat exporters that the FTA should not be seen as a threat. Ukrainian meat import concessions could be in meat producers interests which could help to influence the French Ministry of Agriculture's views when balancing their national interests. It could be argued that increased Ukrainian exports of grain would not affect French wheat export interests as effectively the grain is already marketed in an integrated Mediterranean Basin market, where additional Ukrainian exports to Spain mean less competition for French exports to large North African and Middle Eastern importers;

- Understand the views of Germany, for whom the industrial trade liberalisation of exports to Ukraine is important and may help to offset opposition from German farm interests and the Agriculture Ministry;

- Understand the views of the UK, a country with surplus feed wheat, but which is typically in favour of free trade, above and beyond farming interests, though their views are not yet clear on the Ukrainian FTA; and

- Establish contact with Sweden, which is also typically open to free trade, and they take over the next EU Council Presidency (chairing the Council) from July to December 2009. The Council Presidency can play an important role in relations between the Commission and other Member States; it would very useful to establish government level links to ensure a smooth flow of information and ideas.

1.4 Free Trade Agreements

The General Agreement on Tariffs and Trade (GATT) of the WTO provides the definition of a Free Trade Area:

> "A free-trade area shall be understood to mean a group of two or more customs territories in which the duties and other restrictive regulations of commerce (except, where necessary, those permitted under Articles XI, XII, XIII, XIV, XV, and XX) are eliminated on *substantially all the trade* between the constituent territories in products originating in such territories (emphasis added)."[83]

What *substantially all trade* means has not been formally defined though is generally recognised as liberalisation of 90% or 95% of all trade and remains a contentious point in determining the validity of some FTAs. Although the principle of free trade involves free movement of goods between countries, none of the free trade agreements cover 100% of the products traded between the EU and its trading partners.

There are also some exceptions permitted by the GATT. Exceptions are usually made under Article XX: General Exceptions and Article XXI: Security Exceptions, but the exceptions

83.- GATT, 1994, Article XXIV, paragraph 8 section (b).

allowed by Article XI: General Elimination of Quantitative Restrictions relates more to trade in agricultural products. Article XI is reproduced for reference in Annex 1.

Past EU trade agreements sometimes left out agriculture (Turkey 1995) or only had reduced coverage (Morocco, 2000). For Morocco, 88% of Moroccan agricultural exports to the EU are covered by the agreement, but only 14% are fully liberalised (i.e. zero duties, no quotas or other restrictions). Early evidence from the EU-Morocco agreement suggests that EU import concessions did not lead to any significant increase in Moroccan exports. Key products such as tomatoes were unable to expand their share of Moroccan exports as they were restricted (EU minimum entry prices and seasonal tariff changes as well as TRQs) while the export of newly liberalised products did not significantly change.[84]

The EU will often grant more import concessions than it receives to encourage development in the third country. The balance of EU Ukrainian trade favours the EU (particularly if Ukrainian energy shipments to the EU are factored out); in 2007 EU total exports to the Ukraine were EUR 22.4 billion compared to EUR 12.4 billion in the reverse direction. The EU is also marginally a net agriculture exporter to the Ukraine, in 2007, EU agricultural exports totalled EUR 1.228 billion compared to EU imports of EUR 1.217 billion (Eurostat). A key component of the EU-Mediterranean countries' FTAs was the completion of trade agreements amongst some Mediterranean countries that are not members of the EU (for example, Egypt, Morocco and Tunisia, the so called South-South Trade Regional Integration). Given the importance of the Mediterranean Basin countries in importing grain, this may be an interesting avenue to reflect upon.

84.- It should be noted that a subsequent revision to the agreement in 2003 provided an expanded opportunity for Moroccan tomato exports to the EU.

SECTION II. Overview and outlook of EU grain trade and policy

2.1 EU Wheat Imports and Outlook

Ukraine has been playing an increasingly important role as a supplier of wheat to the EU (Table 1.)

Table 1. EU-27 Imports of Wheat and Meslin (CN 1001), '000 tonnes

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Eu-27_Extra	3,311	3,855	5,505	12,215	6,866	6,946	7,102	5,613	6,394	6,847
Kazakhstan	125	217	115	199	240	64	252	240	412	534
Russian Federation	45	2	572	3,669	1,865	722	786	778	1,026	724
Ukraine	54	28	1,159	4,556	241	673	1,924	714	212	2,759
Ukraine's share, %	2%	1%	21%	37%	4%	10%	27%	13%	3%	40%

Source: Eurostat

EU-27 countries mostly import medium and low quality wheat85 (CN 1001 90 99 20 and 1001 90 99 30, respectively, follow link86 for EU, CN for wheat) from Ukraine and the Russian Federation (table 2).

Table 2. EU-27 Imports of Wheat (CN 1001 9099) '000 tonnes

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Eu-27_Extra	2,348	2,503	4,055	11,032	5,088	5,158	5,329	3,592	4,485	5,529
Kazakhstan	125	216	111	192	236	54	212	223	307	325
Russian Federation	40	0	561	3,630	1,809	715	771	770	998	708
Ukraine	51	25	1,157	4,556	238	673	1,924	711	212	2,759
Ukraine's share, %	2%	1%	29%	41%	5%	13%	36%	20%	5%	50%

Source: Eurostat COMEXT

Feed use in EU-27 is currently forecasted to increase and reach nearly 63 million tonnes in 2017 (Table 3), creating some trade perspectives, especially in years of low grain production in the EU.

85.-As defined in Annex I to Commission Regulation (EC) No. 1249/96 of 28 June 1996.

86.- http://ec.europa.eu/taxation_customs/dds/cgi-bin/tarchap?Taric=1001909900&Download=0&Periodic=0&ProdLine=80&Lang=EN&SimDate=20090525&Country=----------&YesNo=1&Indent=3&Action=1#OK

Table 3. OECD Estimates of EU-27 Wheat Imports and Feed Use, '000 tonnes

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Imports	7,682	6,447	5,833	5,790	6,102	6,178	6,312	6,447	6,581	6,716
Feed use	54,537	58,451	58,836	58,923	58,619	59,681	60,480	60,992	61,860	62,849

Source: OECD

Medium and long term projections for EU grains point towards a continuously tight market situation, high levels of demand, high prices and little overproduction. EU imports of grain are set to increase as shown by the above wheat data, with feed use also projected to gradually increase over the next ten years by OECD.

2.2 Policy Outlook

In the medium term, there are several important possible policy changes for the EU. The EU has committed to a voluntary ending, by 2013, of the use of export subsidies. The role of intervention (public storage) is also being reduced. The recent revision to the EU Common Agricultural policy (CAP) known as the 'Health Check', agreed in November 2008, foresees the gradual dismantling of grain intervention, with maximum volume limits as well as the removal of some grains from the right to use intervention.

Both these measures will reduce the market management tools available to the European Commission in its role of ensuring stable agricultural markets. It may also increase the sensitivity of the EU grain trade to imports especially for those with few exporting options (e.g. no access to ports or with mostly feedgrain).

At the same time, it gives the Commission more freedom to implement market based measures, as policy is being directed towards encouraging market signals to function effectively. The Commission argues that removing most intervention will help grain prices to better reflect market conditions. Trade liberalisation could be seen in this light.

While the status of the WTO Doha Development Agenda round of talks is unclear, over the medium term it is possible that an agreement could be reached requiring the EU to adopt minimum access quotas for grain and lower tariffs.

SECTION III. Grain tariffs

3.1 EU Import Tariffs and Trade Concessions for Grain

At present, EU applies the following tariffs and bound tariff rates (Table 4) and tariff-rate quotas (Table 5):

Table 4. Current EU Grain Import Tariffs, EUR/tonne

	Applied Tariff	Bound Tariff
Durum wheat	0	148
Wheat, high quality	0	95
Wheat, medium/low quality	95	95
Barley	93	93
Rye	37.15	93
Sorghum	37.15	93
Maize (corn)	18.95	94

Note: Applied tariffs at May 2009.
Note: The applied tariff is the rate currently used for imports. The bound tariff is the maximum level of tariff the EU can impose based on its WTO commitments.
Note: This does not take into account TRQs or other preferences; see below for more details.
Note: "High" quality (non-durum) wheat must have a minimum protein content of 14%, a minimum specific weight of 77 kg/hectolitre and a maximum impurity percentage (Schwarzbesatz) of 1.5%. All other wheat is considered medium/low quality.
Source: European Commission

Table 5. EU WTO Tariff Rate Quotas (TRQ) for Grains, EUR /tonne

	TRQ	Tariff
Durum wheat	50,000	148
Quality wheat	30,000	0
Wheat, medium/low quality	2,989,240	12
Barley	306,215	16
Malting barley	50,000	8
Maize (only to Portugal)	500,000	Up to 50
Maize	242,074	0
Maize and Sorghum (to Spain)	2,000,000 300,000	n.a.

Note: The medium/low quality wheat TRQ is available to the following countries:United States 572,000 tonnes; Canada 38,853 tonnes; other countries 2,371,600 tonnes; all countries 6,787 tonnes.
Note: The maize and sorghum quota for imports into Spain (the so called abatamiento quota) is reduced by imports into Spain of non-grain feed ingredients and issued through a tender system; the tariff rate is not fixed.
Source: EU Common External Tariff

There are further import preferences granted by the EU, through over 30 different Free Trade Agreements (FTAs) and other trade liberalisation agreements highlighted in the next section.

3.2 Ukraine Import Tariffs and Trade Concessions for Grain

Ukraine applies ad valorem import tariffs (a tariff rate charged as percentage of the price) in line with its WTO accession commitments, as opposed to the EU which, for grain, typically levies specific import tariffs in EUR/tonne equivalents. The import tariffs currently applied in Ukraine are equal to Ukraine's bound tariff ceilings under WTO (Table 6).

Table 6. Current Ukraine Grain Import Tariffs, %

Ukr HS	Product	Applied tariff, %	Max.[87] tariff, %
1001 10 00 90	Hard wheat (other):	10	10
1001 90 99 00	Soft wheat, spelt and meslin (other)	10	10
1002 00 00 00	Rye	20	20
1003 00 90 00	Barley (other)	5	5
1004 00 00 00	Oats	5	5
1005 90 00 00	Maize (other)	10	10

Source: The Law of Ukraine "On Customs Tariff (as of 25 May 2009, www.rada.gov.ua) for applied tariffs and WTO (http://www.wto.org/english/thewto_e/countries_e/ukraine_e.htm) for bound tariff rates.

Depending on wheat prices, and in-quota vs. out of quota comparisons, the ad valorem equivalents of EU's import tariffs may be higher or lower than those applied in Ukraine. Table 7 provides a simplified comparison of Ukraine and EU import tariffs (within and outside the TRQ) for low and medium quality wheat.

Table 7. Comparison of Wheat Import Tariffs in the EU and Ukraine[88]

EU import tariff, EUR/mt	TRQ	EUR 12
	Bound tariff rate	EUR 95
EU import CIF value, USD/mt (2007)*		USD 305
USD/EUR exchange rate (July 2007)		1.37
***Ad valorem* equivalent of EU Specific import tariff, %**	**TRQ**	**5%**
	Bound rate	**43%**
Ukraine import tariff (applied = bound rate), %		**10%**

** UN Comtrade*

Ukraine largely liberalised trade89 in food and agricultural products (including cereals) in its FTA concluded with the countries of the former Soviet Union (FSU) in mid to late 1990s, although the FTAs with Estonia, Latvia and Lithuania were denounced after the accession of these countries to the EU in 2004. The following countries apply zero import tariffs and use no quantitative restrictions in grain trade with Ukraine: Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyzstan, the Russian Federation, Tajikistan, Turkmenistan and Uzbekistan.
The only FTA concluded between Ukraine and a non-FSU country is with the former Yugoslav

87.- Bound concessions at the HS 6-digit subheading level for Ukraine as reported on Ukraine's WTO accession page (http://www.wto.org/english/thewto_e/countries_e/ukraine_e.htm)

88.- This calculation is sensitive to the import values used, for example, based on the average EU import price of medium/low quality wheat for the period 2006–2008, the EU's ad valorem equivalents are 8% in quota and 63% at the bound rate.

