FARM REFERENCE
HANDBOOK FOR UKRAINE

2005
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DISCLAIMER
The author’s views expressed in this publication do not necessarily reflect the views on the United States Agency for International Development or the United States Government.
INTRODUCTION

This Farm Reference Handbook is a real novelty in the sphere of small private farming in Ukraine. It is meant to assist private farmers and house plot owners while making decisions for the next cropping period, as to what to produce and to determine the value added crops. Small agricultural producers and farm managers could use it as a planning tool while preparing business plans; and also as an analytical tool to determine market competitiveness.

This Handbook can be used as a comprehensive guide manual and tool for commercial banks and credit unions dealing with agricultural lending to small farmers, agricultural donors providing technical assistance, extension service officers, volunteers, traders, agricultural specialists, economists, researchers, and also private agricultural investors. For that purpose, the handbook contains relevant market analysis information from previous years, based on data from economic research institutions, statistical bodies, agricultural donors, private companies and from a network of anonymous small agricultural producers that have agreed to give 2004 economic data on their farming practices.

In addition, the 2004 Enterprise Budgets have been prepared by the USAID Mission for Ukraine, Belarus and Moldova with the help of USAID contractors and grantees, which implement technical assistance through agricultural projects.

The Handbook consists of two parts:

Part 1 – GENERAL INFORMATION ABOUT AGRICULTURE in UKRAINE;

Part 2 – SMALL FARM MANAGEMENT.

The electronic model of a Ukrainian Agricultural Enterprise Budget Reference was created in addition to this Handbook (see attached CD).

Also a Farm Record Book was prepared by the CNFA Farmer to Farmer Project (see attached CD).
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1. The Electronic Model for the Agricultural Products Budgets
2. The Farm Record Book
PART 1. GENERAL INFORMATION ABOUT UKRAINIAN AGRICULTURE

1. GEOGRAPHY, SOIL AND CLIMATE

Ukraine is one of the largest countries in Europe. It shares borders with Belarus, Hungary, Moldova, Poland, Romania, Russia and Slovakia. The total area of the country encompasses some 603,700 thousand square kilometers, which translates into roughly 5.7 percent of the total land mass of Europe or 0.44 percent of the globe.

Because of its favorable geographical location in the center of Europe and a well-developed system of air, railway, sea and motor transport, Ukraine is a transit country for passengers and cargos from different countries.

Ukraine lies on the Western part of the Eastern European plain and on the area of the Carpathians in the Southwest and the Crimea mountains in the South. In the South, Ukraine is washed by the Black sea and the Azov Sea, with a coastline of 1,758 km. Ukraine has a well-integrated network of rivers both large and small. There are 73-thousand rivers and about 20-thousand lakes in Ukraine. The biggest river in Ukraine, the Dnipro, is the third longest river in Europe.

The relief of Ukraine is mainly flat: 95 percent of Ukrainian land consists of plains, while the remaining 5 percent is mountainous. The Ukrainian terrain is highly favorable for agriculture: nearly 60 percent of agricultural land is practically flat and the leftover 35 percent has slopes ranging between 1° and 3°.

With one-third of the world's richest chernozem (black soils), Ukraine occupies a leading place among neighboring countries by proportion of high-quality fertile soil. The deep black soil developed under grass vegetation represents 54 percent of the land and has an enriched humus layer of between 40 and 50 centimeters or more in depth.

Soil composition (percent of agricultural land): heavy loam — 27 percent, light loam —16 percent, medium loam — 21 percent, heavy clay — 3 percent, light clay — 24 percent and sand-10 percent.

Agricultural land accounts for nearly 70 percent of the total area in Ukraine. Of this, arable land represents 55 percent of the total area, pasture 9 percent, hay 4 percent, and orchards and plantations less than 2 percent. The average land endowment in Ukraine is 0.80 hectare (ha) of agricultural land or 0.64 ha of arable land per person. This figure however, shows a considerable variability over regions and also over time, reflecting differences in population density and migration patterns.

As for vertical changes, two mountainous areas are distinguished: the Mountainous Crimea and the Carpathians. The mountainous regions of the country have special climatic conditions because of their vertical partition, different atmospheric circulations, etc. In general, Ukraine is a country with a moderate, continental climate (with the exception of Crimea, which has a subtropical, Mediterranean climate) where the change of the four seasons is very evident during the year.
Natural and Climatic Zones

The entire territory of Ukraine is divided as to its latitudinal changes into three main zones (fig. 1). The flat parts of the country consist of three geographical belts: Woodlands, Forrest-steppe and Steppe, which differ in terms of each ones climatic peculiarities and vegetation.

Figure 1. Natural and Climatic Zones of Ukraine

MARSHY WOODLANDS and CARPATHIANS ZONE (POLISSIA) — Ivano-Frankivsk, Chernihiv, Lviv, Rivno, Volyn, Zakarpattia, and Zhytomyr oblasts (NORTH)

This is the zone of mixed forests; it occupies the northern part of Ukraine. The southern border of Woodlands and Forrest-steppe passes along the line Volodymyr-Volynskyi-Lutsk- Rivne-Korets'-Shepetivka-Polonne-Chudniv-Troyaniv-Zhytomyr-Kryn-Kyiv-Nizhyn-Baturyn-Krolevets'-Glukhiv. In the west of Shepetivka to Rava-Rus'ka the strip of the so-called Small Forrest-steppe which is limited to the Volyn elevation and from the south by the Podil elevation.

The total area of Woodlands is 113,500 sq. km or about 19 percent of the entire territory of Ukraine. The large mosaic character of the natural complexes within the lowlands relief, including wide and mainly swamped valleys, is a specific feature of the natural conditions of the Woodlands.
The climate of the Woodlands is continental with warm and humid summers and mild winters. The average air temperature in July is +17 to +19°C, in January it dips to -4.5, to -7.8°C. The vegetation period lasts from the second ten day period of April to the third ten day period of October. The period with an average temperature higher than +15°C lasts from between 95-125 days. The annual total of temperatures higher than +10°C is about 2,600. The period without light frosts on the soil surface totals from between 160 and 180 days. The relief is flat and the annual average precipitation ranges between 550 and 650mm. The largest amounts of precipitation, ranging between 400 and 450mm fall on the Turfy-podzolic and swamped soils, which occupy roughly 75 percent of Woodland territory, dominate the composition of topsoil. The average woodiness of the zone is 30 percent. Arable lands occupy 33 percent of the entire zone territory that is more than 4 million ha, the haymaking – 1.2 million ha and the pastures – 0.7 million ha. This is the main zone for grain production (rye, oats and buckwheat), technical crops, flax, hop, sugar beets and potatoes as well as the processing of flax, meat and dairy produce.

FORREST-STEPPE ZONE (Lisostep) — Cherkassy, Chernivtsi, Kharkiv, Khmelnytsk, Kyiv, Poltava, Sumy, Ternopil, and Vinnitsa oblasts (CENTRAL)

This zone is located between the Woodlands and the Steppe. The southern border passes along the line Frunzivka-Ananiyv-Lake Kryve-Vilshana — to the north of Kirovograd-Znamianka-Kremenchuk-Krasnograd-Zmiyiv. The zone area is 202,000 sq. km. and is mainly flat with the Volyni-Podils’ka elevation forming the left bank part and the Dnestrian elevations of the Dnieper River on the right bank part.

The climate of the zone is temperate continental. The average temperature in July in the northwestern portion reaches +18°C rising in the south up to +22°C. January’s average temperature is between -5 and -8°C. The vegetation period has an average duration of between 200 and 210 days. The period of time with an average twenty-four hour temperature higher than +15°C in the west is about 100 days and in the southeastern part about 120 days. The annual sum of temperatures higher than +10°C in the north is from between 2,500 and 2,600 and in the south about 2,800. The period without light frosts on surface soil is between 135 and 140 days. The amount of precipitation in the west averages between 550 and 700mm and in the central part the average is about 500 to 550mm and in the southeast it’s about 450mm. The largest amount of precipitation, about 75 percent, falls between April and September.

The topsoil is quite diverse with an intermittence of podzolic soils and typical black soils. Woodiness is insignificant – about 12 percent. Agricultural lands occupy 70 percent of the territory including 66 percent of arable land. As for its agricultural specialization, the Forrest-steppe is a sugar beet-grain zone with milk and meat animal husbandry and pig farming. The structure of sown areas: winter wheat – more than 30 percent, corn – 10 percent, about 8 percent — barley and pulse crops. More than 10 percent is devoted to sugar beet and sunflower.

STEPPE ZONE (STEP) – Crimea, Dnipropetrovsk, Donetsk, Kherson, Kirovohrad, Lyhansk, Mykolaiv, Odesa, and Zaporizhia oblasts (SOUTH)

This zone includes the entire southern and eastern portions of Ukraine and in the north is bordered by Forrest-steppe while to the south it ends at both the Black and Azov Seas. The area is roughly 240,200 sq. km. and the relief is mainly flat.

The climate of the zone is temperate-continental. Summers are hot and winters are cold. The average temperature in January is between -5 and -7°C, contrasting with July temperatures up between +21 and +23°C. The vegetation period usually spans between 210 and 245 days and the period with an average temperature higher than +15°C ranges between 120 and 140 days. The annual sum of temperatures higher than 10°C is 2,800 to 3,600.

The average amount of precipitation ranges from between 500mm in the north to 350mm in the south. The maximum precipitation falls during the summer months and often consists of heavy showers. The moistening coefficient in the south of the zone is 0.8 and in the north of the zone is 1.3. Dust storms and dry winds often occur in the southern part.
Chrnozem or black soils (about 90 percent of the zone area) prevail in the topsoil. Dark chestnut chrnozem (black soils) are typical for the southern part. This is the zone of maximum plough for Ukraine and about 48 percent of Ukraine’s arable land rest on this steppe.

The specialization of agriculture is grain, fruit and vegetable gardens, and vineyards there as well. The main grain crops are winter wheat, corn, barley and of technical crops, sunflower. The growing of vegetables is widespread, especially in the Donetsk basin.

2. ADMINISTRATIVE AND TERRITORIAL DIVISIONS

According to the State Statistics Committee 2004 data, Ukraine has:

- 24 Oblasts and one Autonomous Republic;
- 490 Regions (Rayons in the local vernacular);
- 1,341 urban settlements;
- 28,597 rural settlements/villages; and
- 10,279 village councils.

According to the State Committee on Statistics in Ukraine and results of 2001 Census (see: http://www.ukrcensus.gov.ua), urban areas are settlements of population approved by Ukrainian legislation as towns and townships. All other settlements are rural areas. Size of area/locality is not a major factor in determining the category of locality, while availability or lack of necessary infrastructure, utilities, and type of production can serve as the basis for attributing this locality to either urban or rural status. The Draft Law of Ukraine on Administrative and Territorial Structure of Ukraine (Article 8, 9, 10, 11, 12) dated 07/08/97 provides for the following definitions of villages and towns into various categories.

**Urban Settlements (Townships and Towns).** There are 1,341 urban settlements in Ukraine, including 886 townships and 455 towns.

1) **Townships,** are town settlements neighboring industrial enterprises, facilities, railway depots, hydro-technical facilities, agricultural production/processing enterprises and other settlements that have communal and social infrastructures and the populations of over 2,000 residents whereas at least two-thirds of whom are engaged in the industrial, social or cultural spheres.

2) **Towns:**

   — Region (Rayon) town category includes towns that host industrial enterprises, communal utilities, the housing sector and a network of social and cultural enterprises and the population of over 10,000 residents whereas at least two-thirds of whom are engaged in the industrial, social or cultural spheres (or non agricultural sphere).

   — Republic town (Autonomous Republic of Crimea), oblast town — category incorporates towns that are economic and cultural centers, enjoy developed industry, a communal utilities sector, an essential housing sector and a population of over 50,000 residents. This category may also incorporate towns with populations less than 50,000 residents, are of industrial, social, cultural or historical importance, have prospects for economic development or settlements that make up recreational/spa zones and host sanatoriums, curative and recuperation facilities, tourist camps and other recreation facilities.

   — **Towns with special status** under the Constitution of Ukraine are Kyiv and Sevastopol.

**Rural Settlements (villages)**

There are 28,597 villages in Ukraine. Out of all the villages in Ukraine, 151 (0.5 percent of the total number) have no population at all. In other words, there are whole regions or areas of Ukraine, where no people live. Villages are rural settlements with permanent residents who lead a rural way of living and are mainly engaged in agricultural production. Depending on the population, villages are divided into small (up to 500 inhabitants), medium (500-1,000 inhabitants), and large (more than 1,000 inhabitants). According to data supplied by the State Statistics Committee of Ukraine, as of January 1, 2001 there were no children aged 6 in 5,700 villages; no children and teenagers aged 7 to 15 in 2,200 villages; no young people aged 16 to 17 in 4,000 villages; and no young people aged 18 to 28 in 1,600 villages.
According to the demographic situation indexes, almost 8,000 villages belong to the category of degrading villages, where stabilizing the population is impossible without GOU intervention. Rural administrative districts, in which such villages account for around the half, are considered regions with population crisis. The largest numbers of such districts are in the following oblasts: 22 in Chernigiv, 15 in Sumy, 16 in Kharkiv and 16 in Poltava oblasts.

Over the past five years, more than 300 schools, above 2,000 kindergartens, the same number of cultural venues and about 500 local hospitals have been closed. The houses where rural residents live are old and have a low level of municipal services. Only 17 percent of the residential population is provided with central water supplies, 12 percent have sewage systems and 27 percent are supplied with natural gas.

3. RURAL POPULATION

According to Ukrainian Statistics data, by year end 2003, the population of Ukraine consisted of 47,622,436 people, with people of Ukrainian ancestry making up 73 percent and those of Russian ancestry making up 22 percent.

Ukraine is the fifth most densely populated country in Europe (only after Germany, Italy, Great Britain and France) and the 21st most populated country in the world. Approximately, seven percent of Europe’s population and about one percent of the world’s population live in Ukraine.