89.- Import tariffs are set at zero with the exception of certain sugar, confectionary, alcohol and tobacco products (Russian Federation); no quantitative restrictions are applied.

Republic of Macedonia. Under this FTA, the former Yugoslav Republic of Macedonia established the following TRQs for grain imported from Ukraine: 5,000 tonnes of barley and 20,000 tonnes of maize.

SECTION IV. Previous trade agrements and grain

4.1 EU WTO Wheat and Barley TRQs

Until the end of 2002, EU import tariff regimes for cereal and rice were based on the Margin of Preference (MOP). Under the MOP, the import tariff on wheat and feedgrains was the difference between the maximum duty-paid price (155% of the intervention price) and the landed Rotterdam price based on United States market prices. In the case of wheat, there were three qualities: high, medium and low quality. This tariff system provided a high level of protection until 2002. In 2002, high United States prices reduced tariff rates, while low prices following substantial grain harvests, particularly, in the Russian Federation and Ukraine, made EU imports from the Russian Federation and Ukraine highly competitive on EU markets.

The decision to abolish the MOP was driven by a number of factors including:

- protectionist calls from EU wheat producers in the face of record imports in 2002;
- longer-term prospects of continued pressure from wheat imports from the Black Sea;
- the risk of the MOP system to WTO challenge;[90] and
- need to separate the import duty from the intervention levels so that intervention could be lowered prior to EU accession of Central and Eastern European Countries (CEECs).

In July 2002, the EU notified the WTO of its intention to withdraw its MOP WTO concessions under GATT Article 28.[91] Article 28 allows WTO members to renegotiate prior WTO concessions and provides guidance on how such a negotiation should be structured. When an existing concession is replaced by a TRQ, Article 28 requires that the amount of compensation provided should exceed the level of trade affected and should be calculated considering future trade prospects. This calculation should be the greater of: (a) the average annual trade in the most recent representative three-year period, increased by the average annual growth rate in the same period, or by 10%, whichever is greater; or (b) trade in the most recent year increased by 10%. This language leaves quite a bit of room for negotiation over the determination of the "most recent representative period". From the EU Notification, it can be seen that the choice of base period was 1998/1999, 1999/2000 and 2000/2001. There were virtually no Ukrainian exports to the EU during this period.

The final agreement, in December 2002, resulted in TRQs replacing the MOP tariff system for medium/low quality wheat and barley. Part of the wheat TRQ is allocated to the United States and Canada, the rest is open to other countries. These are WTO commitments as they replace the previous MOP WTO concessions.

90.- The MOP was a variable tariff system that had some similarities with Chile's price band system that had been found WTO inconsistent (i.e. not permitted under WTO rules).

91.- See Annex 2 for the EU Notification.

4.2 Recent EU Trade Agreements and Grain

While the EU has many FTA and trade liberalisation agreements, the most important grain concessions utilized are those for which political objectives were the driving force behind the agreement, for example, liberalisation of EU agricultural imports from the Western Balkan Countries (WBCs) in 2001. The following section is not an exhaustive listing of grain concessions in trade agreements, but is intended to give a representative selection of the type of concessions included in agreements.

Central and Eastern European Countries (CEECs)

The CEECs, for example, Hungary and Poland, first signed Association Agreements with the EU in the mid-1990s, though grain concessions were fairly limited (with for example, some Hungarian maize exports). In 2000, the so called "Double Zero" Agreements were negotiated, eliminating export duties and tariffs on a range of products though again grain was not extensively included. In 2002, the so called "Double Profits" expanded the list of products for which export subsidies and tariffs were eliminated, this time including grain, although the impact was limited given these countries joined the EU in 2004.

The Republic of Moldova

In 2008, the EU granted the Republic of Moldova tariff free access for all industrial products as well as some trade concessions for agriculture.92 TRQs at zero duty were granted for wheat (25,000 tonnes, increasing to 50,000 tonnes by 2012; barley, 20,000 tonnes increasing to 45,000 tonnes; and maize, 15,000 tonnes increasing to 40,000 tonnes). The concessions run until 2012, but an EU-Republic of Moldova FTA has been launched, currently in the phase of preparing impact assessments. The quotas are similar to average Moldovan exports to the EU in the three years preceding the agreement.

From the Commission Regulation: "The general level of imports from the Republic of Moldova is merely 0,03 % of all Community imports. Further market opening is expected to support the development of the Republic of Moldova's economy through increased export performance while not creating negative effects for the Community."

The principle of offering trade based on the previous three years then increased by 100% for these three key grains is noted, though the disclaimer by the EU that the Republic of Moldova is small is perhaps an indication that Ukraine should not expect comparably scaled TRQs for these products.

Morocco

The EU-Morocco FTA[93] (2000, revised 2003) has a special arrangement for EU exports of wheat to Morocco (Annex 3). A TRQ is fixed based on the expected outcome of the domestic wheat harvest with the quota size rising in poor harvests. Morocco also agreed to match tariffs for EU imports if it should offer wheat import concessions to any other country.

92.- http://europa.eu/rapid/pressReleasesAction.do?reference=MEMO/09/180&format=HTML&aged=0&language=EN&guiLanguage=en

93.- http://ec.europa.eu/world/agreements/prepareCreateTreatiesWorkspace/treatiesGeneralData.do?step=0&redirect=true&treatyId=252

Mercosur FTA

The EU attempted to negotiate an FTA with Mercosur (Argentina, Brazil, Paraguay and Uruguay) between 2000 and 2004 without success. Argentina and Brazil are both important agricultural exporters and demanded significant agricultural import concessions from the EU. The EU's offer[94] to Mercosur included full liberalisation (zero duties, no quotas) for durum and high quality wheat as well as barley. A 200,000 tonne TRQ for low-quality wheat and a 700,000 tonne TRQ for maize were also offered.

Turkey

A Custom Union between the EU and Turkey (1995) excluded agricultural products. A subsequent revision (1998) granted a minor reduction in the EU import tariff for rye. A minor tariff reduction for rye, up to EUR 11.68/tonne, was granted provided Turkey applied an export tax of the same amount on the rye.[95]

The African Caribbean and Pacific countries (ACP)

The African Caribbean and Pacific group of 77 countries, mostly former colonies of European countries, has been granted preferential access to EU markets. Economic Partnership Agreements (EPAs) are being negotiated with these countries to replace the existing trade preferences that date back to the 1970s. Tariff and quota free access is granted to grain, though in practice the ACP countries are not major producers of grain let alone exporters so there is little export of grain to the EU.

Least Developed Countries (LDCs)

The Least Developed Countries (49 of the poorest countries in the world) were granted tariff free access for all products (except weapons, bananas, rice and sugar) in 2001. In practice, as with the ACPs, the grain production in these countries is minor and exports even less.

The Western Balkan Countries (WBCs)

In 2001, the countries of former Yugoslavia (for example, Croatia) were granted full tariff free access to EU markets (except for "baby beef", sour cherries and wine). This agreement was designed to assist the reconstruction of former Yugoslavia, as well as recognizing that these countries would be virtually surrounded by the EU following the accession of the CEECs in the mid-2000s, with high level political interests over-riding agricultural protection.

Albania

Albania did not benefit from the opening to the former Yugoslavian countries. A 2008 agreement[96] sees the progressive removal of many agricultural tariffs but not for grain; however, a 20,000 tonne tariff free quota for low-quality wheat was granted.

94.- Note the EU's offer was conditional on many counts; for example, accepting EU phytosanitary rules. The offer was never made public. This information is based on private communication with those involved in the negotiations.

95.- http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:1998:086:0003:0008:EN:PDF

96.- http://register.consilium.europa.eu/pdf/en/08/st07/st07998.en08.pdf

SECTION V. Options for A Grain trade agreement with Ukraine

The previous sections have highlighted that despite the existence of some EU trade concessions for grain, there have not been important import flows created for grain except were high level political objectives have predominated, which may be an indication in part of the sensitivity of the grain sector in the EU.

With full liberalisation of EU grain import tariffs in the FTA being extremely unlikely, the aim of this section is to explore several scenarios that could offer enhanced grain export opportunities to Ukraine while taking into account the sensibilities in the EU that need to be at least partially addressed in finding a mutually agreeable solution in the FTA.

The first option of renegotiating the current WTO TRQs incurs many difficulties and even if possible would give uncertain results. The second option of new TRQs presents the standard approach taken by the European Commission in agricultural trade liberalisation negotiations and provides a baseline for Ukraine to evaluate any eventual EU offer for grain imports. The third option of preferential tariff reductions for Ukrainian grain exports risks creating fears in the EU of unlimited grain imports from Ukraine and, from the viewpoint of EU grain producers, destabilising EU markets. It may also be difficult to negotiate a tariff that is sufficiently low to enable Ukrainian exports in all years. The fourth option, a more speculative concept, is for some element of volume variability based on EU domestic needs (beyond fixed quotas) to take into account likely variability in EU demand. However, this concept would need further reflection and development if it were to be considered.

5.1 Renegotiation of the current WTO Quotas

This option is to request the EU to renegotiate the 2002 WTO TRQs for medium/low quality wheat and barley, to which Ukraine has no specific rights but only access to the erga omnes (open to all countries) TRQs. The aim would be to ensure Ukraine has its own TRQs.

In brief, this option presents many practical problems, which makes it very unlikely to be favoured by the EU, and would, if pursued, lead to uncertain results that might not be in Ukraine's interest.

In Section IV, the background to the WTO TRQs was explained. It is important to remember that these TRQs are not preferential tariff quotas but the bound commitment of the EU from the Uruguay Round Agreement in Agriculture in the mid-1990s. Given the status of these TRQs within the WTO, other third countries, notably Canada and the United States, would likely be strongly opposed to their renegotiation. It would also send a negative signal from the EU to the EU's WTO partners, creating a precedent that the EU would probably like to avoid for fear that other countries would follow suit.

If it decided to change these commitments, the EU must follow WTO rules (GATT Article 28) that require it to replace the withdrawn commitments with something that gives improved access. However, the Article 28 rules are often vague and give considerable power to the EU in any ensuing negotiations (for example, the EU would be able to choose the base period data and form of the

new concession, and does not have an obligation to successfully negotiate an agreement with key trade partners but only a requirement to attempt to find a solution, which in practice means that Ukraine would have little leverage over the eventual outcome).

It is worth stressing some points about the existing WTO TRQs. The EU **CANNOT** argue that they provide preferential access for Ukraine. First, the quotas (that Ukraine can access) are open to all countries, and second, because these TRQs represent the EU Uruguay Round commitments, they are in a sense equivalent to the bound tariffs. There is a case for arguing that Ukrainian exports within these quotas and the payment of EUR 12/tonne for wheat or EUR 16/tonne for barley should be viewed as payment of the full bound tariff, so if there is a calculation of tariffs that Ukrainian exports had faced during previous years, these numbers should be used. If the tariff rate is to be reduced in the FTA, the European Commission would, of course, like to start from the EUR 95/tonne and EUR 93/tonne levels for wheat and barley, respectively, but if the starting point were to be the average weighted tariff, the rate would be significantly lower. As will be seen in paragraph 5.2, the average tariff paid for Ukrainian non-preferential medium/low quality wheat exports to the EU was EUR 3/tonne (2006–2008 base period). While the average tariff calculation can be disputed by the European Commission (minor changes in the assumptions and calculation method can have an impact), the argument that tariff reductions should be based on the average tariff (including the EU's bound commitment at EUR 12/tonne) and not on the full bound tariff should be made convincingly.

As an aside, if country specific quotas had been agreed in 2002, then the outcome would have been less favourable to Ukraine. See Annex 2 for the EU base-period wheat data notified to the WTO for the 2002 negotiations. For barley and maize, Ukrainian exports to the EU in the Notification average less than 100 tonnes/year. In the base period chosen by the EU, Ukrainian exports were less than 20,000 tonnes/year and so would have reflected at best only very limited access to EU markets.

5.2 Creation of New TRQs

This option seeks to investigate how the EU might respond to a request for additional tariff rate quotas for Ukrainian exports of grain to the EU. It uses the standard methodology applied to trade negotiations of using the average EU imports from the previous three years to establish what a TRQ might be. However, this does not take into account how open the EU will be to grain imports and there is no certainty that the EU would accept the types of volumes presented below. It does however give a baseline to measure the sort of TRQs the Ukraine could expect assuming (admittedly unrealistically) that grain was not a sensitive issue in the EU.

Example of a TRQ Calculation for Wheat

The example calculation presented below is for medium/low quality wheat, referred to as "wheat" in this section for simplicity.

Ukraine requests a new quota for all grains in the FTA. This quota is in addition to the WTO TRQs highlighted above, and the quota would be specifically for Ukrainian exports.

Base Period

A base period of the last three years is normally used as a starting point. Typically this would be data from the last full three calendar years, 2006–2008. As EU wheat marketing years (MY) run from July to June, if the negotiation was only about wheat, there would be an argument to use marketing years, although that is not the case for most products covered by the FTA. If MYs were used, the Commission could argue in the July 2009 round of negotiations that the 2008/2009 data is not yet ready (which is true), which would exclude a great portion of the substantial Ukrainian exports in 2008.[97] Occasionally, different base periods are chosen due to exceptional circumstances. For example, if there was no production in a country one year due to a drought, a different base period might be agreed upon to better reflect usual conditions.

In trade negotiations, the standard protocol is to use each country's import data as it is usually more accurate than its export data. However, given there are only very minor differences between EU import data and Ukrainian export data. (Annex 4, Tables 4.2 and 4.3), the example calculation takes into consideration exclusively EU-27 official import data from the European Commission Statistics Division, Eurostat Comext Database of EU trade.

Table 8. EU-27 Imports of Ukrainian Wheat, million tonnes

	2001	2002	2003	2004	2005	2006	2007	2008
Wheat	1.16	4.56	0.24	0.67	1.92	0.71	0.21	2.76
Barley	0.32	0.53	0.10	0.19	0.07	0.04	0.02	0.21
Maize	0.17	0.07	0.13	0.43	0.34	0.38	0.08	1.18

Source: Eurostat Comext Database

The 2006–2008 annual average EU-27 import of common wheat from Ukraine was 1.227 million tonnes[98] However, the European Commission might argue that 2008 was an exceptional year due to the shortage of grain in the EU and the temporary suspension of most EU grain tariffs. They could argue that 2008 should not be used, therefore, in the base period as it was not a typical year.

The Olympic average, which takes five years of data and excludes the data of the highest and lowest figures, is sometimes used to smooth out unusual fluctuations or give an average picture. If the Olympic method were used to calculate the base period, the Olympic average import level from 2004 to 2008 would be 1.087 million tonnes, only slightly less than the 2006–2008 annual average.

Taking a longer term view, the annual average from 2001 to 2008 was 1.75 million tonnes and from 2002 to 2008 was 1.8 million tonnes. So Ukraine could strongly argue that it has consistently provided a high level of wheat that should serve as the starting point for the negotiations.

97.- By the time the FTA is completed, the 2008/2009 data would long since have been available, so this argument is not very strong.

98.- EU-27 data is used. However, during the 2002–2008 period, there were two EU enlargements. A review of the import data of EU-15, EU-25 and EU-27 showed that aggregate imports for each EU membership size varied only slightly as almost all exports were to the EU-15. Therefore, no adjustment to the import figures in Table 8 needs to be made to account for EU membership size difference. However, the 2004 import figure should be reduced by 10,000 to account for the 10,000 tonnes of wheat exported from Ukraine to the CEECs that joined the EU in May 2004. Also the 2005 import figure should be reduced by 36,000 to account for the 36,000 tonnes that were exported to these countries in 2005. Although these are the only adjustments needed to the import figures, they have not been made due to the very minor effect they would have on the numbers.

These different base periods highlight the importance of mastering the data to counter any arguments that the Commission might put forward as well as to reinforce Ukraine's case for significant grain concessions.

Tariffs

It is also necessary to fix a tariff reduction for the quota (the "in-quota tariff"). Given the special status of common wheat tariffs due to the 2002 WTO TRQ negotiation, these TRQs are also effectively part of the EU's bound (maximum) tariff. If the EU is committed to liberalising Ukrainian trade, then the tariff reduction should be based on the tariff actually paid (i.e. taking account of trade within the WTO TRQ, for which a duty of EUR 12/tonne was paid).[99] Therefore, Ukraine should reject any possible Commission arguments that tariff reductions should be made starting from the EUR 95/tonne bound tariff, and should state that tariff reductions should be based on the non-preferential bound levels included in the TRQ.

Given the specific nature of the WTO TRQs in being bound EU WTO commitments, a new concept is introduced: the average bound tariff. Normally the bound tariff is fixed, so the Commission is unlikely to accept this concept easily. However, in practice there are two bound tariffs: the in-quota tariff and the standard bound tariff. The average bound tariff is a reflection of this and could serve as a meeting point between the Ukraine, which would prefer that the EUR 12/tonne rate be used, and the Commission, which will likely argue for the EUR 95/tonne rate. In practice, the calculation is much closer to the EUR 12/tonne rate.

In 2008, wheat tariffs were zero and if all 2006–2007 trade occurred inside the TRQ, then the average tariff encountered was EUR 3/tonne. The Commission will want to negotiate starting from bound not applied tariffs and argue that in 2008 the bound tariff was still EUR 95/tonne. To counter this position, Ukraine could say that the 2008 trade would have occurred at the bound in-quota WTO TRQ rate of EUR 12/tonne up to the maximum quantity (2.3 million tonnes). In this case the average bound tariff 2006–2008 would have been just under EUR 23/tonne.[100]

While discussion about what the average tariff is may seem rather complex, it would be very good to argue that the actual tariff (either bound or applied) was very much lower than EUR 95/tonne (EUR 23 for bound tariffs and EUR 3 for applied tariffs) and liberalisation should start from this lower point, otherwise it cannot be considered a liberalization!

Therefore, there are good arguments for requesting a TRQ at zero duty or, as a less attractive alternative, at EUR 12/tonne (based on a roughly 50% reduction in the average bound tariff of 2006–2008 of EUR 23/tonne).

99.- The European Commission has an internal database of the imports that were in-quota and those that were not, but the standard trade data does not include this information so some assumptions need to be made in order to calculate the wheat that was in-quota. In practice, it is probably fairly safe to assume that all wheat exports during 2003–2007 were in-quota. In 2008, wheat tariffs were suspended so the applied tariff was zero.

100.- 2006+2007+2.3 million tonnes of 2008 imports at EUR 12/tonne, 0.46 million tonnes of 2008 imports at EUR 95/tonne is just under EUR 23/tonne.

Quota Expansion

Often TRQs are based on roughly the historical level of trade, then to acknowledge that the FTA is designed to increase trade opportunities, the quota is increased by 50% or 100% over the phase-in period of the agreement. Sometimes a safeguard clause is attached to the expansion component of the TRQ and care should be taken to be absolutely clear on the exact conditions of the safeguard clause (i.e. can the EU unilaterally withdraw the quota increase and do specific conditions need to be met to use the clause?).

Ukraine could argue therefore, for a 50% increase in the TRQs over a five year period. The EU-Moldova package offered close to base period trade at the start of the agreement with TRQs increasing by 100% from 2008 to 2012. However, the safeguard clause can be implemented very easily and unilaterally should "EU markets be disrupted".

Discussion

The arguments presented above are for a standard calculation. There is no suggestion that the Commission would be prepared to liberalise wheat imports to this extent. However, the Republic of Moldova agreement (2008) creates an interesting precedent, even if the Commission will state that the import volumes presented above would disrupt EU markets even though they are below EU total wheat imports. Also it could be argued that they would not disrupt EU markets but simply displace current imports.

The abovementioned figures of a 1.8 or 1.2 million tonne TRQ with a duty of EUR 0 or EUR 12, and the TRQ to be increase by 50% in five years, perhaps represent a best case scenario and also provide a benchmark against which to judge a EU offer, bearing in mind that Council agreement with these figures might be difficult for the Commission to procure.

In making a case for TRQs, dynamic, forward looking arguments should be used, particularly where past volumes have been constrained by EU tariffs (e.g. barley). Concentrating on static, historical data will tend to just "lock-in" the past trade level, when imports were restricted.

An assessment also needs to be made as to whether the tariff rate is "useful" under all conditions. For example, if Ukraine or the EU has a large (or small) harvest, will exports be possible? Will they be possible when 50% of the current bound tariff of low-quality feed wheat of EUR 95/tonne is EUR 47.50/tonne? In how many of the past years was Ukraine able to export grain to the EU and in what volume (probably quite a low figure).

Taking a long term outlook, what if the WTO Doha agreement is reached? If agreement was reached in say 2010, then the new WTO rules could be fully implemented by around 2015. A Doha agreement would be likely to include minimum access quotas (possibly based on domestic consumption). If the FTA TRQs could be used by the EU as part (or all) of its future minimum access commitments, then the EU may be more open to TRQs.

It can also be argued that Ukraine grain exports do not threaten EU markets as in practice Ukrainian trade if considered in the context of an integrated Mediterranean Basin market means that Ukrainian exports to the EU result in reduced Ukrainian exports to EU export markets

outside the EU. Higher Ukrainian feed wheat and barley exports to Spain would reduce the volume of these grains exported to the Middle East and North Africa, hence reducing competition for French exports. If the EU blocks Ukrainian access to EU markets, this results in lower EU exports to North Africa. Therefore, the EU should be encouraged to think in terms of the whole Mediterranean Basin.

5.3 Reduction of tariffs

The discussion of this option of a reduction in tariffs focuses on how such a reduction might be viewed. The tariff cut would likely be a reduction of the EU bound tariff rate, which in the case of medium/low quality wheat is EUR 95/tonne, applicable to unlimited quantities. For this option, the calculation of tariffs used to support the argument in favour of creating new TRQs is also useful to support a tariff reduction.

The potential of unlimited imports might threaten EU grain interests and thus mobilise opposition to agreement for tariff reduction. It is much easier politically for the Commission to "sell" TRQs to EU Member States. A straight tariff cut might encourage the Commission to introduce a strong safeguard clause so that even if the reduction looks good on paper, in the years when it would be most valuable to have a concession for unlimited exports (as in 2002), the Commission might be forced to suspend the concession (as in 2002) to preserve domestic market stability, thus limiting the value of reduced tariffs to Ukraine.