The average density of the population of Ukraine is 80 people per square kilometer.

**URBAN** population represents 68 percent (32,146,465 people).

**RURAL** population represents 32 percent (15,475,971 people).

Within the total rural population, those under working age total about 20.3 percent, those at working age about 50.9 percent and those over working age number 28.6 percent.

Gender structure of rural population is: women — 53.8 percent, men — 46.2 percent.

**Birth/Death Ratio of the Rural Population in 2003:** 142,175 persons were born and 305,441 persons died. The mortality rate exceeded the birth rate by 163,266 people per year. In recent years, in 90 percent of villages the number of deceased exceeded the number of children born, with 11 percent of them not having a single child registered as being born. Another trend is the increased rate of deserted villages.

According to 2001 Sample Survey by the Ukrainian State Committee for Statistics (Nov.2001), the average number of people in an urban household was 2.63 and in rural areas, 2.89. On the whole, a two person household is most characteristic of Ukraine.

Most households with children have only one child in all Ukrainian regions. Households with two or more children are more typically found in rural areas than urban areas. For instance, 40.2 percent of rural households with two children compare to 27.5 percent in towns and cities; 9.4 percent and 2.6 percent with three children; 2.6 percent and 0.5 percent with four children; and 1.6 percent and 0.2 with five and more children respectively.

The educational level of the rural population is much lower than that in urban areas. 25.8 percent of the employed population in rural areas completed higher or basic secondary education in 2001. At the same time, 2.9 percent of the rural population had a only primary general education or none at all.

Basic characteristics of the situation in rural areas of Ukraine (DFID Rural Livelihood Program’s Workshop, July, 2003).

- Access to information is at the 50 percent level. Rural areas do have a network of both radio and television and other mass media, such as newspapers, are to some extent or another accessible.
- Financial resources are minimal, considering the methods of budget planning and distribution that exist today; it does not allow self governmental agencies to wield the proper level of authority needed to provide protection for the community interests, in this case, the rural community.
• About 40 percent of Ukraine's rural areas has sufficient institutions to support their populations. In the rural areas, very few institutions can influence local politics or the decision-making processes. Legislation that regulates rural development is mostly in place. However, the indicators of its implementation and mechanisms of execution are rather low. There are laws that provide for priority treatment of issues related to social development of the countryside and others, but the mechanisms of execution are missing.

• The level of attitudes reflects how actively rural inhabitants participate in the resolution of their own social and economic problems. Attitudes are still at a low 20 percent level. As for the level of culture and education of rural population, rural wisdom and the possibility of participation in the various processes by men and women, the indicator rests at a relatively high 70 percent mark.

4. EMPLOYMENT AND INCOMES OF RURAL POPULATION

Employment

Far and above any other economic activity, the rural population is mostly engaged in agriculture, forestry and fishery (more than 55 percent, including individual farms – 23 percent); 15 percent in education and healthcare, 11 percent in extraction and processing industries and 6 percent in the retail and stock trade.

76.5 percent of the rural population consists of hired workers while 19.2 percent are self-employed.

By the information from the sample survey carried out by the Ukrainian State Committee for Statistics (November 2001), there are working people in 61.1 percent or almost two thirds of Ukrainian households, including 50.2 percent in rural areas. In rural areas, the proportion of households with no working persons totals 66.7 percent.

Many households have active land plots. Of all Ukrainian households, 37.1 percent keep cattle, poultry or bee-hives. This is further broken down into the following categories: 85.7 percent in rural areas, 31.5 percent in towns and 3 percent in cities. 62.4 percent of all households in the country have land plots in their possession, 98.7 percent of those plots belonging to rural households. 44.3 percent of rural households have land parcels in their use with an area of more than 1 ha, and almost one third or 30.6 percent, from 0.16 to 0.30 ha.

Unemployment rate

The official unemployment level is low, 3.3 percent as of November 2004, but these figures are misleading. Most experts agree that reported unemployment is understated with the real unemployment rate more like 9.3 percent.

The problem of employment for the rural population is as urgent as ever. Formal employment positions for rural residents declined by 30 percent between 1990 and now. Most surplus labor has thus far been absorbed into subsistence farming on individual land plots.

Among the employees who were dismissed in Ukraine during the period of January through September 2003, about 146,800 people, almost every fifth person had been working in agriculture or forestry, about 31,400 people. It is noteworthy that at the same time, as of October 1, 2003 the number of unemployed citizens aged between 15 and 70 in the country in general decreased by 7.2 percent or 161,600 citizens, compared with figures reported during the first 9 months of 2002 (Table1). However, in rural areas, the unemployment rate jumped to 9.6 percent to 38,500 people.

Table1. The Number of the Unemployed in Rural Areas, people

<table>
<thead>
<tr>
<th>Indicators</th>
<th>On average in 9 months:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2003</td>
</tr>
<tr>
<td>All of the country's unemployed population aged 15-70</td>
<td>2,070,800</td>
</tr>
<tr>
<td>Unemployed population in rural areas aged 15-70</td>
<td>442,700</td>
</tr>
<tr>
<td>Adults capable of working</td>
<td>442,300</td>
</tr>
<tr>
<td>Adults older incapable of working/disabled.</td>
<td>300</td>
</tr>
</tbody>
</table>

Source: State Statistics Committee of Ukraine
Opportunities for employment at enterprises in rural areas are highly limited. In fact, among the rural population the number of people who have lost any hope of finding a job shot up by 22,900 during the first 9 months of 2003, an increase of 9.3 percent. For example, the ratio between the number of rural inhabitants who failed to find a job and the economically active rural population was twice as high as the same ratio for urban dwellers, a range of 4.6 percent to 2.5 percent. Pursuant recommendations put forward by international organizations, the indicated category should also be referred to as the unemployed population.

Due to an insufficient number of unoccupied workplaces in the official sector of the economy and the spread of unregistered unemployment in rural areas, the average monthly number of registered unemployed rural inhabitants, recorded between January and September 2003, exceeded the unemployment rate calculated by the International Labor Organization by 2.5 percent.

According to expert assessments, the hidden unemployment rate in rural areas equates to somewhere between 0.9 and 0.95 million people.

A proven method for creating new jobs, thereby reducing the unemployment rate in these rural areas, is by actively developing small and medium sized enterprises.

**Gender Analysis** *(Sources: Agricultural Marketing Project and APK-Inform, 2003)*

Gender issues in Ukrainian agriculture differ from those in many other developing countries. Women face gender discrimination in more conservative rural areas as they are often the first fired when the collectives downsize their operations. Historically, women in Ukraine work outside their homes and at the same time care for their family, their in-laws and their domestic responsibilities.

A major USAID BIZPRO analysis of Women and Entrepreneurship in Ukraine concluded that the number of female small business owners is about the same as male. Female owned firms make up the majority in the wholesale and retail trades; employ women by a two to one margin over men.

Nearly 70 percent of all female owned businesses surveyed were in wholesale and retail trade occupations (compared to 37 percent of male owned firms). The highest ratio of commercial activities for female owned firms is in trade business, restaurants and agriculture. For example, the ratio of female to male agriculture firms stands at 34 percent to 67 percent respectively. There are more women in wholesale and trade than men.

On small family farms, women participate on an equal basis in most agricultural activities, but have additional responsibilities for child rearing, household and livestock care. Because of these responsibilities, women in rural areas are more socially isolated than men and less likely to be able to study in big towns and cities or attend training given lack of childcare, transportation and other domestic responsibilities.

In 2002, the Land O’Lakes conducted an extensive survey of farmer NGOs and found that about 10 to 30 percent of their members were women. There are a number of female farmer associations such as the Coalition of Women Farmers and the Women Farmers Association in Kharkiv, Association of Women in Agricultural Education in Kyiv, Council of Women Farmers in Ukraine and the Club of Women Farmers (Khutoryanichka) in Odesa and women’s cooperative in Zakarpatsya.

The two major women’s organizations in agriculture are the **Board of Women’s Association** and the **Union of Village Women**. The Board, which has 3,500 members in 14 oblasts, provides members with basic knowledge on financial matters, record keeping, business planning, computer skills and how to obtain loans. The group also helps disseminate project information and provide limited legal help to women farmers. The association is also creating marketing cooperatives in Odesa, Mykolayiv and Kherson.

The **Union of Village Women** in Poltava Oblast has 4,270 farmer members in 20 regions. The Association provides its members with: (1) legal consultations, especially on land issues and how low income farmers may benefit from more commercial operations; (2) agricultural production advice; (3) strong network of Internet information centers and cooperative development including credit unions.

Please, see Association’s contact info in Annex 2.
Household Incomes (Wages and Ownership of Assets)

1) **Wages in Agriculture**

In the year 2000, agricultural wages were half the level of wages paid in the rest of the economy. This negative trend continued despite the successful raising of agricultural workers wages during 2003. Figures show that although the average full time wage in the agricultural sector rose by 18.2 percent in 2003 compared to the previous year, the increase still amounted to only 45.4 percent of the average wages in the country’s economy and was 2.8 times lower than wages paid in industrial sector.

In order to compensate for the decline in wages and reduce opportunities for rural wage labor, rural households have increasingly turned to household plot production as the primary source of household food consumption and cash income. In many cases plot generated income is not sufficient to avoid poverty. Nearly 40 percent of rural residents, using the Ukrainian official definition of poverty, have incomes below the poverty line. The average rural household produces USD 35 worth of food per month, of which an equivalent of USD 24 is consumed by the household itself and the remaining USD 11 worth of food is sold for household income (OECD/World Bank Report Achieving Ukraine’s Agricultural Potential: Stimulating Agricultural Growth and Improving Rural Life, 2003).

2) **Income from ownership of assets**

In 2001, rural households earned USD 4.24 each month in rents and dividends which is 27 percent higher than the national average monthly income. This is the result of land reform, which has provided rural residents with the opportunity to rent or lease their land. Land ownership has given rural households a sizable stream of cash income. It is equivalent to about 25 percent of their cash salaries or about 40 percent of the cash that rural households generate from food sales from their own household plots (OECD/World Bank Report Achieving Ukraine’s Agricultural Potential: Stimulating Agricultural Growth and Improving Rural Life, 2003).

3) **Consumption of food products**

The poverty problem facing rural Ukraine translates into a serious food and healthcare issue since 70 percent of rural household income is spent on food (compared to France-25 percent, other EU states-21 percent, Japan-20 percent, and the U.S.-15 percent). Rural households consume 33 percent more milk, 46 percent more potatoes and 7 percent more bread than their urban counterparts in Ukraine, but eat less 3 percent meat, 30 percent less fruit and 21 percent less eggs, fish and vegetable oil. This results in a per capita caloric intake by the rural population that is 4 percent higher than the countrywide average (Table 2).

Table 2: Consumption of Main Food-Stuffs in Ukraine (annually, per capita, kilograms)

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</tr>
</thead>
<tbody>
<tr>
<td>Meat and meat products, sub-products and fat</td>
<td>68.2</td>
<td>38.9</td>
<td>33.1</td>
<td>32.8</td>
<td>31.1</td>
<td>32.6</td>
<td>34.5</td>
</tr>
<tr>
<td>Milk and milk products</td>
<td>373.2</td>
<td>243.6</td>
<td>210.9</td>
<td>199.1</td>
<td>205.2</td>
<td>225.3</td>
<td>226.4</td>
</tr>
<tr>
<td>Eggs</td>
<td>272.0</td>
<td>171.0</td>
<td>163.0</td>
<td>166.0</td>
<td>180.0</td>
<td>209.0</td>
<td>214.0</td>
</tr>
<tr>
<td>Bread and bread products</td>
<td>141.0</td>
<td>128.4</td>
<td>122.4</td>
<td>124.9</td>
<td>129.6</td>
<td>131.2</td>
<td>124.5</td>
</tr>
<tr>
<td>Potatoes</td>
<td>131.0</td>
<td>123.8</td>
<td>122.5</td>
<td>135.4</td>
<td>130.5</td>
<td>132.8</td>
<td>138.0</td>
</tr>
<tr>
<td>Vegetables, watermelons, and melons</td>
<td>102.5</td>
<td>96.7</td>
<td>96.3</td>
<td>101.7</td>
<td>104.8</td>
<td>108.0</td>
<td>113.6</td>
</tr>
<tr>
<td>Fruit, berries, and grapes (not wine)</td>
<td>47.4</td>
<td>33.4</td>
<td>22.2</td>
<td>29.3</td>
<td>26.4</td>
<td>28.5</td>
<td>33.0</td>
</tr>
<tr>
<td>Fish and fish products</td>
<td>17.5</td>
<td>3.6</td>
<td>7.3</td>
<td>8.4</td>
<td>11.0</td>
<td>11.9</td>
<td>12.0</td>
</tr>
<tr>
<td>Sugar</td>
<td>50.0</td>
<td>31.6</td>
<td>32.7</td>
<td>36.8</td>
<td>39.5</td>
<td>36.1</td>
<td>36.4</td>
</tr>
<tr>
<td>Vegetable oil</td>
<td>11.6</td>
<td>8.2</td>
<td>9.0</td>
<td>9.4</td>
<td>10.0</td>
<td>10.7</td>
<td>11.3</td>
</tr>
</tbody>
</table>

Source: State Statistics Committee of Ukraine
Source: State Statistics Committee of Ukraine

Figure 2: Consumption of Main Food-Stuffs in Ukraine (annually, per capita, kilograms)

Web RESOURCES:
For background information on the political and economic environment of the country and rural areas, please click on the links below:

- the U.S. Department of State Background notes: http://www.state.gov/r/pa/ei/bgn/3211.htm;
  - Agriculture Policy Ministry: http://www.minagro.kiev.ua
5. DEFINITION OF DIFFERENT TYPES OF AGRICULTURAL ENTERPRISES

Due to the development of the agricultural sector in Ukraine over the past decade, defining and classifying agricultural producers has been difficult. The following three definitions are used in Ukraine to define categories of agricultural producers.

Agricultural Enterprises, also called large agricultural producers: include state farms, joint stock companies and partnerships of all types, agricultural cooperatives, farming units affiliated with industrial, transportation and other enterprises, organizations and scientific research institutes.

Private Households also called household plots (including dacha plots) or small agricultural producers: include individual or family households with land estates, forms of agricultural production when an individual or a family manufactures commodities to satisfy the family needs in foods or with other purposes.

Private Farming is also generally considered to be small farmers: a form of free enterprise, using owned or rented lands and other assets. A private farmer operates his/her business unit to produce, sometimes process, and market agricultural commodities and is registered by the government as a farm.

To summarize, the Agricultural Enterprise category includes the largest farm holdings, such as former state and collective farms still struggling with post Soviet realities and the modern and efficient corporate style holdings. Private Households are comprised of individual and family rural households that produce food primarily for personal consumption, but also market a certain percentage of its commodities to supplement family income. Last, Private Farming is very similar to private households, but is registered as a business.

It is easier to think of agricultural enterprises as large farms, while the other two categories are small farms.

In Chapter 7 of this Book we will analyze the development of small agricultural farms.

6. DEFINITION OF SMALL AND MEDIUM SIZED AGRICULTURAL ENTERPRISES

- ECONOMIC CODE of Ukraine (January 16, 2003, #436-IV); Chapter, Organization forms and kinds of Enterprises

The definition of a small enterprise: when the average staff list of employees for the reference period (calendar year) does not exceed 50 people and the volume of annual gross income does not exceed 500,000 Euro.

Law of Ukraine “On State Support of Small Entrepreneurship”;

Article 1. The notion of subjects in small entrepreneurship: The subjects in small entrepreneurship are: Legal entities are economic entities of any organizational and legal form and form of ownership in which the average staff list of employees for the reference period (calendar year) does not exceed 50 people and the volume of annual gross income does not exceed 500,000 Euro.

Article 2. The sphere of the purview of the Law: The purview of this Law extends to the subjects of small entrepreneurship irrespective of the forms of ownership including those which act in the area of agriculture.
In accordance with the aforementioned Ukrainian legislation and APHD Project, the analysis shows that in 2003 91.2 percent of the agricultural enterprises in Ukraine have total sales volume that does not exceed the designated maximum equivalent of 500,000 Euro (3.2 million UAH) and only 22.3 percent reported the maximum allowable 50 employees. Accordingly, these 22.3 percent could also be included in the category of small enterprises (by the criteria provided for by current legislation).

Less than 0.1 percent of agricultural enterprises can be included in the category of large enterprises (altogether four enterprises).

The group of medium sized enterprises is the largest.

*It is considered possible to divide medium enterprises into such classes or groups:*

- The enterprises in which the average staff list of employees per fiscal year is over 50 but does not exceed 1,000 people and the volume of gross sales income from both products and services in the fiscal year does not exceed the sum equivalent to 500,000 Euro at an average year rate of UAH of the National Bank of Ukraine are recognized to be medium enterprises of the first group.
- Other enterprises classified as medium enterprises by law are medium enterprises of the second group.

**Table 3. Classification of Agricultural Enterprises in Ukraine, 2003**

<table>
<thead>
<tr>
<th>Agricultural enterprises</th>
<th>Average number of employees</th>
<th>Volume of annual gross income, thousands of UAH</th>
<th>Number of enterprises</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small</td>
<td>&lt;=50 and &lt;=3,200</td>
<td></td>
<td>2,850</td>
</tr>
<tr>
<td>Big</td>
<td>&gt;=1,000 and &gt;=3,200</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>Middle</td>
<td>&gt;50 and &lt;1,000 and &gt;3,200 and &lt;32,000</td>
<td></td>
<td>1,077</td>
</tr>
<tr>
<td>Middle</td>
<td>&gt;50 and &lt;1,000 and &lt;=3,200</td>
<td></td>
<td>8,806</td>
</tr>
<tr>
<td>Middle</td>
<td>&lt;=50 and &gt;3,200 and &lt;32,000</td>
<td></td>
<td>20</td>
</tr>
<tr>
<td>Middle</td>
<td>&gt;=1,000 and &gt;=32,000</td>
<td></td>
<td>10</td>
</tr>
<tr>
<td>Middle</td>
<td>&gt;=50 and &lt;1,000 and &gt;=32,000</td>
<td></td>
<td>10</td>
</tr>
<tr>
<td>Middle</td>
<td>&gt;=1,000 and &lt;=32,000</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td></td>
<td><strong>12,784</strong></td>
</tr>
</tbody>
</table>

Source: UNDP Agricultural Policy Project
USAID Land-of-Lakes Agricultural Marketing Project defines farmers as being small and medium size agricultural producers as well as producer groups that truly need marketing assistance to increase their incomes. LOL’s target customers are private farmers, private rural producers, or produce cooperatives, associations and business groups either formally or informally organized.

Under small and medium size LOL AMP means a total of up to 50 ha including leased farmland, family farm or private entrepreneur/private enterprise types — not a corporate type of farm, a former collective farm — up to 20 full-time workers and up to one (1) million UAH in farm revenue.

USAID LSU Extension Service Project (Small Farm Training) defined a small and medium size agricultural enterprise as:
1) real private farmers (with leased land up to 200 hectares) and
2) house plot owners:
   — more than one hectare of land and up to 500 hectares,
   — use of hired labor,
   — commercial agricultural produce.

USAID CNFA Volunteers in Agribusiness Project (Farmer-to-Farmer) defined small and medium size agricultural enterprises as farms up to 100 hectares, including leased farmland under private farmers, small plot holders and dacha owners.
7. SMALL SCALE AGRICULTURE

Release of land parcels to rural inhabitants has spurred the formation of small private farming. The role of small scale agricultural producers (private farmers and households (HPOs)) in the Ukrainian agrarian sector has increased significantly over the past decade. Despite serious difficulties, they have become a major component of Ukrainian agriculture. In 1990 the share of agricultural land used by house plot owners (HPOs) and private family farms was only 6 percent, today this number has ballooned to 36.3 percent (of which HPOs — 28.9 percent). At the same time, the share of this group of producers in total agricultural production has topped 69.4 percent (of which HPOs — 66.7 percent).

7.1. PRIVATE FARMERS

Any rural resident can use land and assets to start an independent private family farm. According to the State Statistics Committee of Ukraine, the number of independent private farms grew from 82 to 43,016 between 1991 and 2004.

The share of land used by private farmers is 7.4 percent, and their share in total agricultural production is 2.7 percent.

The average private farm size during the past ten years increased from 24 to 72 ha (including 67 ha of arable lands).

Private Farmers:
- Rely heavily upon land for income and subsistence
- Live in a rural setting and farming is their profession
- Manage farms by operator and/or family.

Table 4. Private Farmers in Ukraine (end of the year)

<table>
<thead>
<tr>
<th>Source: State Statistics Committee of Ukraine</th>
</tr>
</thead>
<tbody>
<tr>
<td>In 2003, from all land under private farming, 98.5 percent is agricultural land, including 95.1 percent of arable land. Farmers lease 49.5 percent of the land they own; the land shares from members of former collective farms make up 77.4 percent of this leased land.</td>
</tr>
<tr>
<td>The Size of Private Farmers Land Plots (2003 data)</td>
</tr>
<tr>
<td>More than 500 hectares — 2.5 percent of farmers; 100.1 — 500 hectares — 8.1 percent; 50.1-100 hectares — 10.7 percent; 20.1-50 hectares — 36.5 percent; 10.1-20 hectares — 13.1 percent; 5.1-10 hectares — 11.1 percent; 3.1-5 hectares — 8.3 percent; and up to 3 hectares — 7.2 percent. 2.5 percent of farmers have no land.</td>
</tr>
</tbody>
</table>
The Structure of Sowing Area in Private Farms:

Grain and pulses — 55.7 percent; technical crops — 35 percent, including sunflower seeds — 28.9 percent; sugar beets — 3.1 percent; feed crops — 7.9 percent; vegetables — 0.7 percent; potatoes — 0.3 percent; and other — 3.4 percent.

The Share of Private Farmers in Total Agricultural Production in Ukraine is 2.7 percent,

- including plant growing products — 4.2 percent, from them: grains — 10.6 percent (15,509,700 centners), sugar beets — 10.9 percent (11,277,600 centners); sunflower seeds — 16.7 percent (5,984,400 centners); potatoes — 32.8 percent (860,600 centers); vegetables — 15.9 percent (1,317,000 centners);
- including animal products — 0.6 percent.

Table 5. Number of Livestock and Poultry under Private farms (at the end of the year, heads)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Cattle</td>
<td>200</td>
<td>27,000</td>
<td>102,500</td>
<td>116,600</td>
<td>119,800</td>
<td>106,200</td>
</tr>
<tr>
<td>Including calves</td>
<td>100</td>
<td>16,400</td>
<td>35,800</td>
<td>39,900</td>
<td>37,800</td>
<td>36,000</td>
</tr>
<tr>
<td>Pigs</td>
<td>300</td>
<td>40,300</td>
<td>54,000</td>
<td>69,800</td>
<td>101,400</td>
<td>88,200</td>
</tr>
<tr>
<td>Sheep and goats</td>
<td>40,900</td>
<td>6,000</td>
<td>7,900</td>
<td>11,900</td>
<td>18,400</td>
<td></td>
</tr>
<tr>
<td>Horses</td>
<td>-</td>
<td>3,600</td>
<td>6,000</td>
<td>7,100</td>
<td>6,800</td>
<td>6,400</td>
</tr>
<tr>
<td>Rabbits</td>
<td>-</td>
<td>6,900</td>
<td>4,900</td>
<td>4,000</td>
<td>4,300</td>
<td>3,200</td>
</tr>
<tr>
<td>Poultry</td>
<td>-</td>
<td>287,100</td>
<td>115,900</td>
<td>160,300</td>
<td>350,000</td>
<td>269,600</td>
</tr>
<tr>
<td>Bees, thousands of families</td>
<td>-</td>
<td>6,500</td>
<td>7,200</td>
<td>8,000</td>
<td>7,700</td>
<td>7,200</td>
</tr>
</tbody>
</table>

Source: State Statistics Committee of Ukraine
Source: State Statistics Committee of Ukraine

**Figure 8. Dynamics of Livestock and Poultry under Private farming (at the end of the year, heads)**

**Table 6. Availability of Agricultural Machinery on Private Farms (by the end of the year, units)**

<table>
<thead>
<tr>
<th></th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tractors</td>
<td>22,118</td>
<td>23,663</td>
<td>26,312</td>
<td>27,797</td>
</tr>
<tr>
<td>Per 100 ha of arable land</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Grain harvesters</td>
<td>4,585</td>
<td>5,054</td>
<td>6,032</td>
<td>6,559</td>
</tr>
<tr>
<td>Corn harvesters</td>
<td>165</td>
<td>217</td>
<td>256</td>
<td>325</td>
</tr>
<tr>
<td>Fodder harvesters</td>
<td>422</td>
<td>467</td>
<td>541</td>
<td>547</td>
</tr>
<tr>
<td>Beet harvesters</td>
<td>617</td>
<td>665</td>
<td>792</td>
<td>826</td>
</tr>
<tr>
<td>Potatoes harvesters</td>
<td>126</td>
<td>158</td>
<td>160</td>
<td>188</td>
</tr>
<tr>
<td>Tractor drills</td>
<td>9,982</td>
<td>10,641</td>
<td>12,169</td>
<td>12,944</td>
</tr>
<tr>
<td>Trailed reapers</td>
<td>975</td>
<td>1,226</td>
<td>1,455</td>
<td>1,777</td>
</tr>
</tbody>
</table>

Source: State Statistics Committee of Ukraine

**Additional data on developing private farming in Ukraine (Y2003):**

- Share of private farmers using organic fertilizers: 10. percent.
- Share of private farmers using crop protective chemicals: 12.6 percent.
- Production cost structure. Materials, 65.4 percent; labor, 12.7 percent; depreciation, 4.9 percent; allocation to social needs, 0.6 percent; other expenditures, 16.4 percent.
- Share of income from agricultural production in the total farmers’ income, 83.6 percent.
- Farmers’ profitability rate, 17 percent.
- The Main Expenses of private farms are: inputs — 65.4 percent; salary — 12.7 percent; amortization — 4.9 percent; social payments — 0.6 percent, and other expenses — 16.4 percent.

**There are several impediments to developing private farming in Ukraine:**

- The design of many government support programs, such as the subsidized agricultural credit program, makes them inaccessible to smaller farmers.
- Credit systems that could support independent private farmers, such as credit unions, are still in the early stages of development. The commercial banking system is not well enough developed to service smaller farms.
- Input supply and output marketing systems that deliver or supply in smaller quantities needed by independent private farmers are only beginning to develop. Input supply and marketing cooperatives which enable groups of small farmers to buy and sell in bulk, are either underdeveloped or non existent.
- Lack of appropriate policies and inadequate markets. Lack of business environment for agriculture that allows the most efficient producers to thrive and the use of new technologies to increase their productivity.
7.2. PRIVATE HOUSEHOLDS

This category of individual or family farming is widespread in Ukraine. The total area is near 11 million hectares, which represents \( \frac{1}{3} \) of all agricultural land (see a table below). HPOs share in agricultural production is rather significant – 66.7 percent.

The average size of these plots rarely exceeds 0.5 hectares, but on occasion can be as large as two hectares, and almost all households have at least one such plot.

### Households:

- Rely heavily upon land for subsistence
- Typically live in a rural setting
- Employed elsewhere (including schools, factories and stores)
- Up to 0.1 hectares, 6.6 percent of households
- 0.11-0.15 — 6.6 percent
- 0.16-0.50 — 49.5 percent
- 0.51-1.0 — 28.5 percent; and
- more than 1 hectare, 8.8 percent of households

Source: State Statistics Committee Land Survey of Private Householders (2000 year)

The relative importance of household production in agricultural output is the result of a number of factors.