A reduced bound tariff would also have no benefit when the EU reduces applied tariffs below the bound rate as in 2008.

There are few precedents for the EU granting simple tariff reductions for grain. One precedent is South Africa (2003), for whom a wheat import tariff of EUR 16/tonne was set. However, a brief review of trade data for 2006–2008 reveals that there were no South African wheat exports to the EU during this period.

5.4 Flexibility

This option is a speculative idea that introduces the importer of first preference concept. A starting point is that EU grain supply varies with each campaign, with dramatic swings seen in recent campaigns. EU feed demand is fairly constant, so with limited public storage, import requirements are often high.

The Commission's role is to ensure "stable markets" but the EU has fewer tools than before to manage markets as it is committed to eliminating export subsidies by 2013 and grain intervention (public storage) is being reduced or stopped. Therefore, EU grain markets are likely to become more volatile in terms of both grain prices and quantities.

The importer of first preference at its simplest would be that Ukrainian grain exports rise when EU needs increase. A satisfactory (for Ukraine) minimum level of access would also be included in this idea (i.e. a TRQ).

Another example of a flexible arrangement is the EU-Morocco FTA (2000 and 2003 revision) whereby Moroccan tariffs for EU wheat are based on the outcome of the harvest,[101] with the EU guarantee that no other supplier country will be granted greater access.

A question remains as to whether this type of flexibility would encourage long-term development of the grain industry in Ukraine.

Adding to this idea of flexibility, access could be sold with a guarantee to provide grain as needed. An arrangement with the EU selling access to its market and Ukraine guaranteeing grain supply would require that the Ukraine have the capacity for long-term storage, which is cheaper in Ukraine than in the EU, and could help smooth the impact of variable output in Ukraine. It is assumed that the additional costs of storage and risk for Ukraine are passed on to EU purchasers. It would also open up the possibilities for multi-annual supply contracts with EU feedmills and for Ukraine to administer the TRQs in such a way as to ensure that the quota rents[102] stay in Ukraine.

However, many issues would have to be resolved for such an arrangement to be workable. Reaching agreement on the rules and details might be difficult and small changes in the agreement could have a large impact on actual import/export operations. How would the EU calculate its needs? The abatamiento quota showed that exercises to determine annual needs can lead to tension in the way that rules are implemented unless the rules are set out in a very clear form. The idea is also complex and would require the full support of both industry and the government if it is to succeed in underpinning an effective policy.

101.- For more details see http://www.fas.usda.gov/gainfiles/200311/146085206.pdf

102.- Quota rent is the difference between the full tariff and the preferential tariff. The issue of who benefits from the quota rent is complex depending on the form of the TRQ and market conditions.

SECTION VI. Summary

Several options for a Ukrainian approach to liberalising grain exports to the EU in the current EU-Ukraine Free Trade Agreement negotiations are presented.

The TRQ approach would appear to have the greatest chance for success; however, the quantities that would be acceptable to the European Commission are not known. Current Ukrainian grain exports would support the argument for a 1.2 to 1.8 million tonne medium- and low-quality wheat quota with a zero or very low in-quota duty rate. The figure for a maize quota would be around 550,000 tonnes and for a barley quota around 100,000 tonnes (although to put these figures in context, the EU has granted the Republic of Moldova a zero duty TRQ for barley of 50,000 tonnes).

Further, it is not clear how much room the European Commission would have to manoeuvre on grain trade liberalisation, so there is no certainty that these volumes would be acceptable to the EU (or to Ukraine, in terms of ambition). They do, however, set out a baseline for comparison with an eventual EU offer.

Past EU trade liberalisation agreements would serve to caution Ukraine to set realistic expectations, though there are several precedents for opening grain preferences.

APPENDIX 1 TO ANNEX A. GATT Article XI

Article XI: General Elimination of Quantitative Restrictions

1. No prohibitions or restrictions other than duties, taxes or other charges, whether made effective through quotas, import or export licenses or other measures, shall be instituted or maintained by any contracting party on the importation of any product of the territory of any other contracting party or on the exportation or sale for export of any product destined for the territory of any other contracting party.

2. The provisions of paragraph 1 of this Article shall not extend to the following:

(a) Export prohibitions or restrictions temporarily applied to prevent or relieve critical shortages of foodstuffs or other products essential to the exporting contracting party;

(b) Import and export prohibitions or restrictions necessary to the application of standards or regulations for the classification, grading or marketing of commodities in international trade;

(c) Import restrictions on any agricultural or fisheries product, imported in any form,* necessary to the enforcement of governmental measures which operate:

(i) to restrict the quantities of the like domestic product permitted to be marketed or produced, or, if there is no substantial domestic production of the like product, of a domestic product for which the imported product can be directly substituted; or

(ii) to remove a temporary surplus of the like domestic product, or, if there is no substantial domestic production of the like product, of a domestic product for which the imported product can be directly substituted, by making the surplus available to certain groups of domestic consumers free of charge or at prices below the current market level; or

(iii) to restrict the quantities permitted to be produced of any animal product the production of which is directly dependent, wholly or mainly, on the imported commodity, if the domestic production of that commodity is relatively negligible.

Any contracting party applying restrictions on the importation of any product pursuant to subparagraph (c) of this paragraph shall give public notice of the total quantity or value of the product permitted to be imported during a specified future period and of any change in such quantity or value. Moreover, any restrictions applied under (i) above shall not be such as will reduce the total of imports relative to the total of domestic production, as compared with the proportion which might reasonably be expected to rule between the two in the absence of restrictions. In determining this proportion, the contracting party shall pay due regard to the proportion prevailing during a previous representative period and to any special factors* which may have affected or may be affecting the trade in the product concerned.

Source: http://www.wto.org/english/docs_e/legal_e/legal_e.htm

APPENDIX 2 TO ANNEX A.
EU Notification to the WTO in 2002

EU15 imports of spelt, common wheat and meslin (excl seed) (Code 10019095)
By country of origin – By campaign year (01.07–30.06)

	Qunatity tonne				Value ECU 1,000/EUR O			
	AVG				AVG			
	1998/1999	1999/2000	2000/2001	1998-2000	1998/1999	1999/2000	2000/2001	1998-2000
USA	983,271.8	1,098,469.1	963,340.9	1,015,027.3	153,809.5	175,601.9	174,187.1	167,866.1
Canada	864,147.6	1,084,450.8	1,027,352.4	991,983.6	148,117.1	188,404.8	193,783.6	176,768.5
Hungary	272,182.7	205,429.1	44,208.2	173,940.0	26,672.0	22,668.1	8,089.4	19,143.2
Kazakhstan	52,074.0	202,873.8	159,799.6	138,249.1	7,595.4	32,003.2	28,288.0	22,628.9
Australia	113,611.8	83,316.1	44,816.2	80,581.4	19,430.6	15,551.1	10,714.4	15,232.0
Romania	22,512.1	39,228.1	9,978.3	23,906.2	2,300.8	5,013.3	2,347.2	3,220.4
Ukraine	10,687.5	13,619.1	29,561.2	17,955.9	1,597.5	2,029.8	6,111.7	3,246.3
Argentina	2,044.3	2,490.4	21,833.7	8,789.5	286.9	463.3	3,603.9	1,451.4
Russian Federation	8,496.6	12,953.6		7,150.1	900.7	1,728.1		876.3
Slovakia	4,508.6	6,932.2	9,224.1	6,888.3	668.7	1,078.0	1,713.9	1,153.5
Bulgaria	1,899.5	2,613.6	2,750.0	2,421.0	195.7	288.9	319.7	268.1
Czech Rep.	954.6	827.6	2,365.6	1,382.6	206.2	193.8	501.7	300.6
Estonia	2,596.8			865.6	371.1			123.7
Poland	75.0	1,604.1	604.1	761.1	8.8	178.8	85.0	90.8
Thailand	1,985.9			662.0	283.6			94.5
Croatia		821.0		273.7		122.9		41.0
Switzerland	0.3	587.0	7.1	198.1	0.2	142.2	7.7	50.0
New Zealand	252.6		301.2	184.6	149.1		99.0	82.7
Egypt	0.4		69.6	23.3	1.2		24.7	8.6
Turkey	15.8	30.2	17.6	21.2	8.0	14.4	15.5	12.6
Slovenia	26.1			8.7	4.0			1.3
Israel			2.6	0.9			9.2	3.1
Syria	2.1			0.7	0.6			0.2
Dominican R.		0.9	0.9	0.6		0.9	1.0	0.6
Norway	1.2		0.1	0.4	0.4		0.0	0.1
China	0.2		1.0	0.4	0.2		1.0	0.4
Lebanon		0.6	0.5	0.4		0.7	0.2	0.3
Chile	0.2			0.1	0.5			0.2
South Africa			0.0	0.0			0.0	0.0

Source: http://www.wtocenter.org.tw/SmartKMS/fileviewer?id=36625

APPENDIX 3 TO ANNEX A.
EU-Morocco Free Trade Agreement and Wheat

Agreement in the Form of an Exchange of Letters between the European Community and the Kingdom of Morocco Concerning Reciprocal Liberalisation Measures and the Replacement of the Agricultural Protocols to the EC-Morocco Association Agreement[103]

Protocol No 3 Concerning the Arrangements Applicable to Imports into Morocco of Agricultural Products Originating in the Community

Article 2

1. For cereals falling within CN code ex 1001 90 99, the tariff quota shall be fixed as stipulated in the footnote on page 2 of the Annex on the basis of Moroccan output during the current year, as estimated and published by the Moroccan authorities during May. The quota will be adapted if necessary at the end of July in the light of a communication from the Moroccan authorities fixing the definitive volume of Moroccan output. However, the result of any such adjustment must be adjusted by common accord between the Parties either upwards or downwards by 5% depending on the outcome of the consultations referred to in paragraph 2. The above tariff quota shall not apply during June and July. During the consultations provided for in the following paragraph, the Parties shall agree to consider whether to extend the timetable in the light of the forecasts for the Moroccan market. However, any extension may not go beyond 31 August.

2. For the purposes of managing the provisions set out in paragraph 1, and in order to ensure supplies to the Moroccan market as well as the stability and continuity of that market and to stabilise prices on the Moroccan market and preserve traditional trade flows, the following cooperation arrangements shall apply in the cereals sector.

Before the beginning of each marketing year, no later than the second half of May, the parties shall hold consultations. The purpose of these consultations will be to discuss the market situation for cereals including, in particular, production forecasts for Moroccan common wheat, the situation of stocks, consumption, producer and export prices and possible market development as well as possibilities of adapting supply to demand.

3. If, after the entry into force of this Agreement, Morocco grants a larger tariff reduction on cereals falling within CN code ex 1001 90 99 to a third country under an international agreement, Morocco undertakes to grant the same tariff reduction to the Community as an autonomous measure.