The first is the large surplus in rural areas that has brought most rural residences into subsistence farming as a means of survival. At current labor rates, household plots produce crops such as potatoes, vegetables, meats and dairy products at a lower market cost than farm enterprises.

The second is the low rate of productivity on farm enterprises as a result of slow reform process of the farms, and the continuing inefficiency of input supplies, output marketing chains and credit markets on which they depend.

The activities of HPOs are mainly non-commercial, since most of the produce is intended for family consumption and regarded as an additional source of household income. It should be noted that in some cases these households are market-oriented and they produce the items which are in demand.

Traditionally, a lack of resources and/or a lack of markets mean that many agricultural producers earn a living off small parcels of land by growing low investment, low return field crops such as corn, sunflower, sugar beet and even wheat. While the CNFA Farmer to Farmer program estimates that farmers can earn at least 5,000 UAH net profit/ha growing high-value crops/specialty crops such as vegetables (as compared to about 500 UAH/ha from wheat and about 1,500 UAH/ha from sunflower), the high cost of inputs for these crops, the necessity and expense of irrigation and the combination of their permissibility, together with a general lack of storage facilities or transportation to effectively market these crops, make their introduction difficult.

Regarding specialty crops, it should be noted that they are generally not produced and sold in mass quantities. They have a high cash value per hectare, grossing between UAH 10 and 40 thousand per hectare (LOL AMP data). They are not necessarily exotic and include crops that need a lot of care to raise, and are therefore outside the traditional wholesale loop. These may include sweet corn, garlic, herbs, spices, cut flowers and organic produce.
Table 7. Agricultural Land under Households, /1000 hectares

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Land under all categories of agricultural enterprises</td>
<td>41,721</td>
<td>40,425</td>
<td>40,773</td>
<td>40,652</td>
<td>40,308</td>
<td>38,421</td>
<td>38,150</td>
<td>37,877</td>
</tr>
<tr>
<td>including households</td>
<td>2,565</td>
<td>5,011</td>
<td>5,589</td>
<td>5,788</td>
<td>6,243</td>
<td>8,543</td>
<td>9,736</td>
<td>10,939</td>
</tr>
<tr>
<td>The share of households land in all agricultural land, percent</td>
<td>6.1</td>
<td>12.4</td>
<td>13.7</td>
<td>14.3</td>
<td>15.5</td>
<td>22.2</td>
<td>25.5</td>
<td>28.9</td>
</tr>
</tbody>
</table>

Source: State Statistics Committee of Ukraine

Figure 9. Agricultural Land under Agricultural Enterprises and Households /1000 hectares

Table 8: The Share of Households in Gross Agricultural Production of Ukraine, (in comparison prices, percent)

<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Share of Households in gross agricultural production, total</td>
<td>27.5</td>
<td>44.9</td>
<td>51.5</td>
<td>52.5</td>
<td>55.8</td>
<td>56.8</td>
<td>62.0</td>
<td>58.7</td>
<td>59.8</td>
<td>66.7</td>
</tr>
<tr>
<td>including:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• in plant growing</td>
<td>21.3</td>
<td>39.8</td>
<td>46.9</td>
<td>44.4</td>
<td>48.0</td>
<td>47.1</td>
<td>54.4</td>
<td>50.1</td>
<td>52.4</td>
<td>61.5</td>
</tr>
<tr>
<td>• in animal breeding</td>
<td>33.8</td>
<td>51.5</td>
<td>57.7</td>
<td>65.6</td>
<td>65.9</td>
<td>68.3</td>
<td>73.6</td>
<td>72.6</td>
<td>70.9</td>
<td>73.5</td>
</tr>
</tbody>
</table>

Source: State Statistics Committee of Ukraine
CROP PRODUCTION IN HOUSEHOLDS

Table 9. Production of Main Crop Produce by Households (/1000 tons)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Grains</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1,445</td>
<td>2,353</td>
<td>2,521</td>
<td>4,495</td>
<td>8,046</td>
<td>9,319</td>
<td>5,638</td>
<td>x 3.9 times</td>
<td>x 2.4 times</td>
<td>60.5</td>
</tr>
<tr>
<td>Household Share in total grain production, percent</td>
<td>2.8</td>
<td>6.6</td>
<td>10.3</td>
<td>18.4</td>
<td>20.2</td>
<td>24.0</td>
<td>27.9</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td><strong>Sugar beet</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>263</td>
<td>1,034</td>
<td>1,605</td>
<td>3,166</td>
<td>3,780</td>
<td>3,027</td>
<td>x 1,098 times</td>
<td>x 11.5 times</td>
<td>80.1</td>
</tr>
<tr>
<td>Household Share in total sugar beet production, percent</td>
<td>0.007</td>
<td>0.9</td>
<td>4.5</td>
<td>12.2</td>
<td>20.3</td>
<td>26.2</td>
<td>22.6</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td><strong>Sunflower seed</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>62</td>
<td>102</td>
<td>103</td>
<td>432</td>
<td>407</td>
<td>544</td>
<td>678</td>
<td>x 11 times</td>
<td>x 6.7 times</td>
<td>124.6</td>
</tr>
<tr>
<td>Household Share in total sun seeds production, percent</td>
<td>2.4</td>
<td>6.5</td>
<td>4.9</td>
<td>2.5</td>
<td>18.1</td>
<td>16.6</td>
<td>15.9</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td><strong>Potatoes</strong></td>
<td>11,940</td>
<td>14,851</td>
<td>17,552</td>
<td>19,561</td>
<td>17,069</td>
<td>16,390</td>
<td>18,190</td>
<td>152.4</td>
<td>122.5</td>
<td>111.0</td>
</tr>
<tr>
<td>Household Share in total potatoes production, percent</td>
<td>71.4</td>
<td>92.2</td>
<td>95.3</td>
<td>98.6</td>
<td>98.4</td>
<td>98.6</td>
<td>98.5</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td><strong>Vegetables</strong></td>
<td>1,794</td>
<td>3,336</td>
<td>4,131</td>
<td>4,835</td>
<td>5,134</td>
<td>5,120</td>
<td>5,711</td>
<td>x 3.2 times</td>
<td>171.2</td>
<td>111.5</td>
</tr>
<tr>
<td>Household Share in total vegetables production, percent</td>
<td>26.9</td>
<td>64.9</td>
<td>81.5</td>
<td>83.1</td>
<td>86.9</td>
<td>87.9</td>
<td>87.3</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td><strong>Fruit and berries</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1,555</td>
<td>807</td>
<td>1,430</td>
<td>1,189</td>
<td>948</td>
<td>1,035</td>
<td>1,289</td>
<td>82.9</td>
<td>159.8</td>
<td>124.5</td>
</tr>
<tr>
<td>Household Share in total production, percent</td>
<td>53.6</td>
<td>70.0</td>
<td>74.3</td>
<td>81.8</td>
<td>85.7</td>
<td>85.5</td>
<td>76.0</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
</tbody>
</table>

Source: State Statistics Committee of Ukraine
Figure 11. Production of Main crops in Large Agricultural Enterprises and in Households, 2003

ANIMAL PRODUCTION IN HOUSEHOLDS

Table 10. Number of Livestock and Poultry Heads per Households (by the end of year, /1000s heads)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Livestock</td>
<td>3,540</td>
<td>3,855</td>
<td>3,742</td>
<td>4,386</td>
<td>4,758</td>
<td>4,914</td>
<td>4,581</td>
<td>129.4</td>
<td>118.8</td>
<td>93.2</td>
<td>59.1</td>
</tr>
<tr>
<td>including cows</td>
<td>2,186</td>
<td>2,799</td>
<td>2,917</td>
<td>3,107</td>
<td>3,243</td>
<td>3,314</td>
<td>3,192</td>
<td>146.0</td>
<td>114.0</td>
<td>96.3</td>
<td>74.4</td>
</tr>
<tr>
<td>Hogs</td>
<td>5,356</td>
<td>5,864</td>
<td>5,699</td>
<td>5,238</td>
<td>5,463</td>
<td>5,813</td>
<td>5,093</td>
<td>95.1</td>
<td>86.9</td>
<td>87.6</td>
<td>69.1</td>
</tr>
<tr>
<td>Sheep and goats</td>
<td>1,530</td>
<td>1,742</td>
<td>1,492</td>
<td>1,462</td>
<td>1,575</td>
<td>1,622</td>
<td>1,564</td>
<td>124.8</td>
<td>89.8</td>
<td>96.4</td>
<td>83.9</td>
</tr>
<tr>
<td>Poultry, million heads</td>
<td>113.1</td>
<td>100.0</td>
<td>95.1</td>
<td>98.4</td>
<td>101.6</td>
<td>105.7</td>
<td>100.3</td>
<td>88.6</td>
<td>100.3</td>
<td>94.8</td>
<td>70.1</td>
</tr>
</tbody>
</table>

Source: State Statistics Committee of Ukraine
Source: State Statistics Committee of Ukraine

**Figure 12: Number of Livestock and Poultry Heads in Households (by the end of year, /1000s heads)**

<table>
<thead>
<tr>
<th>Year</th>
<th>Cows</th>
<th>Sheep and goats</th>
<th>Other cattle</th>
<th>Hogs</th>
<th>Sheep</th>
<th>Poultry million heads</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990</td>
<td>1,259</td>
<td>28.9</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1994</td>
<td>1,164</td>
<td>43.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1996</td>
<td>1,227</td>
<td>58.1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2000</td>
<td>1,225</td>
<td>73.7</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2001</td>
<td>1,165</td>
<td>76.8</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2002</td>
<td>1,201</td>
<td>72.9</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2003</td>
<td>1,187</td>
<td>69.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: State Statistics Committee of Ukraine

**Table 11: Production of Main Animal Products by Households (/1000 tons)**

<table>
<thead>
<tr>
<th>Year</th>
<th>Meat (in slaughter weight)</th>
<th>Household Share in total meat production, percent</th>
<th>Milk</th>
<th>Household Share in total milk production, percent</th>
<th>Eggs, million</th>
<th>Household Share in total egg production, percent</th>
<th>Wool</th>
<th>Household Share in total wool production, percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990</td>
<td>1,259</td>
<td>28.9</td>
<td>5,874</td>
<td>24.9</td>
<td>6,161</td>
<td>37.8</td>
<td>3,300</td>
<td>11.1</td>
</tr>
<tr>
<td>1994</td>
<td>1,164</td>
<td>43.5</td>
<td>7,207</td>
<td>39.7</td>
<td>5,464</td>
<td>53.8</td>
<td>4,900</td>
<td>25.4</td>
</tr>
<tr>
<td>1996</td>
<td>1,227</td>
<td>58.1</td>
<td>8,162</td>
<td>51.6</td>
<td>5,088</td>
<td>58.1</td>
<td>3,700</td>
<td>39.8</td>
</tr>
<tr>
<td>2000</td>
<td>1,225</td>
<td>73.7</td>
<td>8,989</td>
<td>71.0</td>
<td>5,832</td>
<td>66.2</td>
<td>2,100</td>
<td>61.8</td>
</tr>
<tr>
<td>2001</td>
<td>1,165</td>
<td>76.8</td>
<td>9,808</td>
<td>73.0</td>
<td>5,989</td>
<td>61.9</td>
<td>2,100</td>
<td>61.8</td>
</tr>
<tr>
<td>2002</td>
<td>1,201</td>
<td>72.9</td>
<td>10,674</td>
<td>7.5</td>
<td>6,326</td>
<td>55.9</td>
<td>2,400</td>
<td>70.6</td>
</tr>
<tr>
<td>2003</td>
<td>1,187</td>
<td>69.5</td>
<td>10,981</td>
<td>80.4</td>
<td>6,437</td>
<td>56.1</td>
<td>2,400</td>
<td>72.7</td>
</tr>
</tbody>
</table>

Source: State Statistics Committee of Ukraine
HARVEST OF HOUSEHOLDS/MARKETING

• One in ten plot holders engage in the sale of their harvest
• One in ten plot holders have extra produce to sell
• Production output capacities are not maximized
• Producers sell for cash, not for profit
• Cash crops vary from region to region, e.g. potatoes in the West, fruits in the South
• Regional exchanges of commodity are commonplace, e.g. L'viv potatoes for Odesa fruit

INPUT CONSUMPTION by PRIVATE HOUSEHOLDS

• 5.1 percent of owners purchased seeds
• 3.8 percent of owners purchased fertilizers
• 0.4 percent of owners purchased pesticides

Source: Sibley Int.

Figure 13. INPUT CONSUMPTION BY SMALL PLOT HOLDERS

For more information about agricultural input, please see Chapter 8.8.1.


DACHA PLOT OWNERS

• Dacha plots are usually recreational; owners not dependent on production for subsistence
• Owner typically lives in an urban setting
• Plot provides incremental earnings and foodstuffs only

• Owner typically cultivates four to five types of fruit and five to seven types of vegetables
• Smaller the plot, more diverse the crop composition
• Potatoes and carrots are included in 80 percent of plot holder crop compositions
**8. DEVELOPMENT of the AGRARIAN SECTOR ECONOMY**

8.1. AGRICULTURAL REFORMS

Agriculture accounted for 13 percent of GDP while the food processing industry contributed another 7 percent. The agricultural sector employs 19.7 percent of population, while the food processing industry employs only 2.5 percent.

Agriculture reform, which reached its climax at the end of 1990’s, resulted in considerable qualitative and quantitative changes in the sector. The main results of agricultural sector reforms include:

- Stable and gradual growth of total agricultural output
- Introduction of private land, property and output
- Market fundamentals of agrarian regulatory policy
- Development of new farming methods
- Adoption of new Land Code in 2001, aimed at fostering development of landownership relations, including the agrarian sector, laying new legislative grounds for regulating land market and strengthening legislatively established principles of private ownership in rural areas.