103.- http://ec.europa.eu/world/agreements/prepareCreateTreatiesWorkspace/treatiesGeneralData.do?step=0&redirect=true&treatyId=252

APPENDIX 4 TO ANNEX A.
Trade data

Table 4.1 EU grain imports, 2008 (tonnes)

Partner	Wheat	Barley	Maize
EU-27_total imports	6,847,447	542,994	9,734,072
Ukraine	2,759,351	214,320	1,176,847
Canada	1,303,883	542	7,855
United States	1,150,924	622	46,576
Russian Federation	723,630	98,770	49,531
Kazakhstan	533,941	38,102	
Mexico	233,545		46
Australia	54,631		0
Moldova	27,170	13,282	7,170
Tunisia	26,206		
Turkey	10,961	80	11,440
Argentina	9,039	175,233	3,731,259
Croatia	3,293	656	84,875
Namibia	2,977		
Uruguay	2,205	174	11
Paraguay	1,885		265,380
Serbia	1,072	160	128,623
Syria	988		2
China	613	3	14,754
Switzerland	444	439	213
Egypt	228		84
New Zealand	151	59	2
Brazil	141	0	4,152,367
Norway	50	65	19
Peru	24	1	5,912
Chile	3	391	16,162
India	0		32,158
South Africa	0		575
Colombia			44
Ecuador		71	23
Madagascar			1,773
FormerYugoslav Republic of Macedonia			76
Thailand		1	184

Note: Countries exporting less than 30 tonnes are removed from the list, so that 95 tonnes of wheat imports are not included in this table.
Source: Eurostat Comext Database

Table 4.2 EU-27 imports and exports of wheat ('000 tonnes)

Trade flow	Commodity Description	Partner	2000	2001	2002	2003	2004	2005	2006	2007	2008
Export	Durum wheat	Ukraine	38	1	1	0	0	0	0	0	0
		World	421	356	921	708	1,014	1,104	927	809	1,045
		Ukraine share, %	***9%***	***0%***	***0%***	***0%***	***0%***	***0%***	***0%***	***0%***	***0%***
	Wheat except durum wheat, and meslin	Ukraine	167	9	2	452	19	0	0	1	1
		World	11,393	9,743	9,654	10,696	7,608	9,535	13,051	7,631	17,140
		Ukraine share, %	***1%***	***0%***	***0%***	***4%***	***0%***	***0%***	***0%***	***0%***	***0%***
Import	Durum wheat	Ukraine	2	0	1	2	0	0	3	0	0
		World	1,288	1,348	1,065	1,667	1,778	1,773	2,021	1,914	1,317
		Ukraine share, %	***0%***	***0%***	***0%***	***0%***	***0%***	***0%***	***0%***	***0%***	***0%***
	Wheat except durum wheat, and meslin	Ukraine	27	1,157	4,556	238	673	1,924	711	212	2,759
		World	2,545	4,091	11,114	5,135	5,176	5,329	3,592	4,484	5,531
		Ukraine share, %	***1%***	***28%***	***41%***	***5%***	***13%***	***36%***	***20%***	***5%***	***50%***

Source: EU-27 imports as reported by UN Comtrade (www.comtrade.un.org)

Table 4.3 Ukraine exports and imports of wheat to/from EU-27 countries* ('000 tonnes)

Trade flow	Commodity description	2001	2002	2003	2004	2005	2006	2007	2008
Export	Durum wheat	33	34	2	3				1
	Wheat except durum wheat, and meslin	1,342	4,547	230	895	2,163	1,110	192	2,821
Export total		1,375	4,581	232	898	2,163	1,110	192	2,822
Import	Durum wheat	7	0	13	0	0	0	0	0
	Wheat except durum wheat, and meslin	4	0	456	20	0	0	1	1
Import total		10	0	469	20	0	0	1	1

** As reported by Ukraine and as appears in the UN Comtrade*

ANNEX B
METHODOLOGY
for Preparing Grain Supply and Demand Balance Forecasts

DRAFT
APPROVED by Joint Order of the
Ministry of Agrarian Policy of Ukraine
and the Ministry of Economy of Ukraine
No _____ dated _____

METHODOLOGY
for Preparing Grain Supply and Demand Balance Forecasts[104]

1. General Provisions

1.1. The Methodology of Preparing Grain Supply and Demand Balance Forecasts (hereinafter referred to as "Methodology") is intended to be used by central and local government authorities in charge of the preparation of grain supply and demand balance forecasts.

1.2. Grain supply and demand balance forecasts (hereinafter referred to as "balance forecasts") are systems of indicators characterizing the anticipated supply and use of key grains.
Balance forecasts show, for each grain crop, the flows from production to final use and enable to assess the country's food security general state and to forecast future developments in agricultural production and food markets.

1.3. The goal of balance forecasts is to model the market situation of key grain crops by forecasting key indicators of these balances for the following marketing year (running from July 1 until June 30).

1.4. The Ministry of Agrarian Policy of Ukraine is the government agency in charge of the preparation and the publication of balance forecasts.
The Interdepartmental Commission for Preparation of Grain Supply and Demand Balance Forecasts under the Ministry of Agrarian Policy of Ukraine is responsible for the coordination and the calculation of the agreed balance forecasts.
Balance forecasts are prepared and published on a monthly basis, according to the schedule approved by the Ministry of Agrarian Policy of Ukraine.[105]
The Interdepartmental Commission for Preparation of Grain Supply and Demand Balance Forecasts is composed of representatives of the Ministry of Agrarian Policy of Ukraine, the Ministry of Economy of Ukraine, the State Statistics Committee of Ukraine, the Ukrainian Hydrometeorological Centre of the Ministry of Ukraine of Emergencies, the National Academy of Sciences of Ukraine, the Ukrainian Academy of Agricultural Sciences and professional agro-industry organizations.

104.- The authors of this methodology are Dr Kateryna Prokopenko, Senior Researcher, Institute of the National Economy of the National Academy of Sciences of Ukraine, and Mr Dmitry Prikhodko, Economist of the Investment Centre, FAO. This document is a translation of the Ukrainian language version that was discussed at a round table in the Ministry of Agrarian Policy of Ukraine on 1 December 2009. This translation is provided for information purposes and reflects the official writing style used in the Ukrainian language version. The original Ukrainian language document is also included in this report.

105.- As a result of the analysis of information flows, the optimal period for the monthly balance update is considered to be from the 10th to the 15th of each month.

1.5. According to the working schedule, the preparation and the publication of balance forecasts for the first forecast for the outlook grain marketing year starts in April of the current year (i.e. 1 April 2010 for the Marketing Year 1 July 2010–30 June 2011).

1.6. Balances are made in quantitative terms for the following grain crops:

a) total grains and legumes;
b) wheat;
c) rye;
d) buckwheat;
e) millets;
f) barley;
g) corn;
h) oats;
i) peas.

If necessary, the above list of grain crops may be further detailed.

1.7. The information used to prepare balance forecasts come from: government statistical observations of companies and organizations, from trade, processing industry and agricultural, sectors; the observation of households' living conditions and their agricultural activity; customs statistical data; commodity exchange trade data; the registration of export contracts in the specified order; other sources of information on grain supply and use (administrative and internal information, analysis and assessments done by independent experts can be taken into the consideration).

The schedule for the calculation and the updates of the balance forecasts for the outlook indicators is provided in Annex3

1.8. When preparing balance forecasts, the following general scheme, coherent with international recommendations (Food and Agriculture Organization of the United Nations), must be adhered to:

DEMAND = SUPPLY

SUPPLY = STOCK at the beginning of the period + PRODUCTION + IMPORT

DEMAND = DOMESTIC CONSUMPTION (human consumption + seeds + livestock and poultry feed + industrial use + losses + other consumption) + EXPORT + STOCK at the end of the period

A detailed balance forecast form is provided in Annex 1.

1.9. According to international recommendations (FAO) balance forecasts should be calculated for the main product, i.e. including both grain and processed grain products expressed in grain equivalent. When calculating each grain crop balance, processed grain products must be converted into the main product using the appropriate coefficients and conversion factors. These conversion factors are provided in *Annex 2*.

2. Determining components of the Demand

2.1. Human Consumption

The grain and grain products for human consumption include any form of grain used by the country's population for personal consumption.

The human consumption is composed of the production during the marketing year, the imports and the stock consumption. The human consumption of grain and grain products includes flour, cereals, legumes, bread products, pasta and pastries, all calculated in grain equivalent.

The volume of the human consumption is a basic indicator for the calculation of balance forecasts. The human consumption forecast is calculated as the product of the country's forecasted population in the forecast period by forecasted per capita food consumption of each product.

To assess forecasted per capita food consumption, it is useful to consider the food consumption as functionally dependent on the income in a number of previous years. When calculating forecasted human consumption, the following indicators should also be taken into account: rational per capita consumption standards, forecasted real available income, government regulation of food markets, etc.

2.2. Seeds, livestock and poultry feed is the amount of grain used for agricultural production needs (sowing and animal feeding).

The seed use calculation is based on forecasted grain sowing areas and sowing norms (the average of the actual amounts of seeds used per hectare of sowing area in the last five years). This data is periodically updated with the sowing norms and expert assessments.

The livestock feed use calculation is based on the following data forecasted by the Ministry of Agrarian Policy:

- forecasted average annual livestock and poultry population;
- forecasted productivity;
- amount of feed required for the forecasted production;
- share of concentrated feed in the ration composition.

The amount of grain required for livestock feed in the following marketing year is determined with the need in concentrated feed. Grains used for animal feed are broken down by types according to the state statistical observation data from FormN°16-sg *"Agricultural Products Balance for 200__"* available from the State Statistics Committee of Ukraine on a calendar year basis.

The analysis and expert assessment for individual households is based on the share of feed in the total on-farm consumption from the estimated balance of the previous year.

Grains required for livestock feed in individual households are broken down by types according to data received through a sample survey of households' living conditions and activities in rural areas (conducted on a monthly basis by the SSCU).

The amount of feed may be adjusted during the marketing year considering livestock population change in agricultural enterprises and individual households compared with the previous year.

2.3. Industrial use includes the amount of grain used in production of alcohol, malt, etc. and is part of domestic consumption.

When preparing balance forecasts, industrial use is determined with government statistical agencies' reports from the previous years, consultations with professional public organizations of agricultural producers, and expert assessments.

Calculations are based on state statistical observation data obtained with Form N°1-grain *"Stocks and Flows of Grains and Oilseeds"* submitted by companies engaged in storage and processing of cereal and oilseed crops (which are owning or leasing storage and processing facilities), and on expert assessments.

2.4. Losses

Losses should be differentiated into production losses and sale losses. Regarding production losses, harvesting losses are not taken into account because production figures are based only on the harvested crops. Losses include weight losses occurred during sorting, etc. Sale losses are determined as losses occurred during storage, transportation, and processing. They include decreases of grain weight caused by the decrease of moisture content, by the reduction of waste and grain additives, and by natural grain weight losses during storage (depending on its duration).

The amount of losses (in all phases, from production to sale) is determined as a share of production represented by the ratio between losses and production amounts for the last five years.

Calculations are based on state statistical observation data concerning grain losses (obtained with Form N°16-sg *"Balance of Agricultural Production"*) and on random observations of households' living conditions.

2.5. Export

Export is the amount of grain (including flour and other processed products in grain equivalent) legally exported during the marketing year (excluding grain transits from other countries).

When preparing balance forecasts, export is considered to be the amount of grain which may be exported during the marketing year once all domestic market needs are fully met.

Forecasted export is determined before the beginning of each marketing year as the difference between the forecasted availability of cereal crops and the domestic demand excluding carryover stock.

During the marketing year, forecasted annual export is adjusted on a monthly basis considering the actual amount of grain (including processed grain products) shipped for export and determined according to customs statistical data.

When monthly adjusting export data, the following factors must be taken into account:

- monthly trends observed for several years (structure);

- actual customs statistical data of the previous month of the forecasted marketing year (monthly);

- information concerning export contracts registered as of the 10th of the current month by the Ukrainian agrarian exchanges (information available from the Ministry of Agrarian Policy).