---

**VEGETABLES**

<table>
<thead>
<tr>
<th>East</th>
<th>West</th>
<th>South</th>
</tr>
</thead>
<tbody>
<tr>
<td>91 percent Tomatoes</td>
<td>85 percent Tomatoes</td>
<td>91 percent Tomatoes</td>
</tr>
<tr>
<td>96 percent Potatoes</td>
<td>89 percent Potatoes</td>
<td>96 percent Potatoes</td>
</tr>
<tr>
<td>16 percent Eggplant</td>
<td>10 percent Eggplant</td>
<td>1 percent Eggplant</td>
</tr>
<tr>
<td>85 percent Zucchini</td>
<td>64 percent Zucchini</td>
<td>43 percent Zucchini</td>
</tr>
<tr>
<td>65 percent Peppers</td>
<td>31 percent Peppers</td>
<td>3 percent Peppers</td>
</tr>
<tr>
<td>83 percent Carrots</td>
<td>68 percent Carrots</td>
<td>76 percent Carrots</td>
</tr>
<tr>
<td>91 percent Cabbage</td>
<td>65 percent Cabbage</td>
<td>70 percent Cabbage</td>
</tr>
<tr>
<td>21 percent Cauliflower</td>
<td>9 percent Cauliflower</td>
<td>8 percent Cauliflower</td>
</tr>
</tbody>
</table>

**FRUITS**

<table>
<thead>
<tr>
<th>East</th>
<th>West</th>
<th>South</th>
</tr>
</thead>
<tbody>
<tr>
<td>75 percent Cherries</td>
<td>43 percent Cherries</td>
<td>78 percent Cherries</td>
</tr>
<tr>
<td>61 percent Apples</td>
<td>47 percent Apples</td>
<td>56 percent Apples</td>
</tr>
<tr>
<td>36 percent Pears</td>
<td>17 percent Pears</td>
<td>39 percent Pears</td>
</tr>
<tr>
<td>1 percent Quince</td>
<td>0 percent Quince</td>
<td>24 percent Quince</td>
</tr>
<tr>
<td>35 percent Apricots</td>
<td>4 percent Apricots</td>
<td>58 percent Apricots</td>
</tr>
<tr>
<td>0 percent Peaches</td>
<td>0 percent Peaches</td>
<td>29 percent Peaches</td>
</tr>
<tr>
<td>29 percent Strawberries</td>
<td>0 percent Strawberries</td>
<td>11 percent Strawberries</td>
</tr>
<tr>
<td>33 percent Plums</td>
<td>19 percent Plums</td>
<td>38 percent Plums</td>
</tr>
<tr>
<td>46 percent Berries</td>
<td>54 percent Berries</td>
<td>38 percent Berries</td>
</tr>
<tr>
<td>21 percent Grapes</td>
<td>11 percent Grapes</td>
<td>57 percent Grapes</td>
</tr>
<tr>
<td>31 percent Melons</td>
<td>0 percent Melons</td>
<td>24 percent Melons</td>
</tr>
</tbody>
</table>

Source: Sibley International, January 2001
Despite these positive results achieved while implementing agrarian reforms in Ukraine, many pressing issues remain unaddressed. The following issues and problems are of highest priority:

- **Breaking away from the administrative command management system.** Absence of policies promoting a market driven agricultural sector; lingering government monopolies, price regulation and market interference mechanisms.
- **Land Market Development.** Incomplete land title and land registration related issues; moratorium on land sales; absence of land mortgage market; inefficient use and protection of agricultural land.
- **Agricultural Lending, Tax and Insurance Systems Development.** Poor agricultural financing and lending relations (including mortgage banking and risk insurance market); law credit supply and high loan costs for family and subsidiary farms and farm service cooperatives; absence of income tax exemptions for family and subsidiary farms, farm service coops, farm workers, and lessor of land shares and parcels.
- **Market Infrastructure Development.** Absence of (1) effective marketing channels to rise of produce volumes sold in a transparent market; (2) wholesale markets of agricultural produce and inputs; (3) effective exchange trade, (4) market infrastructure (trading houses, private and cooperative agricultural-service, processing and sale enterprises).
- **Rural Development.** Absence of a private sector focused rural development strategy to alleviate the poverty in rural communities.
- **Quality and Safety Standards Development and Introduction.** Unconfirmed Ukrainian Quality and Safety standards with world WTO and EU standards (ISO, HACCP) to ensure expanded export market potential.
- **Legal development of high-value horticultural production and application of new technology.**

**General Agricultural Web resources:**

Ukraine’s State Statistics Committee has adjusted agricultural data available in English at http://www.ukrstat.gov.ua.

Agricultural Policy Ministry web site: http://www.minagro.kiev.ua

**8.2. LAND OWNERSHIP**

a. **Ownership status of agricultural land**

Privatization of land in rural Ukraine moves forward steadily, but has some ways to go before it can be declared accomplished. The principal types of rural land owned by Ukrainian citizens are: (1) house plots on which the houses rest, (2) small “household plots” (also called “subsidiary plots”) near the village that are allocated to each village family for growing vegetables, (3) dacha plots, which are usually owned by urban families, and (4) land represented by "land shares" given to members and pensioners of the former kolkhozes and sovkhozes, as well as local residents providing social services (schoolteachers, etc.). The productivity of these land categories is discussed elsewhere in this report.

The first three categories share characteristics relating to ownership status. First, it is generally easy to identify the boundaries of such plots since they are marked with fences (in the case of house plots and dacha plots) or with temporary boundary markers (in the case of household plots). Second, relatively few State Acts have been issued for such plots. Because the boundaries and the right of control over such plots are generally respected, the lack of State Acts has not prevented citizens from using them.

The fourth category — land represented by land shares — differs fundamentally from the other categories. Each land share represents a partial interest in the group of fields previously used by the kolkhoz or sovkhoz, and each holder of a land share owns all such fields in common with other holders of land shares. Although the average land share represents 4.2 ha of land (the size varies from an average of 1.1 ha in Ivano-Frankivsk Oblast in the west to 9.4 ha in Lugansk Oblast in the east), until fields are subdivided into individual parcels, a holder of a land share cannot identify any particular part of the common massif as being his separate property.

Thus, although the holder of a land share is entitled to receive a land plot, the boundaries of the land plot cannot be known until the land massif is sub-divided and a State Act is prepared and issued for each new land plot. Without a State Act, the holder of the land share does not have the permanent right to cultivate the land personally since the location of the plot is not established. A 2003 study found that whereas 18 percent of land owners who had converted their land share into a land parcel and received a State Act, only 2 percent of holders of land shares cultivate their land share individually.¹

In this situation, the only way in which the holder of the land share can derive any benefit from the land share is by joining with other holders of land shares to lease the shares to an enterprise or private farmer. But a person who leases his land share cannot take action to cancel the lease agreement in case the enterprise or farmer does not pay since the holder of the land share does not own any particular part of the land that is leased. In contrast the land owner who possesses a State Act has the ability to demand cancellation of the lease agreement in case of failure to pay rent, and the owner can then either use the land personally or lease it to a more reliable enterprise or farmer. The added flexibility that the State Act provides may help to explain why owners who possess a State Act for agricultural land receive rents that are an average of 45 percent higher than rents received by holders of land shares (an average of UAH 224 per hectare for holders of State Acts versus UAH 154 per hectare for holders of land shares).\(^2\) In other words, citizens who possess a State Act for their land are able to demand higher rents than citizens who possess only a land share. Thus, the economic value of State Acts is well demonstrated.

Approximately 7 million citizens received land shares during the last 13 years. In 2001 USAID began devoting large resources to help holders of land shares to become true land owners through a process of sub-dividing the massifs into individual parcels and then preparing and issuing a State Act to the owner of each new parcel. In 2006, the USAID-financed ULTI project ([http://www.ulti.kiev.ua/en](http://www.ulti.kiev.ua/en)) will have assisted local governments to prepare and issue State Acts for approximately 25 percent of all holders of land shares (15 percent have already been issued). ULTI estimates that surveyors directly funded by villagers or farming enterprises will have prepared another 25 percent by 2006, although it remains unclear if these State Acts will have actually been issued to all land share holders for all land to which they are legally entitled. This will leave approximately 3.5 million land share holders without State Acts for such land — about half of the total number of original land shares.\(^3\)

<table>
<thead>
<tr>
<th>Source of assistance</th>
<th>Approximate percentage of total land shares converted to State Acts</th>
</tr>
</thead>
<tbody>
<tr>
<td>ULTI Y 2002 - 2005</td>
<td>15</td>
</tr>
<tr>
<td>ULTI Y 2005 –2006 (planned)</td>
<td>10</td>
</tr>
<tr>
<td>Other surveyors Y 2002 – 2006</td>
<td>25</td>
</tr>
<tr>
<td>Total issued Y (2006)</td>
<td>50</td>
</tr>
<tr>
<td>Total remaining Y (2006)</td>
<td>50</td>
</tr>
</tbody>
</table>

The major barriers to completion of this work are lack of government funds to pay for land surveys, printing and issuance of State Acts to citizens. The law allows state and private survey companies to charge citizens up to UAH 85 per land share for completing such work, though in practice surveyors often regard the UAH 85 figure as a minimum rather than maximum fee. The ULTI project has found that by organizing competitive tenders and refusing to pay unreasonable fees, the cost of surveying the land, preparing and issuing State Acts can be reduced to less than UAH 30 per land share.

In addition to the 3.5 million State Acts for which there is no concrete plan for preparation and issuance, there is no concrete plan for preparing and issuing the estimated 6 million State Acts for rural house plots or the estimated 6 million State Acts for subsidiary plots. The law currently sets a maximum fee of 153 UAH for preparation and issuance of State Acts for such land although in practice fees are often substantially higher. ULTI is in the process of conducting a pilot project to establish processes and costs for preparing and issuing State Acts for house plots, household plots and other land currently used by rural citizens. ULTI estimates that these costs should not exceed UAH 50 per allocation if proven ULTI mass production, competitive tender, performance based payment and independent verification techniques are fully adopted and properly utilized to organize and conduct such work.

In 2004 the Government of Ukraine agreed to borrow US$ 195 million from the World Bank to accomplish a number of land-related goals. Of the total amount, the loan agreement allocates US$ 85 million for issuance of State Acts, but so far contains no concrete goals. ULTI has informed the Government of Ukraine and the World Bank that it estimates, based on ULTI experience of the costs of State Act preparation, that the US$ 85 million is sufficient to complete State Acts for all remaining land shares, as well as a substantial portion of rural house plots and all household plots.

\(^2\) Id. at 12. When rent differences in Sumy Oblast are excluded, the difference falls to 32% per hectare, still a sizeable advantage to holders of State Acts. Id. at 13.

\(^3\) In many cases, survey works have been started and then suspended, and holders of land shares are often confused regarding the status of the work or their rights to insist upon its completion. In some oblasts, State Acts were issued for a portion of the land represented in the land share, while some land was excluded. In other oblasts, land parcels were allocated to citizens without complete legal and technical documentation. Additionally, an estimated 1 million land share holders died prior to receiving State Acts and their land is subject to expensive and problematical inheritance proceedings before State Acts can be issued to their heirs. Additional works will need to be performed to complete the land reform in these cases.
b. Land sale market

Under current law, owners of house plots, household plots and dacha plots may freely sell their land. Such land is being sold in Ukraine, though the sale of rural house plots and household plots is not occurring in high volumes.

The Land Code imposes a moratorium on sale of land shares and land received in kind on the basis of land shares. The moratorium is currently scheduled to expire on 1 January 2007, after which sale of such land and land shares will be allowed. In addition, the Land Code limits how much agricultural land citizens and legal entities may own, and does not allow foreigners to own agricultural land in any amount.

A 2003 survey by the IFC states that 44 percent of farmers state that a land market will lead to destruction of the country's national wealth and 39 percent express fear that a small group of people will obtain control of agricultural land. However, this pessimistic picture is not consistent with the findings of a 2003 survey commissioned by ULTI, which found that only 1.1 percent of rural landowners plan to sell their land once the moratorium is lifted. Thus, although land owners report that they do not intend to sell their own land, they appear to be worried that other land owners will sell land. More public discussion and dissemination of information to rural areas is needed to dispel fears surrounding liberalization of the land market.

Expiration of the moratorium on sale of land received on the basis of land shares will improve the position of land owners and farmers in several ways. Land that can be sold will acquire a value it does not currently have, and will provide land owners with an additional option for obtaining benefit from the land. Although only 1.1 percent of current land owners intend to sell agricultural land, their heirs — many of whom live in cities — may in the future prefer to sell the land and reinvest the money to improve their residences and businesses. As farmers gradually become able to buy land, they will be motivated to make long-term investments to improve the productivity of the land. Such investments are not likely so long as land continues to be leased. The shift in ownership is likely to be quite gradual and to occur over time, as it has in more developed economies in Europe and the United States.

c. Land lease market

Because the Land Code currently imposes a moratorium on sale of most agricultural land, land lease is the dominant form of transaction in agricultural land. Most agricultural land in the lease market is leased in by large agricultural enterprises.

A large number of land owners and holders of land shares who lease out their land rights encounter problems in collecting rents. The ULTI legal aid centers — first established in 2003 and open in every oblast of Ukraine — have received many thousands of complaints regarding rent payments. The most typical problems reported are nonpayment of rent, delayed payment of rent and partial payment of rent. In some cases, large enterprises use land without concluding lease agreements, or press land owners into renewing agreements even though the enterprise has not fully paid rents it already owes. One successful approach to resolving lease disputes is described in the next section.

d. Information and legal assistance

Owners of agricultural land and holders of land shares, the overwhelming majority of whom reside in villages, do not have ready access to reliable information on land rights, land values, rent values and other topics related to use and benefit of land ownership. Most of these owners are pensioners who are less mobile and often less able to understand the dynamic changes occurring in land relations. For these reasons, owners of agricultural land and holders of land shares are vulnerable to being misinformed and misled regarding their rights and interests.

To help address these needs, in 2001 the ULTI project began operating an extensive national public education campaign targeted to rural land owners. The campaign produces weekly and monthly national television programs to discuss typical situations related new agricultural land relations. The campaign includes a daily national radio program in which project experts answer questions received by mail from rural land owners throughout Ukraine, as well as radio programs that describe successes of new landowners on the basis of true-to-life examples. The project also actively uses press conferences and press clubs, exhibitions, presentations and workshops to disseminate information on rights to land.

4 Id., Table 18.
5 Due to the dominance of large enterprises in the land lease market, Ukrainian farms remain huge as compared with farms in Europe. Once the land ownership is subdivided and State Acts are issued, it would be normal to expect that the area leased by large enterprises will decline to sizes similar to farms in the rest of Europe.
But the needs of land owners are not limited to information. They also require specific advice on how to solve disputes related to land, as well as representation by attorneys in actually resolving such disputes. The ULTI project now operates 25 legal aid centers — one in each oblast — providing services exclusively to rural land owners at no charge. The centers employ 90 full-time attorneys and to date have assisted over 100,000 land owners (and holders of land shares hoping to become land owners). The center attorneys also conduct seminars in villages, which usually produce one or more applications for assistance by land owners and assist village radas to complete the agricultural land reform. Typical complaints relate to problems in obtaining land shares or State Acts, inheritance of these, and collection of rent owed for lease of land and land shares. The assistance of the attorneys is often necessary to help land owners overcome obstacles presented by officials or agricultural enterprises. The attorneys are able to resolve almost all problems based on negotiation, thereby helping citizens to enforce their land rights, and helping to establish more balanced norms in land relations.

e. Land rights registration

Development of a system for registering rights to land and buildings, which has been debated in Ukraine for 10 years, is currently the subject of a large World Bank loan to the Government of Ukraine. Currently no system in Ukraine integrates registration of various rights to land and permanent structures. Separate systems exist for registration of land parcels (but not rights to land parcels), rights to permanent structures (buildings and apartments), and mortgage of rights to land and permanent structures. No organized system exists for registering rights to the land itself. Delay in creating a single organized system impedes the natural development of the economy throughout Ukraine.

The basic purpose of registration of ownership to land and buildings is to provide security to owners and to promote development of markets for land, buildings and more affordable mortgage credit. A well functioning market for land and buildings is a fundamental necessity for growth of the national economy. Registration of such rights allows citizens to conduct transactions with confidence, while increased investment in land and buildings strengthens economic activity at the local level, increases the value of land and buildings, and increases the property tax base for local budgets to finance infrastructure improvements and community services while reducing central government subsidies.

In 2004 the Law on State Registration of Rights to Immovable Property was adopted. The law has many defects and does not yet operate. Although the law provides for free of charge registration of rights based on State Acts, Dershkomzem currently charges fees for registering land parcels even though registration of the parcel is only part of the process of registering the owner's rights to the parcel. Thus, Dershkomzem currently charges fees for doing less than the law requires them to do free of charge.

Recent experience in other transition nations (e.g. USAID Registration Organization Improvement Project 2003-2005 in Albania) shows that it would be much less costly to register the rights to all land and buildings on a mass basis at one time rather than requiring each owner to appear and pay for registration of rights separately over a period of years. The loan from the World Bank to the Government of Ukraine for creation of the registration system is sufficient to pay for mass registration of rights, provided that the activity is organized and managed correctly. State finance of mass registration of rights to land and buildings would greatly accelerate the process of creating a viable registration system while opening new land, building and credit markets.

Even if the registration process is organized and managed correctly, it may take many years to register ownership rights to Ukraine’s estimated 40 million land parcels and buildings. During this transitional period, it is also extremely important to protect and encourage the natural development of land, building and credit markets. It is therefore necessary for the Registration law to be changed to provide that in regions where the registry is not yet fully functioning, owners who possess a State Act may continue to transfer ownership according to procedures in force prior to adoption of the law.

Ideally, the state registry of rights to land and buildings should be open for viewing by all citizens. This would help to protect the rights of all owners by providing transparency regarding the actions of registry officials. If the general public cannot know the general contents of the land registry, the registry will not fully protect the interests of all property owners. Openness of information would also greatly reduce the cost of land transactions. Every land owner has an interest in reducing the cost of land transactions, since this directly increases the value of each owner’s land by making it more attractive to investors.
f. Mortgage and long-term credit

Farmers require medium-term and long-term credit to finance purchase of additional land, to finance permanent improvements of land already owned, and to purchase inputs, machinery, storage facilities, processing facilities and other capital goods. In Western economies, most bank loans are financed through mortgage of privately owned land and buildings. A properly functioning system for registration of rights to land is necessary to make banks secure in executing mortgage contracts with farmers and thereby to reduce the high risk costs attached to such credits.

But a registration system, by itself, is not enough. Laws must be revised to provide an efficient system that allows banks to foreclose (execute) against the mortgaged land in case the farmer is not able to repay the loan. If the bank must wait years or incur high costs to recover its money in case the farmer cannot repay the loan, the bank will not be motivated to loan money in the first place or, alternately, will significantly increase the cost of credit to compensate for higher risks of making loans.

In addition, banks are likely to become interested in accepting agricultural land as collateral for such loans only after the banks are confident that a market for agricultural land exists. Otherwise, if the farmer is not able to repay the loan and the bank is forced to foreclose (execute) on the land, the bank will not be able to re-sell the land to recover the money loaned. Banks do not want to own land, but instead want to convert land and buildings into profitable revenue streams so they can make more loans. As long as the market for agricultural land remains undeveloped and subject to high risks, banks will be reluctant to accept land as collateral and to make more affordable loans to farmers.

8.3. AGRICULTURAL CREDIT

Today, agriculture enjoys equal rights to access to credit with other branches of the Ukrainian economy. This sector accounts for 16 percent of the bank credit portfolio. This position of agriculture is a result of stabilization of macro-economic indicators, improvement of the business environment in rural areas, clarity in determination of ownership rights for the borrowers’ property, and the GOU’s credit state’s facilitating policy for agriculture. However, long-term loans are limited, averaging 22 percent in the overall bank credit portfolio and approximately 15 percent in the general structure of all loans issued in agriculture. The majority of it is mainly formed by the loans issued are for the term of one to three years in duration.

In spite of a policy to promote credit, however, lack of access to credit in rural areas is generally accepted to be a major constraint to the development of Ukrainian agriculture, particularly for the large numbers of newly-titled land owners and small and medium private farmers that have emerged in recent years. These farmers need for credit assets is not covered to the full extent. According to the UNDP Agricultural Policy Project, for in respect of short-term loans, only 50 percent of the need for short-term loans is met and only 2 percent of long term credit needs.

The agricultural sector faces more difficulties than other parts of the economy in accessing credit and the reasons for this are illustrated in the table below. However, one issue not covered in the table is the overall weakness and shallow nature of Ukraine’s financial market. As was mentioned Ukraine is only now moving on the development of commercial and residential mortgages, and it will be some time before land mortgages will be available.

Also as you will see other than banks the only other financial institution serving agriculture in a limited fashion are credit unions. Supplier credits are available but have shrunk significantly since the nineties because when the government abandoned barter. However, the GOU, it did not replace that system with a system to pledge future crop as collateral to pay off the supplier. Ukraine is only now beginning to develop a system of warehouse receipts which will enable grain and oilseed producers to use harvested crop as collateral. Another constraint facing Ukrainian agriculture is the lack of equipment leasing as an alternative to bank financing of equipment. Finally, Ukraine unlike other transition economies has not yet mastered implementation of a subsidy system to encourage efficiency. The limited nature of interaction between the agriculture sector and the financial markets constrains growth.
MAIN CONSTRAINTS TO ACCESSIBLE CREDIT

- Poor understanding of credit risks
- Undercapitalization of lending institutions
- Short credit history of the borrowers
- Lack of experience — initial stages of rural lending development in UA
- Legal environment — lack of experts, poorly defined collateral rights
- Poor training/lack of qualified appraisers of agricultural assets. Tendency of farmers to overvalue pledged assets.
- High interest rates
- Low capitalization/small size of credit unions in rural areas
- Lack of external or international financing and insurance of risks
- Poor governance among lenders
- Absence of unified bank policies
- Lack of financial skills and absence of proper record keeping in small farms
- Absence of timely access to comprehensive market information
- Low profitability and unstable cash-flow of agriculture
- Extensive way of management
- Low diversification in production
- Shortage of liquid security
- Overstating of the value of collateral
- Government sends wrong message to farmers by providing interest subsidies or loan write-offs.
- Legal issue of land ownership
- Non-transparency of the market
- Absence of stabilizing funds/reserves
- Low number of branches of commercial banks in rural areas/bad infrastructure

Source: CNFA Farmer to Farmer Project

One of the main problems in the credit market today is the limited amount of collateral that can be provided by borrowers and limited credit resources offered by creditors. The first one can be resolved through active introduction of new financial instruments, such as promissory notes, warehouse documents, etc. The problem with availability of long-term loans would be resolved as soon as the mortgage of agricultural land will be permitted and a reliable institution for the protection of landowner rights, land valuation, etc. is established.

Without access to affordable medium and long-term credit, both farming enterprises and processors struggle to make the capital investments needed to improve efficiency and quality, or to expand output.

COMMERCIAL BANKS

Agricultural loans from commercial banks are mostly of short-term duration and used for financing day-to-day operational purposes. Insufficient availability of short-term, crop-cycle loans, particularly unsecured or cash-flow loans, inhibit the proper application of inputs for many producers and perpetuates the cycle of low yield, low quality and low income for Ukraine’s farmers.

Commercial banks’ interest rates are still too high for small farmers (Figure 14). The weighted interest rate on loans issued to agricultural enterprises in UAH currency in 2003 averaged 20 percent and those on loans in foreign currencies at 14 percent and in 2004 they averaged 17 percent.
Mechanism of partial compensation of interest rates

State policy on support of agricultural financing is aimed at reduction of interest rates paid on commercial bank credits and credit unions via partial compensation of interest rate (which has been started in 2000), improvement of legislation on leasing operations, insurance etc.

In 2003, the mechanism of partial compensation of interest rates was extended to loans issued to agricultural enterprises by commercial banks as well as by credit unions. This included processing enterprises for advance purchasing of agricultural produce from its producers.

In 2004 the partial compensation program included not only short-term but also and long-term loans as well. In 2002 the program of support purchasing of complex agricultural machinery made in Ukraine, as a 30 percent cost reimbursement from the budget after the buyer has paid 70 percent of the total value. This program eliminated the risk connected with failure to pay on the buyer’s part.

As a positive result of the program of partial compensation of interest rates, the amount of credits given to agriculture increased in four times comparing to 2000 (Table 12). The total loans granted to the agro-industrial enterprises were UAH 7.7 billion in 2004.

Table 12. Loan amounts given into Agro-Industrial Complex (billions of UAH)

<table>
<thead>
<tr>
<th>Indicators</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total amount of loans</td>
<td>1.8</td>
<td>5.6</td>
<td>5.6</td>
<td>7.7</td>
<td>7.7</td>
</tr>
<tr>
<td>— of which on the partial compensation program</td>
<td>0.818</td>
<td>2.8</td>
<td>2.2</td>
<td>3.2</td>
<td>3.2</td>
</tr>
<tr>
<td>including to agriculture particularly</td>
<td>0.456</td>
<td>1.0</td>
<td>1.8</td>
<td>2.9</td>
<td>2.9</td>
</tr>
</tbody>
</table>

Source: UNDP Agricultural Policy Project

Since 2000, the number of farm enterprises and household plots borrowing from lending institutions increased almost three times, among private farms four times and household plots another threefold. The share of individual farmers and household plot producers in the overall amount of borrowing, however, remains insignificant, i.e. only 6 percent and 0.2 percent respectively (WB/OECD Report).
Figure 15: Agro-industrial credit by Ukrainian commercial banks in 2000–2004

Main Commercial banks, leading in agricultural crediting

<table>
<thead>
<tr>
<th>Bank</th>
<th>Website</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bank «AVAL»</td>
<td><a href="http://www.aval.kiev.ua/eng/corporate/credit_transactions/credit_agr/">http://www.aval.kiev.ua/eng/corporate/credit_transactions/credit_agr/</a></td>
</tr>
<tr>
<td>UkrSibBank</td>
<td><a href="http://www.ukrsibbank.com.ua/russian/fcorporate/credit">http://www.ukrsibbank.com.ua/russian/fcorporate/credit</a></td>
</tr>
<tr>
<td>Pravex Bank</td>
<td><a href="http://www.pravex.com/divisions/1020934190735/">http://www.pravex.com/divisions/1020934190735/</a></td>
</tr>
<tr>
<td>Nadra Bank</td>
<td><a href="http://www.nadrabank.com.ua">http://www.nadrabank.com.ua</a></td>
</tr>
</tbody>
</table>

Nadra Bank agricultural lending activity (http://www.nadrabank.com.ua)

The USAID Rural Credit Project provides Nadra Bank, a privately-owned Ukrainian bank with a partial loan portfolio guarantee to extend loans to small farmers and suppliers. This project is utilized to provide a mechanism of risk-sharing alternative for mobilizing private capital in Ukraine to overcome the lack of access to credit for both small farmers and input suppliers, particularly for medium and long term loans.

The maximum loan amount for farmers has been set at $60,000 and at $250,000 for suppliers. In December 2004, the average size of a loan was 80,000 UAH, the minimum- 9,000 UAH. The interest rates for short term loans are 19 percent and 18 percent, respectively.

In 2004, Nadra Bank was able to grant 115 loans to small farmers valued at $1.5 million. Cumulatively, the bank has disbursed 130 loans totaling $1.7 million.

Ukraine Micro Lending Program (UMLP) http://www.microcredit.com.ua/eng/about/info.