3. Determining the components of Supply

3.1. Production

Grain production in the marketing period is the main source of the supply in the country.

When compiling production component, annual production is determined with the forecasted grain production in farms of all categories. At the same time, grain yield is expressed in the *clean weight* equivalent.

Forecasted production is based on forecasted sowing areas and average grain yields in recent years. Forecasted sowing areas for the following marketing year are determined starting from April 1st of the current year based on the state statistical observation data from Form N°37-sg *"Agricultural Crops Sowing and Harvesting, and Other Field Work"*, with monthly data updates.

Crop yield is determined by an expert analysis based on the average actual yield of the last five years adjusted to the assessment of crop condition and prospects of development by the Ukrainian Hydrometeorological Institute.

Starting from August of each marketing year, production data is being adjusted considering actual harvest areas and yields based on the state statistical observation data from Forms N°4-sg *"Agricultural Crops Sowing Areas"* and N°37-sg *"Agricultural Crops Sowing and Harvesting, and Other Field Work"*, and data from field reports gathered by the Ministry of Agrarian Policy of Ukraine.

Final production data is added in the balance in February of the current marketing year based on the state statistical observation data from Form N°29-sg *"Agricultural Crops, Fruits, Berries, and Grape Yield as of December 1st, 200 __."*

3.2. Stocks

Stock at the beginning of the period is the known amount of grain which, at the beginning of the marketing year, is or will be stored in any storage facility.

$$P_t = P_{t-1}, \text{ where}$$

P_t – stock at the beginning of the period;

P_{t-1} – stock at the end of the previous period.

Stock at the end of the period is the known amount of grain which, at the end of the marketing year, is stored in any storage facility. This amount does not include newly-harvested grains (for example, new grains harvested before the beginning of new marketing year).

$$P_t = P_{t+1}, \text{ where}$$

P_t – stock at the end of period;

P_{t-1} – stock at the beginning of the next period.

If possible, stock must be separately calculated for individual households, agricultural producers, grain processing and grain storage enterprises including government reserves.

At the beginning of April of the current year, when preparing balance forecasts for the following year, the *stock at the beginning of the period* is determined as the difference between:

state statistical observation data from Forms N°1-grain *"Availability and Increase of Cereal and Oilseed Crops"*, N°1-opt (quarterly) *"Report on Sales and Stocks of Goods (Products) in Wholesale Trade"*, and data gathered through a sample survey of households *"Agricultural performance parameters, grain declaring data as of the beginning of the month of the first balance forecast (April 10th)"*;

forecasted three-month domestic consumption and forecasted (expected) grain export in the period before the beginning of the marketing year.

The initial forecasts are adjusted monthly until the beginning of the marketing year. Starting from July, the *stock at the beginning of the period* of the balance forecast is compiled using actual data .

Stock at the end of the period is equal to the difference between:

- grain supply;
- forecasted consumption and export for the forecasted marketing year.

It is common to consider that stock at the end of the period is equal to the amount of grain sufficient to meet, at least, two-month domestic consumption requirements, considering provisions of Ukrainian law on food security.[106]

Stock changes are calculated as the difference between stocks at the end and at the beginning of the period.

Forecasted stock data is adjusted during the year according to the latest operational information, taking into account:

- state statistical observation data and information on grain quantities declared by agricultural enterprises, processing industry, wholesale and retail trade;
- for individual households, this data is determined based on existing sample surveys. It

106.- The sufficient amount of grain resources in a country is the ratio of government grain reserves to domestic consumption. According to the FAO methodology of determining main indicators of food security and food security assessment criteria, the minimum acceptable indicator is 17%, which corresponds to 60 days of consumption.

is evaluated using information on trends of production, of stocks (determined by the random observation of households), of income from the payment of work and parcel rents (information from state statistical observation data from form N°21-zag *"The Use of Agricultural Production"*), of procurements, etc and using information on households' living conditions.

3.3. Import

Import is the amount of grain (including flour and other processed products in grain equivalent) legally imported during the marketing year (excluding grain transits).

Forecasted import is calculated by expert assessment of the amount of grain which must be imported to cover the domestic market deficit (if any). It is monthly adjusted with the actual amounts of grain and processed grain products which have been already imported since the beginning of the marketing year and determined according to customs statistics and monthly trends observed during several years.

ANNEX 1 Supply and demand balance form

(cereal crop type)

(unit of measurement)

No.	Indicator	Formula	Total
A	**Stock at the beginning of the period – total**	**Σ[(A.1.) : (A.n.)]**	
A.1.	Agricultural producers		
A.2.	Grain trade, processing, storage companies		
A.3.	Individual households		
A.n.	Other		
I	**Supply – total**	**(1.1.) + (1.2.) + (A)**	
1.1.	Production	1.1.1. × 1.1.2.	
1.1.1.	Harvested area		
1.1.2.	Yield		
1.2.	Import		
	including flour grain equivalent		
II	**Demand – total**	**(2.1.) + (2.2.) + (B)**	
2.1.	Domestic consumption – total	(2.1.1.) + (2.1.2.)	
2.1.1.	Human consumption		
2.1.2.	Other consumptions	S[(2.1.2.1.) : (2.1.2.3.)]	
2.1.2.1.	Seeds, livestock and poultry feed	(2.1.2.1.1.) + (2.1.2.1.2.)	
2.1.2.1.1	Seeds		
2.1.2.1.2	Feed		
2.1.2.2.	Industrial use		
2.1.2.3.	Losses		
2.2.	Export		
2.2.1.	including flour in grain equivalent		
B	**Stock at the end of the period – total**	**Σ[(B.1.) : (B.n.)]**	
B.1.	Agricultural producers		
B.2.	Grain trade, processing, storage companies		
B.3.	Individual households		
B.n.	Other		

ANNEX 2 Conversion coefficients

Bread product converted to the flour equivalent	
Bread	0.736
All flour types	1
Pasta products	1.031
Cereal- and pasta-based semi-finished and culinary (pastry) products	0.7
Flour products (flour in grain equivalent)	**1.330**
Including semolina	1.368

ANNEX 3 Schedule for the calculation of the balance forecast indicators

Balance indicators	Month														
	Year N-1									Year N					
	April	May	June	July	August	September	October	November	December	January	February	March	April	May	June
Harvest area	Actual data concerning winter crops (Form №37- sg)	Including final data concerning perished winter crops (Form №37- sg)	Actual data from Form №37-sg	Form №4-sg excluding the five-year average difference between the sowing area from Form №4-sg and the harvest area.	Form №37-sg				Unchanged data		Data update from Form№ 29-sg	Unchanged data			
	- assessment of perished winter cereal crops from the Hydrometeorological Institute of Ministry for Emergencies, including data from Form №37-sg or the reporting of the Ministry of Agrarian Policy			Monitoring the harvest area									-assessment of perished winter cereal crops from the Hydrometeorological Institute of Ministry for Emergencies. or from the reporting of the Ministry of Agrarian Policy		
	+ spring wheat sowing forecast (from the Ministry of Agrarian Policy according to regional data)	+ spring wheat sowing data from Form №37- sg											+ spring wheat sowing forecast (from the Ministry of Agrarian Policy according to regional data)	+ spring wheat sowing data from Form №37-sg	
Crop yield	Average crop yield during the last 5 years (separate winter and spring wheat data)	Average crop yield during the last 5 years (separate winter and spring wheat data) OR forecasted data from Ukrainian Hydrometeorological Institute	Ukrainian Hydrometeorological Institute + Ministry of Agrarian Policy forecasts (based on regional data)		Ministry of Agrarian Policy forecasts (based on regional data) considering actual SSC yield data from Form №37 - sg (bunker weight recalculated in terms of registered weight)				Unchanged data	Updated data from Form №29 - sg		Unchanged data			
					Monitoring the crop yield according to Form №37 - sg										
Production	Area X yield									N/A			Area X yield		
Export	Calculations and updates are done on a monthly basis according to the Methodology														
Import	Calculations and updates are done on a monthly basis according to the Methodology														
Consumption															
Human consumption	Calculated as the product of the country's forecasted population in forecast period by forecasted per capita food consumption index, with regular updates														
Balance indicators	Month														

	Year N-1									Year N				
	April	May	June	July	August	September	October	November	December	January	February	March	April	May	June
Industrial use	Initial data is calculated as the average share in production during the last 5 years from Forms №1-grain and №29 - sg	Recalculated considering updated production figures				Recalculated considering updated production figures and actual processing data from Form №1-grain				Recalculated considering actual processing data from Form №1-grain					
Seeds	Calculated as the product of forecasted grain sowing area and sowing norms (expert assessment based on the five-year average actual amount of seed sowed per hectare of sowing area and sowing norms) and including insurance stock	Updated while changing forecasted grain sowing area.						Updated according to the amount of actual winter crop sowings	Updated while changing forecasted spring crop sowing area			Updated according to the amount of actual spring crop sowings	Actual grain crop sowings	Updated actual grain crop sowings
Livestock and poultry feed	Determined based on information about forecasted average annual livestock and poultry population, forecasted productivity, amount of feed required for production purposes, percentage of concentrated feed in animal feed ration	Updated while changing forecasted parameters		Monthly expert update considering actual parameters											
Losses	Share of production for the last 5 years									Actual data	N/A				
Stock at the beginning of the period	Carryover stock including data from Form №1-grain and grain declaring data	Updated data including data from Form №1-grain and grain declaring data		Final data from Form №1-grain for 6 months registered for previous marketing year + grain declaring data. Consumption indexes are recalculated	N/A										
Stock at the end of the period	Determined as two-month amount of domestic consumption					Determined as two-month amount of domestic consumption, updated considering actual data for the 1st quarter		Unchanged data		Determined as two-month amount of domestic consumption, updated considering actual data for the 1st half of year	Unchanged data		Determined as two-month amount of domestic consumption, updated considering actual data for 3 quarters	Data update	

ANNEX C
METHODOLOGY
for Preparing Grain Supply and Demand Balance Forecasts

(In Ukrainian)

ПРОЕКТ
ЗАТВЕРДЖЕНО
спільним наказом Міністерства
аграрної політики України та Міністерства
економіки України
від _____N° _____

Методичні рекомендації щодо підготовки прогнозних балансів попиту і пропозиції зернових культур[107]

1. Загальні положення

1.1. ***Методика підготовки прогнозних балансів попиту і пропозиції зернових культур*** (далі – «Методика») призначена для використання центральними та місцевими органами виконавчої влади, уповноваженими складати прогнозні баланси попиту і пропозиції зернових культур.

1.2. ***Прогнозні баланси попиту і пропозиції зернових культур*** (далі – «Прогнозні баланси») є системою показників, що характеризують джерела формування ресурсів основних видів зернових культур та напрями їх використання.

Прогнозні баланси відображають рух окремих видів зернових культур від моменту виробництва до моменту кінцевого її використання, дозволяють оцінити загальний стан продовольчої безпеки країни та прогнозувати розвиток ситуації на агропродовольчих ринках.

1.3. ***Метою побудови прогнозних зернових балансів*** є моделювання ситуації на ринках основних видів зернових культур шляхом прогнозування основних показників цих балансів на наступний маркетинговий рік (з 1 липня по 30 червня).

1.4. ***Державною установою***, що відповідає за підготовку та опублікування прогнозних балансів, є Міністерство аграрної політики України.

Міжвідомча комісія з підготовки прогнозних балансів попиту і пропозиції зернових культур при Міністерстві аграрної політики України забезпечує координацію та розрахунок узгоджених прогнозних балансів.

Підготовка та опублікування прогнозних балансів відбувається щомісячно згідно із робочим графіком, затвердженим Міністерством аграрної політики України.[108]
До складу Міжвідомчої комісії з підготовки прогнозних балансів попиту і пропозиції зернових культур входять представники Міністерства аграрної політики України, Міністерства економіки України, Державного комітету статистики України, Українського гідрометеорологічного центру Міністерства з надзвичайних ситуацій України, Національної академії наук України, Української аграрної академії наук, представники профільних громадських професійних організацій агропромислового комплексу.

107.- автори: К. Прокопеноко, к.е.н, с.н.с. Інституту економіки та прогнозування НАН України та Д.Приходько, к.е.н., економіст Інвестиційного центру ФАО .

108.- За результатами аналізу строків надходження інформації оптимальним періодом щомісячного перегляду прогнозного балансу буде 10-15 число кожного місяця.

1.5. ***Згідно з робочим графіком***, підготовка і публікація прогнозних балансів на наступний маркетинговий рік розпочинається з квітня поточного року.

1.6. ***Баланси складаються*** у натуральному виразі за такими видами зернових культур:

а) зернові та зернобобові – всього;
б) пшениця;
в) жито;
г) гречка;
д) просо;
є) ячмінь;
е) кукурудза;
ж) овес;
з) горох.

При необхідності список зернових культур може уточнюватися.

1.7. ***Інформаційною базою*** при складанні прогнозних балансів є дані форм державних статистичних спостережень підприємств і організацій сільського господарства, переробної промисловості, торгівлі, дані обстежень умов життя домогосподарств та їх сільськогосподарської діяльності, митної статистики, дані про обсяги біржової торгівлі, реєстрацію у встановленому порядку експортних контрактів та дані інших джерел, що характеризують формування зернових ресурсів та їх використання, адміністративна, відомча інформація, аналіз та експертні оцінки незалежних фахівців. Календарний план формування показників прогнозного балансу надається в додатку 3.

1.8. При складанні балансів необхідно дотримуватися такої загальної схеми яка відповідає міжнародним рекомендаціям Продовольчої і Сільськогосподарської Організації ООН:

ПОПИТ = ПРОПОЗИЦІЇ

ПРОПОЗИЦІЯ = ЗАПАСИ НА ПОЧАТОК ПЕРІОДУ + ВИРОБНИЦТВО + ІМПОРТ

ПОПИТ = ***ВНУТРІШНЄ ВИКОРИСТАННЯ (фонд споживання населенням + насіння + корми худобі та птиці + переробка на нехарчові цілі + інше споживання + втрати) ЕКСПОРТ + ЗАПАСИ НА КІНЕЦЬ ПЕРІОДУ***

Детальна форма складання прогнозних балансів наведена у додатку 1.

1.9. Відповідно до міжнародних вимог та рекомендацій Продовольчої і сільськогосподарської організації ООН баланси за видами зернових культур складаються по основному продукту, тобто враховується як зерно, так і продукти його переробки в перерахунку на зерно. при розрахунку окремих статей балансу продукти переробки зернових перераховуються на основний продукт за відповідними коефіцієнтами (Додаток 2).

2. Формування складових розділу “Попит”

2.1. ***Фонд споживання населенням*** (продовольче споживання) включає обсяг продукції, використаний населенням країни на особисте споживання у будь-якому вигляді. Він формується з обсягів продукції виробництва звітного періоду, імпорту, а також виробництва продукції у попередні роки у вигляді спожитих запасів. Фонд споживання хлібопродуктів включає борошно, крупи, зернобобові, а також хлібобулочні, макаронні та кондитерські вироби у перерахунку на борошно.

Обсяг фонду споживання продовольчих ресурсів населенням є базовим показником, з якого починаються розрахунки при складанні прогнозних балансів.

Фонд споживання населенням розраховується як добуток прогнозної кількості осіб, що проживатиме у країні у прогнозованому періоді на прогнозний рівень споживання продукції на душу населення.

Для оцінки прогнозного рівня середньодушового споживання продуктів харчування доцільно базуватися на оцінці споживання як функціональної залежності між споживанням продукції та доходами населення за ряд попередніх років. При розрахунку прогнозного фонду споживання необхідно зважати також і на інші показники: раціональні норми середньодушового споживання, прогнозований рівень реальних наявних доходів населення, заходи державного регулювання ринків продовольства тощо.

2.2. ***Насіння та корми худобі та птиці (виробниче споживання)*** характеризує обсяг зерна, використаного на сільськогосподарські виробничі потреби (витрати на посів та на корм худобі). Стаття балансу про витрати на посів розраховується, виходячи з даних про прогнозні площі посіву зернових культур та норм висіву, які визначаються як фактична витрата насіння на гектар посівної площі у середньому за п'ять років. Ці дані періодично звіряються з нормами висіву та експертними оцінками.

Стаття про витрати на корм худобі розраховується виходячи з даних, що прогнозуються Мінагрополітики:

- дані про прогнозне середньорічне поголів'я худоби та птиці;
- прогнозна продуктивність;
- нормативи витрат кормів на прогнозне виробництво продукції;
- частка концентрованих кормів в структурі раціону;

Виходячи з потреби у концентрованих кормах, визначаються обсяги зерна, необхідні на корм худобі у наступному маркетинговому році. Розподіл зернових культур, спрямованих на корм, за видами здійснюється за даними державного статистичного спостереження за формою N° 16-сг „Баланс сільськогосподарської продукції за 200__ рік".

Для господарств населення для аналізу та експертної оцінки використовується питома вага витрат на корм у обсязі внутрішнього споживання за даними балансів за попередні роки. Розподіл зерна, використаного на корм господарствами населення, за видами здійснюється за даними вибіркового обстеження умов життя домогосподарств.

Протягом маркетингового року проводиться коригування обсягу витрат на корм худобі з урахуванням темпів зміни поголів'я тварин по видах в сільськогосподарських підприємствах та господарствах населення порівняно з попереднім роком.

2.3. ***Переробка на нехарчові цілі*** включає обсяг зерна, що використовується для виробництва спирту, солоду, тощо і враховується у статті «Внутрішнє використання».

При складанні прогнозного балансу обсяги переробки зерна визначаються, виходячи із звітних даних органів державної статистики за попередні роки, консультацій із громадськими

професійними організаціями виробників продовольства, експертних оцінок.

За основу для розрахунків приймаються дані державного статистичного спостереження за формою N°1-зерно "Наявність і надходження зернових та олійних культур", яку подають підприємства, що займаються прийманням на зберігання та переробкою зернових та олійних культур (мають власні або орендовані пристосовані для зберігання приміщення та переробні потужності) та експертні оцінки.

2.4. При визначенні статті балансу „втрати" слід розрізняти втрати на стадії виробництва та втрати на стадії реалізації. Що стосується втрат на етапі виробництва, втрати при збиранні урожаю, як правило, не враховуються, оскільки обліку підлягає лише отриманий урожай. З іншого боку, у дані статті „втрати" враховуються втрати в господарстві пов'язані з втратою ваги, в процесі сортування тощо. Втрати на стадії реалізації визначаються як втрати при зберіганні, транспортуванні, переробці. До них відносять убутки маси зерна: від зменшення вологості, від зниження смітної та зернової домішки, при зберіганні у залежності від строку зберігання.

Прогнозні обсяги втрат зерна (на всіх стадіях від виробництва до реалізації) визначаються як відсоток від виробництва зерна, величина якого є співвідношенням між обсягом втрат і виробництва, яке склалося за попередні 5 років. Він розраховується на підставі даних, щодо втрат зернових культур за розрахунками Держкомстату України (дані державного статистичного спостереження за формою N° 16-сг „Баланс сільськогосподарської продукції" та дані вибіркового обстеження умов життя домогосподарств).

2.5. ***Експорт*** це обсяг зерна (включаючи борошно та інші продукти переробки у зерновому еквіваленті), який легально буде вивезений з країни, за виключенням транзиту, протягом маркетингового року.

При розробці прогнозного балансу експорт визначається як обсяг зерна, який може бути вивезений впродовж маркетингового року, на який складається баланс, за межі країни, за умови повного забезпечення потреб внутрішнього ринку.

Прогнозований обсяг експорту визначається до початку маркетингового року як різниця між прогнозованою наявністю в країні обсягів зернових культур та потребами внутрішнього ринку за виключенням перехідних запасів.

Протягом маркетингового року прогнозований річний обсяг експорту уточнюється з урахуванням фактичних обсягів зерна (в т.ч. продуктів його переробки), що відвантажені на експорт і визначаються за даними митної статистики.

Щомісячно при коригуванні обсягів експорту враховуються:

- тренди, що склалися по місяцях за ряд років (структура);

- фактичні дані митної статистики за минулий місяць прогнозованого маркетингового року щомісячно;

- дані по експортних контрактах, зареєстрованих станом на 10 число кожного поточного місяця.

3. Формування складових розділу “Пропозиція”

3.1. ***Виробництво*** продукції за період, на який складається баланс, є основним джерелом формування пропозиції продовольчих ресурсів в країні.

При заповненні статті “виробництво” обсяг виробництва за рік визначається на базі прогнозних розрахунків виробництва зернових культур у всіх категоріях господарств. При цьому валовий збір зерна враховується у вазі після доробки.

Для розрахунку прогнозного обсягу виробництва продукції використовуються прогнозні посівні площі, середні за останні роки показники врожайності зернових культур;

Прогнозні посівні площі на наступний маркетинговий рік визначаються починаючи з 1 квітня поточного року на основі даних державного статистичного спостереження за формою N° 37-сг „Сівба та збирання врожаю сільськогосподарських культур, проведення інших польових робіт” із щомісячним уточненням даних.

Урожайність визначаться шляхом експертної оцінки на основі середніх за останні 5 років фактичних показників урожайності та оцінки стану посівів Українського Гідрометцентру.

Починаючи з серпня поточного маркетингового року, дані щодо виробництва коригуються з урахуванням фактичної ситуації на основі інформації державних статистичних спостережень за формами N° 4-сг „Посівні площі сільськогосподарських культур під урожай”, N° 37-сг „Сівба та збирання врожаю сільськогосподарських культур, проведення інших польових робіт на” та оперативної звітності, що збирається Мінагрополітики України.

Заключні дані щодо виробництва включаються у баланс у лютому поточного маркетингового року на основі інформації державного статистичного спостереження за формою N° 29-сг „Підсумки збору врожаю сільськогосподарських культур, плодів, ягід та винограду на 1 грудня 200 __ року”.

3.2. ***„Запаси”.***
Запаси на початок періоду. Обсяг зерна, про яке відомо, що на початок маркетингового року воно знаходиться, або буде знаходитись у будь-яких зберігачів.

$$P_t = P_{t-1,} \text{ де}$$

P_t – запаси на початок періоду;

P_{t-1} – запаси на кінець попереднього періоду.

Запаси на кінець періоду. Обсяг зерна, про яке відомо, що на кінець маркетингового року воно знаходиться в запасах у будь-яких зберігачів. Не включає надходження зерна нового врожаю (напр., нові надходження зернових, зібраних до початку нового маркетингового року).

$$P_t = P_{t+1,} \text{ де}$$

P_t – запаси на кінець періоду;

P_{t+1} – запаси на початок наступного періоду.

Коли це можливо, запаси визначаються окремо у господарствах населення, сільськогосподарських підприємствах, зернопереробних та зернозберігаючих підприємствах, включаючи державні резерви.