In a combined effort, the European Bank for Reconstruction and Development (EBRD) and the German-Ukrainian Fund (GUF) have implemented the Ukraine Micro Lending Programme (UMLP). The UMLP aims to foster the development of micro and small enterprises through facilitating their access to bank loans on a permanent basis. Programme implementation is supported by the United States Agency for International Development (USAID), the European Union and German Kreditanstalt fur Wiederaufbau (KfW) in the framework of the German Government's TRANSFORM Program for Co-operation in Eastern Europe. Today the UMLP has 6 partner banks, such as Bank Aval, Bank Forum, Kreditprombank, Bank Nadra, PrivatBank, ProCredit Bank, which disburse micro and small loans in more than 70 cities and towns of Ukraine. This year some partners-banks started a special program to serve small and medium agricultural producers especially. It is a real opportunity for farmers to receive loans on simplified terms.
Ukrainian micro and small enterprises, which are largely defined as legal entities or private entrepreneurs, employing up to 100 persons are eligible to receive a loan, the amount of which ranges from USD 100 to USD 125,000 with monthly interest rates, which varies from 1 percent to 1.75 percent for loans issued in USD and EUR and 1.7 percent — 2 percent on loans denominated in Hryvnia. As of March 31, 2004, almost 74,000 loans were granted to Ukrainian micro and small businesses for an amount of USD 421 million.

**CREDIT UNIONS**

The total amount of registered Credit Unions serving agricultural needs in Ukraine is 152 as of June 1, 2005 (total amount of Credit Unions registered in the State Commission for Regulation of Financial Services Markets of Ukraine is 756).

There are 2 all-Ukrainian associations of Credit Unions: National Association of Credit and Savings Unions (UNASCU) (number of Credit Unions registered — 144) and All-Ukrainian Association of Credit Unions (AACU) (number of credit unions registered — 47).

There are leading oblasts in crediting to agricultural needs of farmers and households as of June 1, 2005: Cherkassy (17 credit unions), Donetsk (12), Luhansk (12), Ternopil (11), Ivano-frankivsk (10), Lviv (9), Kharkiv (8), and Zakarpatty (7 credit unions).

Financing of small farmers and household plot owners by Credit Unions is limited. The total portfolio outstanding for credit union loans to agriculture is approximately 22 UAH million, equal 3 percent of the total loan portfolio of all loans outstanding. Interest rates are higher than in commercial banks, and in 2004, the average is 40 percent. However, credit by credit unions has its advantages: collateral is generally not required; the application process is much easier and quicker than commercial banks.

The GOU stimulates access to credit by farmers through by subsidizing part of the interest rate. However, small farmers are not aware generally of the interest subsidy program. Credit unions mainly serve urban areas, not rural areas. Therefore, a GOU fund allocated to interest subsidies for small-scale agriculture was not used totally in 2003.

From UAH 3.0 million allocated in the state budget to subsidize credit union agricultural loans only UAH 35,600 were actually spent. The largest agricultural loan amounts were issued in the Luhansk oblast (UAH 240,500), Poltava (UAH177, 000) Kyiv (UAH199, 000) and Lviv (UAH 120,000) oblasts from the total of UAH 824,100.

Source: Ministry of Agricultural Policy of Ukraine

**Figure 16. Volume of credits for agricultural purposes in the portfolio of credit unions, 2004, UAH million**

In 2004 leading oblasts in loaning to farmers and private farms through credit unions stood at (as of III Qrt, 2004), UAH /1000:

- Luhansk 4, 211.4 (20.01 percent)
- Kherson 3, 513.7 (16.69 percent)
- Poltava 2,552.5 (12.13 percent)
- Mykolayv 1,454.3 (6.91 percent)
- Lviv 1,427.0 (6.78 percent)
- Zaporizhia 1,378.4 (6.55 percent) and Cherkassy 1,306.1 (6.20 percent).

Contacts:
National Association of Credit and Savings Unions website [http://www.unascu.org.ua](http://www.unascu.org.ua)
8.4. TAXES in AGRICULTURE

In 1999 the mechanism of tax payments was simplified. The introduction of the fixed tax rate decreased the tax burden compared with previous tax periods by almost UAH one billion per year, and simplified its administration via payment computations.

Taxation of private farmers and agricultural small producers

Currently, fixed tax rates per agricultural land unit (hectare) are set as percentage points against agricultural lands monetary/market value. The rate is 0.5 percent for ploughed land, meadows and pastures; and 0.3 percent for perennials croplands. On average, farmers pay 20-23 UAH (US $4-5) of fixed agricultural tax per hectare. It is forecast that in 2004 fixed rate tax revenues for agriculture will total UAH 450 million.

Taxation of rural households

Rural households pay a tax on owned and rented land, at an average rate of 50 UAH per hectare.

Taxation of Agricultural Cooperatives

The current Tax Code offers significant disincentives for the organization of farmer-owned cooperatives, including a higher VAT rate for middlemen providing crop brokerage services, as compared to individual producers selling their own crop. There is also a regime of double taxation, under which cooperatives are assessed a profit tax prior to dividend distribution like any other company, and then members must also pay tax on dividends received from the distribution of the cooperative’s net profit. Most groups of farmers choose to work together informally, sharing information and resources but selling their crop individually, as a means of avoiding extra taxation.

Taxation of Intermediaries

The procurement of agricultural produce and its further resale to processing facilities—in essence an intermediary activity—is a common activity. These intermediaries register as private/physical person businesses and register with tax authorities as flat rate taxpayers and pay monthly taxes of UAH 20-200 set by local authorities.
8.5. MARKETING AGRICULTURAL PRODUCE

A growing component of the farm sector includes the primarily small, but increasingly commercial, private farmer with 5 to 50 hectares of land. These producers have begun to organize into associations and groups working together to better provide an effective marketing chain, especially to serve rapidly emerging supermarket chains. These small farmers face serious economic challenges including:

- Lack of information about markets
- Law selling prices and law consumer demand
- Inability to time production to meet market needs
- Limited competitive market opportunities
- Little experience with cooperative efforts
- Limited knowledge of the business and marketing planning systems
- Lack of confidence in contracts to establish long-term relationships with customers
- Lack of effectively organizing wholesale markets and exchange trade in major cities; a limited number of private wholesalers across the marketing chain; and a few number of purchasing organizations
- Lack of access to competitive offers throughout the supply chain and an underdeveloped infrastructure to ensure product quality such as transport, storage, handling, packaging, and other facilities and services.

(USAID Land O'Lakes Agricultural Marketing Project (http://www.lol.org.ua and annex 2), Market infrastructure

According to information with the Ministry of Agrarian Policy of Ukraine, as of January 1, 2004 the network of procurement stations have been expanded to 24,400, including 17,000 milk stations, of which 2,200 of those are for live cattle and poultry and another 2,500 have been set aside for fruits and vegetables.

As of the report date, Ukraine had 35 certified commodity exchanges, 437 agro trading offices, 1,432 wholesale food markets and wholesale fruit and vegetable markets and had conducted 320 live cattle auctions and 2,184 exhibitions and fairs. However, these figures concern only registered entities, rather than active structures.

The number of service cooperatives is 1,055, of which 70 are processing enterprises, 170 are procurement and sales companies, 21 are consumer co-operatives, 324 are service co-operatives and 424 are multi-functional co-operatives.

Marketing channels

- According to the Ukrainian State Statistics Department direct sales from the farm and sales to intermediaries are the main channel of agricultural produce sales for producers. Sixty percent of private farms and reformed farms sell their goods in this way. Large and small intermediaries are working rather actively and successfully between producers of raw materials and processing enterprises. They control most of the export commodity flows, wholesale and retail trade turnovers. As a result, the largest profit share is concentrated in these structures.

Today three forms of payment prevail in produce marketing: payment before seeding, payment at harvest and deferred payment until after produce is brought to market. The two last forms are most common. Today most producers sell their output within the boundaries of the administrative region, where their farm is located. It was reported by 73 percent of the surveyed private family farms. Almost two thirds of produced grain is sold inside the region. (IFC Survey: Development of Farming and Agribusiness Sectors in Ukraine, 2003 (conducted by the Ukraine Agribusiness Development Project).

Only a fourth of all Ukrainian producers sell their produce at the post-season period when prices start to increase, and only few of them export their produce directly. (Ref.: Land O’Lakes Agricultural Marketing project “Agribusiness and Marketing Strategic Guidelines” 2003).

- Given the relatively low salaries in rural areas, open air (farmers) markets continue to supply the majority of Ukrainian consumers with foodstuffs. Most salespersons in these markets are rural dwellers selling their own produce, from their own household plots. In 2003, according to official GOU statistics, there were 597 open-air markets selling foodstuffs (99 markets located in Kyiv with a total floor space of 599,000 square meters). The majority of consumers hold the perception that food from open-air markets is generally cheaper than that sold in supermarkets. Elderly consumers also believe that products found at wholesale open-air markets are organic and of the higher quality.
According to some estimates, 40 to 50 percent of total food product transactions occurred in open-air retail outlets in 2003. For some commodities like meat and offal, sales in open-air outlets account for 90 percent. Sales of fresh vegetables, fruit, honey and dried fruit are also dominant in open-air markets. (UDSA report UP2041).

- Two percent of all agricultural commodity producers (including small farmers) sell their goods through commodity exchanges (http://www.minagro.kiev.ua/newenglish/exchange/index.php3)

- There are only two full-scale wholesale markets in the nation, together with perhaps 20 crude, small scale and private wholesale markets that operate seasonally, mostly in the south and west, and in a few big cities offering few services with limited space and little support to improve product quality. In addition, a number of greenhouse operations offer modest volumes of vegetables and now serve mostly local markets. Much of this volume comes from small farms and household plots and sold at produce markets.

- In Ukraine in most cases, retailers deal directly with producers through large numbers of small, costly transactions or they rely on traders and produce markets that lack organization and provide few services. The retailer is often forced to sort and grade produce, and to invest heavily in inefficient collection systems that are duplicated needlessly across the sector. In general, there appear to be strong opportunities for groups of producers to provide selected services, organize themselves more efficiently and increase returns by becoming more competitive. According to the Land O’Lakes field analysis, the greatest immediate opportunities for commercial farmers are to both reduce the current high costs of marketing and develop rewarding market niches by providing superior quality products on a timelier basis.

The growth in the local retail sector and the growing presence of European retail chains has resulted in increased competition. In 2003, the retail network was comprised of approximately 660 hypermarkets and supermarkets in large urban areas, many food products continue to be sold through open-air markets and small stores. In 2003, retail sector gross sales reached 41.5 billion UAH (USD 7.7 billion), despite the fact that only 55 percent of all food products were sold through the 38,442 grocery stores and supermarkets. According to retail experts, gross sales for the top 10 food retail chains in Ukraine reached between 1.0 and 1.2 billion UAH (USD 188 and USD 225 million). An average supermarket carries between 25-30 thousand items. Approximately 80-90 percent of products sold are of Ukrainian origin. There is a wide range of dairy products, fish, meat, bakery and spirits. The largest chains work with almost 1,000 different suppliers represented by large wholesale companies, producing companies and importers. Local chains are actively introducing western standards and quality assurance mechanisms. Foreign chains, Austria’s Billa, (www.billa.co.at), and the only full fledged discount chain, Germany’s Metro Cash and Carry as well as SPAR from the Netherlands entered the Ukrainian market between 2001 and 2003. (USDA UP 4021 Report).

- The processing sector also provides a crucial link in the marketing chain. In 2001, there were 700 agribusiness companies. LOL analysis indicates that only few of them rely on current fruit and vegetable production and marketing chains, or have been in a position to create permanent collection systems with commercial farmers under contract. Most large companies still prefer to cut their uncertainty by producing raw materials themselves, or buying from adjacent former collective farms. Nevertheless, many are being forced to struggle to obtain raw product from commercial farmers under the current system to meet rapidly growing consumer demand for fresh product. According to the Ukrainian State Statistics Department, in nine months of 2003, sales of the main types of agricultural produce from agricultural enterprises directly to processing enterprises declined considerably resulting in the following figures: grains 4 percent of the total, sugar beets 80 percent, sunflower seeds 2 percent, milk and dairy produce 79 percent, cattle and poultry 29 percent. The main reason why this situation has occurred is the fact that processing enterprises do not have substantial current assets for increasing their purchase of raw materials. Due to this reason, they often have to operate on toll-processing programs. This especially concerns sugar beets.
Main findings of the IFC survey, entitled Specifics of Farm Produce Processing and Marketing in Ukraine 2003, Chapter, Supply of Raw Material to Processors (conducted by the Ukraine Agribusiness Development Project) in the sphere of marketing agricultural produce

- Processing businesses work with different categories of input suppliers, however primary agricultural producers (agricultural enterprises, family farms and private households) represent the main category of raw material suppliers. Overall in the sample, 60 percent of enterprises purchase raw material from agricultural enterprises, 58 percent from farms and 45 percent from private households.
- Seventy-one percent of the surveyed dairies purchase milk from private households and the share of this category of supplier equal 27 percent of the total volume of the purchased raw material.
- Private family farms are the primary suppliers of raw materials to the canning industry (32 percent),
- Fruit and vegetable processing businesses, as in the case of dairies, mainly use their own transportation vehicles to deliver raw material for processing: it was reported by 91 percent and 95 percent of such businesses respectively.
- Quality of raw material supplied for processing is the decisive factor influencing choice of supplier.
- The purchasing price in most cases is a result of combination of two main factors: market prices for raw material at the time of purchase and cost of production of raw material.

Web Resources on Agricultural Prices and Agricultural Marketing:


8.6. ADVISORY/EXTENSION SERVICES AND MARKET INFORMATION SYSTEMS

Extension Services

Although extension or advisory services are a relatively new concept in Ukraine, they are being established in 22 Ukrainian oblasts (27 extension offices through a variety of models developed by the Ministry of Agricultural Policy, the Ukrainian Academy of Agrarian Sciences, universities and foreign donors). The international donor community, including the British, Canadian, EU, Swedish, German, IFC and USAID supported technical assistance projects and were active in testing and developing different extension and advisory service models in ten Ukrainian oblasts.