При складанні прогнозних балансів на початок квітня поточного року на наступний маркетинговий рік запаси на початок періоду визначаються як різниця між:

- даними державного статистичного спостереження за формами N° 1 (зерно) "Наявність і надходження зернових та олійних культур", N° 1 (опт) (квартальна) „Звіт про продаж і запаси товарів (продукції) в оптовій торгівлі", даними вибіркового обстеження сільськогосподарської діяльності домогосподарств, даними декларування зерна на початок місяця розрахунку першого прогнозного балансу (10 квітня) і

- даними прогнозного тримісячного внутрішнього використання (квітень-червень) та прогнозного (очікуваного) обсягу експорту зернових культур за період до початку маркетингового року.

У подальшому ці дані до початку маркетингового року щомісячно коригуються. Починаючи з липня у прогнозних балансах по статті „запаси на початок року" проставляються фактичні дані. *Запаси на кінець періоду* дорівнюють різниці між пропозицією зернових ресурсів та очікуваним внутрішнім споживанням та експортом прогнозованого маркетингового року.

Прийнято вважати, що запаси на кінець періоду повинні дорівнювати щонайменше обсягу зернових культур, який забезпечує, як мінімум, двомісячний обсяг **внутрішнього використання,** з урахуванням чинного законодавства щодо забезпечення продовольчої безпеки[109]**.**
Зміна запасів розраховується як різниця між запасами на кінець та початок періоду. При розрахунку загального попиту, якщо така різниця є додатною – вона віднімається від попиту, якщо від'ємною - додається до попиту.

Протягом року прогнозна інформація щодо запасів уточнюється згідно з оперативними даними з урахуванням наступного:

- запаси безпосередньо в сільськогосподарських підприємствах, на підприємствах переробної промисловості, оптової і роздрібної торгівлі - за даними форм державних статистичних спостережень цих галузей статистики, даних про декларування зерна суб'єктами його зберігання;

- у господарствах населення – визначаються розрахунково. При оцінці обсягів використовується інформація щодо тенденцій зміни виробництва продукції, запасів за даними вибіркових обстежень домашніх господарств, надходжень за рахунок оплати праці та оренди паїв (дані державного статистичного спостереження за формою N° 21-заг „Реалізація сільськогосподарської продукції"), закупівель тощо, а також інформація щодо обстежень умов життя домогосподарств.

3.3. *„Імпорт".*

Обсяг зерна (включаючи борошно та продукти переробки у зерновому еквіваленті), що легально буде увезено в країну, за виключенням транзитного, протягом маркетингового року.
Прогнозні обсяги імпорту розраховуються шляхом експертної оцінки обсягу продукції, яка повинна бути увезена із-за меж країни для покриття дефіциту внутрішнього ринку (у разі його наявності). Дані щомісячно уточнюються на базі фактичних обсягів зерна та продуктів його переробки, що вже надійшли в країну з початку маркетингового року, визначені за даними митної статистики та із врахуванням трендів, що склалися по місяцях за ряд років.

109.- ***Забезпеченість держави зерновими ресурсами визначається як співвідношення запасів зерна у державі до внутрішнього споживання. Згідно з методикою ФАО граничним вважається критерій на рівні 17 відсотків, що відповідає 60 дням споживання.*- Методика визначення основних індикаторів продовольчої безпеки та критерії її оцінки.**

Додаток 1
Форма балансу попиту і пропозиції

(найменування виду зернових культур)
(одиниця виміру)

N° п/п	Показник	Формули	Всього
I	**Попит – всього**	**1.1. + 1.2. + Б**	
1.1.	Внутрішнє споживання – всього	1.1.1. + 1.1.2.	
1.1.1.	фонд споживання населенням		
1.1.2.	інше споживання	Σ[1.1.2.1. : 1.1.2.3.]	
1.1.2.1.	виробниче споживання	1.1.2.1.1. + 1.1.2.1.2.	
1.1.2.1.1.	*витрати на посів*		
1.1.2.1.2.	*витрати на корм*		
1.1.2.2.	переробка продукції на нехарчові цілі		
1.1.2.3.	втрати		
1.2.	Експорт		
1.2.1	*в т.ч. експорт борошна в перерахунку на зерно*		
II	**Пропозиція – всього**	**2.1. + 2.2. + А**	
2.1.	Власне виробництво	2.1.1. x 2.1.2.	
2.1.1.	*посівна площа*		
2.1.2.	*урожайність*		
2.2.	Імпорт		
	в т.ч. імпорт борошна в перерахунку на зерно		
А	**Запаси на початок періоду - всього**	**Σ[(А.1.) : (А.n.)]**	
А.1.	Сільськогосподарські підприємства		
А.2.	Підприємства зберігання зерна, перероблення, торгівлі		
А.3.	Господарства населення		
А.n.	та інші		
Б	**Запаси на кінець періоду - всього**	**Σ[(Б.1.) : (Б.n.)]**	
Б.1.	Сільськогосподарські підприємства		
Б.2.	Підприємства зберігання зерна, перероблення, торгівлі		
Б.3.	Господарства населення		
Б.n.	та інші		

Додаток 2
Коефіцієнти перерахунку хлібних продуктів

Хлібні продукти в перерахунку на борошно, крупи	
Хліб та хлібобулочні вироби	0,736
Борошно всіх видів	1
Крупи всіх видів	1
Горох, квасоля, інші бобові	1
Макаронні вироби	1,031
Напівфабрикати та кулінарні вироби з круп та макаронних виробів	0,7
Хлібні продукти (борошно, крупи) в перерахунку на зерновий еквівалент	**1,330**
з них манні крупи	1,368

Додаток 3 Календарний план формування показників прогнозного балансу

Місяць року															
	Рік “n -1”									Рік “n”					
Показник балансу	**Квітень**	**Травень**	**Червень**	**Липень**	**Серпень**	**Вересень**	**Жовтень**	**Листопад**	**Грудень**	**Січень**	**Лютий**	**Березень**	**Квітень**	**Травень**	**Червень**
Площа збирання	фактичні дані щодо посівів озимих зернових (Форма N° 37-сг)	З остаточним врахуванням даних щодо загибелі озимих (Форма N° 37-сг)	фактичні дані Форма N° 37-сг	Форма N°4-сг (за виключенням середньої за 5 років різниці між посівною площею (Форма N°4-сг) та площею збирання (Форма N°29-сг))	Форма N° 37-сг				дані не змінюються		уточнені дані Форма N°29-сг	дані не змінюються			
	- оцінка загибелі озимих зернових Гідрометцентру МНС з наступним урахуванням даних щодо загибелі озимих за Формою N° 37-сг або відомча звітність мінагрополітики			моніторінг зібранної площі (щомісячно)									мінус оцінка загибелі оз. Гідрометцентру МНС або відомча звітність мінагрополітики		
	+ прогноз посіву ярої пшениці (Мінагрополітики за даними регіонів)	+ дані Форма N° 37-сг щодо посіву яр. пш.											+ прогноз посіву ярої пшениці (Мінагрополітики за даними регіонів)	+ дані Форма N° 37-сг щодо посіву яр. пш.	
Урожайність	Середня врожайніть за останні 5 років (окремо оз. і яра пшениця)	Середня врожайніть за останні 5 років (окремо оз. і яра пшениця) АБО прогнозні данні Укргідромет центру	Гідрометцентр + оцінки Мінагрополітики (на основі даних з областей)		Оцінка Мінагрополітики (на основі даних з областей) З врахуванням фактичних даних щодо урожайності ДКС за формою N° 37-сг (бунк. вага перерах. на залікову вагу з урахуванням середньої за 5 років різниці між бункерною та заліковою вагою)				дані не змінюються	попередні дані форми N° 29-сг	остаточні дані форми N° 29-сг	дані не змінюються			
					Моніторінг врожайності за Форм. N° 37-сг										
Виробництво	Площа Х урожайн.									не прогнозується			Площа Х урожайн.		
посівна площа, урожайність та виробництво визначаються окремо для сільськогосподарських підприємств та господарств населення															
Експорт	**розрахунки та уточнення здійснюються щомісячно згідно Методики**														
Імпорт	**розрахунки та уточнення здійснюються щомісячно згідно Методики**														
Споживання	**Квітень**	**Травень**	**Червень**	**Липень**	**Серпень**	**Вересень**	**Жовтень**	**Листопад**	**Грудень**	**Січень**	**Лютий**	**Березень**	**Квітень**	**Травень**	**Червень**

Місяць року													
	Рік "n-1"								Рік "n"				
Показник балансу	Квітень	Травень	Червень	Липень	Серпень	Вересень	Жовтень	Листопад	Грудень	Січень	Лютий	Березень	Квітень	Травень	Червень
фонд споживання населенням	визначається як добуток прогнозної кількості осіб, що проживатиме у країні у прогнозованому періоді на очікуваний рівень споживання продукції на душу населення з періодичним уточненням														
переробки на несарчові цілі	початкова інформація визначається як усереднена частка від виробництва за попередні 5 років за формами №1-зерно та № 29-сг					перераховується із врахуванням уточнених обсягів виробництва			перераховується із врахуванням уточнених обсягів виробництва та фактичних даних щодо переробки за формою № 1-зерно		перераховується із врахуванням фактичних даних щодо переробки за формою № 1-зерно	перераховується із врахуванням фактичних даних щодо переробки за формою № 1-зерно			
насіння	визначається як добуток прогнозних площ посіву зернових культур та норм висіву (експертна оцінка на основі фактичних витрат насіння на гектар посівної площі у середньому за п'ять років та норм висіву) та з урахуванням страхового фонду	уточнюється при зміні прогнозних площ посіву зернових культур						уточнюється на обсяги фактичних витрат на посів озимих зернових культур	уточнюється при зміні прогнозних площ посіву ярих зернових культур			уточнюється на обсяги фактичних витрат на посів ярих зернових культур	фактичні витрати на посів зернових культур	уточнені фактичні витрати на посів зернових культур	
корм худобі та птиці	визначається на основі інформації про прогнозне середньорічне поголів'я худоби та птиці, прогнозну продуктивність, нормативи витрат кормів на виробництво продукції, частки концентрованих кормів в структурі раціону	уточнення при зміні прогнозних показників		щомісячне експертне уточнення з урахуванням фактичних показників											
втрати	частка від виробництва, що склалася за 5 років									фактичні дані	не прогнозується				

Місяць року														
	Рік "п-1"									Рік "п"				
Показник балансу	Квітень	Травень	Червень	Липень	Серпень	Вересень	Жовтень	Листопад	Грудень	Січень	Лютий	Березень	Квітень	Травень	Червень
Запаси на початок періоду	залишкові запаси за балансовим розрахунком з врахуванням даних форми 1-зерно та декларування зерна	уточнення даних з врахуванням даних форми 1-зерно та декларування зерна		Остаточні дані за формою 1 зерно півр. фіксуються за попередній марк. рік. + дані декларування зерна Проводиться перерахунок показників споживання	не прогнозується									
запаси на кінець періоду	визначаються як двомісячний обсяг внутрішнього використання						визначаються як двомісячний обсяг внутрішнього використання, з уточненням на фактичні дані 1 квартал	не змінюється		визначаються як двомісячний обсяг внутрішнього використання, з уточненням на фактичні дані 1 півріччя	не змінюється		визначаються як двомісячний обсяг внутрішнього використання, з уточненням на фактичні дані за 3 квартали	уточнення даних

Please address comments and inquiries to:

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