In addition extension service centers operate in five additional oblasts without donor support. The Extension Service offices started providing the newly emerging private agricultural sector, including small producers with market information, educational programs on farm management, scientifically based production technology and legal support.

In March 2003, an Association of Advisory Services in Ukraine (http://www.dorada.org.ua) was established in order to coordinate extension activities in the regions, exchange materials, and organize employee training for these services, their institutional development and advocate extension service on a national level. One of the association’s main objectives was to improve legislation pertaining to advisory services for agricultural producers. One result of this effort by the association and the donor community was the enactment of the Law on National Agricultural Advisory Services on June 17, 2004 by the Ukrainian Parliament. The objectives of this law include: increasing knowledge and improving practical skills of agricultural producers and rural population; providing advisory services in management and marketing issues; and applying modern technologies and providing rural social development. The law permits advisors or extension agents to provide practical assistance in adopting methods of profitably for a market economy, dissemination and implementation of modern achievements of science, equipment and technology, and assisting state executive bodies of local self-government in implementing state agrarian policy.

It also anticipates state support for agricultural advisory activity through financing advisory services and applied research. In addition, the law provides for commercial advisory services carried out on a payment basis from clients which would create conditions favorable for additional profit by agricultural producers and rural populations.

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Agricultural Market Information Systems

In Ukraine, the demand for market information is still unsatisfied on all levels of market chain. According to a separate APK-Inform 2004 farmer survey, 50 percent of farmers indicated a strong need for accurate market information. Without such detailed and reliable information about available markets and their requirements, producers are reduced to investment and marketing by trial and error. In such situations, there’s little possibility to effectively plan production to take advantage of seasonal trends, consumer preferences, shifts in competitive positions or other factors that normally drive production and marketing decisions.

- **Agricultural Marketing Project created a sustainable, private sector Market Information System** for fruits and vegetables. AMP’s market information includes: (1) extensive market news reports including wholesale market prices together with analysis of key trends in quality and availability; (2) trade balances for key markets and competitors including exports and imports, together with prices and volumes; (3) supply and demand situation analyses and outlook; and (4) articles on key issues affecting the sector.

There are some results of AMP’s Market Information (MI) system efficiency research, which was carried out in December 2004 among farmers and private household owners in six oblasts of Ukraine. Most farmers have expressed their satisfaction with the quality of market information provided by AMP. A total of 60 percent of producers thought that the most valuable information for them was included in the retail and wholesale price reports and technological articles. The total result of the MI system during the period of June through November 2004 was UAH 32.9 million from additional sales and better prices.

The offer and bid system was designed by AMP and also posted on the web-page to improve farmer marketing channels and provide them with the opportunity to advertise their produce free of charge ([http://www.lol.org.ua](http://www.lol.org.ua)). There are some results of the poll for agricultural producers, who are not AMP clients and do not get additional assistance from the project’s specialists as AMP clients (the data for AMP clients are higher). Around 50 percent of all producers admitted that they actually sold produce thanks to the offers and bids placed in the Ahroohladi. Average sales for producers totaled UAH 4,930 per producer. This system helped them generate additional sales of UAH 7.4 million during the last six months of 2004. Producers also mentioned that the management information system (offers and bids, price information and market reports) helped them receive better prices for their produce and pay a lower price for the inputs purchased. On average the average recipient gained an additional UAH 2,551.

- **System of Information Support of Agriculture and Food Industry (Agro-IKS), created by LSU Projects: Extension and Partnerships for Food Industry Development**

The Non Governmental Organization, International Center for Scientific Culture World Laboratory, Ukraine Branch, has been a Ukrainian partner to three USAID funded projects implemented in Ukraine since 1998. As a result of these activities, a powerful computer assisted information resource was designed, entitled Agro-IKS.

The system covers a package of computer programs and databases delivering useful information for crop and animal production as well as processing activities namely, growing, pest management, fertilization aspects, livestock feeding, upkeep and breeding. The economic aspects of farming, including accounting, business-planning and marketing, food safety and quality standards are covered as well.

Agro-IKS products are used in 67 regional offices and three oblast centers: Vinnytsia, Khmelnytsky and Cherkasy. Introductory CDs on the program were delivered to all Advisory Service entities throughout Ukraine.

In order to widen access to Agro-IKS informational resources, an Internet based version of its components has been created and is available at the following address: [www.agro-iks.org](http://www.agro-iks.org). (for more detailed information please, see Part 2 of this book, Chapter 6).
8.7. AGRICULTURAL INPUTS

8.7.1. AGRICULTURAL CHEMICALS (data from the FCS, US Embassy in Ukraine)

The estimated annual size of the pesticides (includes all plant and animal chemical controls of pests and diseases) market in Ukraine is USD 130-150 million, while its potential demand could reach USD 1 billion.

The agricultural chemicals market is still in a state of flux, and offers opportunities for foreign producers of new low chemical, low risk products. The pesticides market in Ukraine is fairly large; with the overall annual demand for pesticides is currently 30 to 35 thousand tons to cover an area of 20 million hectares. A substantial amount of harvested crops are lost due to pests, fungus and weeds. Due to the current lack of pesticides, more than 30 percent of the annual crop harvest is lost.

Approximately 70 to 80 percent of the pesticides currently sold in Ukraine are imported. As domestic pesticide production lacks raw materials, the demand for plant-protecting chemicals provides real incentives to importers of agricultural chemicals. Most companies marketing pesticides in Ukraine represent European subsidiaries of foreign multinational companies.

Production of mineral fertilizers in Ukraine has exhibited a clear upward trend. In 2002, the country produced 2.4 million tons of mineral fertilizers. However, due to poor cash flow of Ukraine’s agricultural producers, only 16 percent of the total quantity of fertilizers produced was sold to the domestic market. In 2002, the import of mineral fertilizers witnessed a dramatic upsurge by nearly 7.5 times. One of the key reasons for this growth was more active consumption of mineral fertilizers by agricultural enterprises (Ministry of Agricultural Policy data).

Source: CNFA Farmer-to-Farmer Project
Domestic pesticide and agricultural chemical production satisfies only 20 percent of Ukraine’s annual needs and even this limited production depends upon imported raw materials. Local production of pesticides utilizing local compounds was expected to meet only one quarter of total demand in 2004. Ukraine would need to rely on imported chemical compounds to make up the shortfall in pesticides.

Currently, about thirty companies supply agricultural chemicals to the Ukrainian market. Sales to locally licensed or authorized intermediaries and distributors are the most prevalent marketing strategies. Competition within the agrochemical market in Ukraine is complex, due to the presence of many foreign companies distributing products directly as well as through their local distributors. Fungicides are still dominated by Swiss and Ukrainian companies.

**CNFA Farmer to Farmer Project** is working to accelerate the development of input distribution to small farmers through its Agro Dealer Business Management Training (ABMT) Program. CNFA’s strategy is to train business development service providers around Ukraine in ABMT and license them to promote, sell and deliver the course to agro dealers on a private, for profit basis. CNFA is also working to involve 150 multinational and regional wholesale distributors in Ukraine in this program. (see the main list of inputs suppliers in Annex 2). For this purpose, in 2004, four training module for agro-dealers on business planning, financial management and marketing were prepared and 24 independent commercial trainers trained and will be certified in 2005. This will contribute to an increase in sales volumes and sales revenue of 300 ABMT agro-dealers by the end of the project.

For more info on inputs companies please, see Annex 2 of this Book, and also:


Ukrainian Crop Protection Association: [http://ucpa.org.ua/](http://ucpa.org.ua/) (Ukrainian language only)

8.7.2. AGRICULTURAL MACHINERY

According to the UNDP Agricultural Policy Project 2003 estimations, commercial plot owners have about 30 percent of the tractors and 20 percent of the grain combines. According to various resources, an immediate demand to replenish the physically depreciated farm and processing equipment in Ukraine is estimated at between USD five and ten billion, with an annual supply of USD one and two billion worth of farm equipment.

Table 13. Availability of primary agricultural machine types in agrarian sector /1000, 2003

<table>
<thead>
<tr>
<th></th>
<th>Agricultural enterprises</th>
<th>Machine stations</th>
<th>Machines number at private subsidiary plots</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tractors</td>
<td>259.6</td>
<td>5.2</td>
<td>120.0</td>
<td>384.8</td>
</tr>
<tr>
<td>Grain combines</td>
<td>58.3</td>
<td>2.3</td>
<td>15.0</td>
<td>75.6</td>
</tr>
<tr>
<td>Feed combines and ensilage harvesters</td>
<td>26.3</td>
<td>0.3</td>
<td>2.0</td>
<td>28.6</td>
</tr>
<tr>
<td>Beet harvesters</td>
<td>13.0</td>
<td>0.14</td>
<td>1.5</td>
<td>14.6</td>
</tr>
</tbody>
</table>

Source: UNDP Agricultural Policy Project

Experts estimate that the current level of physical depreciation of agricultural machinery and equipment is at 70 to 80 percent compared to 55 to 60 percent in 1999. Approximately 40 percent of all tractors are 15 to 25 years old. There is currently a critical demand for dependable farm machinery due to the lack of reliable domestic manufacturing. High quality foreign equipment can have a positive impact on Ukrainian agricultural productivity. Ukraine can offer excellent opportunities for foreign companies to expand to other markets nearby such as Russia and other CIS countries. Up to one thousand grain combines are imported into Ukraine every year at prices ranging from USD 5,000 (15+ years old) and up to USD 17,000 (9-12 years). The need to replace basic farm machinery is becoming critical. (Source: FCS Commercial Guide, 2004).

There are about 40 manufacturers of agricultural machinery in Ukraine, who still supply a significant part of Ukraine's agricultural machinery, in particular, ploughs, harrows, cultivators, seeders and sprayers.

Actual production at most agricultural machinery plants in use ranges from 15 percent to 30 percent of total capacity. The price of domestically produced agricultural machinery is not cheap, because of inefficient and outdated manufacturing technology. All this makes local machinery less attractive for agricultural companies.

New domestic machinery is mainly sold via NAC, Ukragroleasing and JSC Leasing Company Ukragromashinvest. Owing to the unsatisfactory state of the machine-and-tractor fleet available for agricultural enterprises, during the past few years, the state budget has appropriated funds for to subsidize the purchase of sophisticated agricultural machinery: 30 percent of the price offered by the producing factory. This measure has substantially augmented demand for domestic machinery and spurred the domestic agricultural machinery production and sales. The partial GOU purchase subsidy program is increasingly popular in comparison with purchase of machinery through state leasing companies.
According to the UNDP Agricultural Policy Project data, in 2003, the actual amount of budgetary funds appropriated for financing of leasing operation totalled UAH 113.4 million. These funds were used as the source for purchase of 437 tractors and 40 combine harvesters.

At the same time only UAH 34 million was used for the partial compensation of sophisticated agricultural machinery’s value, which provided agricultural enterprises, through the multiplication effect, with a substantial amount of private investments in the capacity of the purchased machinery, including 781 tractors and 51 grain combine harvesters.

Western European firms actively operate in the Ukrainian market and they understand that despite the obstacles to doing business in Ukraine, the potential for hard currency agribusiness exports is vast. The major importers of grain combines into Ukraine are: Germany, Russia, USA, Italy and Denmark. Representatives of foreign machinery producers mainly sell their machines on terms of full prepayment.

U.S. agricultural machinery has a good reputation in Ukraine. The list of U.S. manufacturers includes AGCO Corporation, Massey Ferguson, John Deere, Caterpillar and Case/New Holland. US farm equipment companies offer a full range of equipment and parts, including spare parts for cultivating, growing, harvesting and transporting, as well as equipment for livestock production.

**Web Resources and contacts:**
Main agricultural machinery suppliers: [http://agrosouz.ua](http://agrosouz.ua); [http://amacoint.com](http://amacoint.com); [http://rise.kiev.ua](http://rise.kiev.ua); [http://www.agcocorp.com](http://www.agcocorp.com); [http://avtek/com/ua](http://avtek/com/ua); [http://eridon.kiev.ua](http://eridon.kiev.ua); [http://www.magnus/kiev/ua](http://www.magnus/kiev/ua); [http://www.ukrfood/com/ua](http://www.ukrfood/com/ua); [http://www/united-agro/com/ua](http://www/united-agro/com/ua); (also see Annex 7).
Ministry of Agrarian Policy of Ukraine: [http://www.minagro.kiev.ua/newenglish/index.html](http://www.minagro.kiev.ua/newenglish/index.html);
American Chamber of Commerce in Ukraine: [Http://www.amcham.ua](http://www.amcham.ua)

Co-located agri-food trade shows – Kiev AgriHort (agricultural machinery and chemicals) and UkrProdMash (food and drink processing and packaging technology and equipment). Show organizers web-sites: [www.bto-exhibitions.nl](http://www.bto-exhibitions.nl) and [www.pe.com.ua](http://www.pe.com.ua)
8.8. ACCESS to GLOBAL MARKETS for UKRAINIAN SMALL FARMERS

8.8.1. Competitiveness of Ukrainian Produce, High Value Agricultural Export and Target Markets

Competitive Advantages

Ukraine has several major competitive advantages for developing high value agricultural exports: favorable climatic conditions, rich agricultural resources (including high quality soil and land suitable for irrigation), access to abundant water resources, recent progress in agricultural trade experience and entrepreneurial development, as well as proximity to major foreign markets whose demand for high value agricultural products is dramatically growing.

However, there are some major negative trends and problems preventing Ukraine from entering external markets with agricultural products:

- The low agricultural sector productivity and efficiency (both land and labor).
- The reduction of area under high-value crops will impede farm profitability and productivity growth and will lead to a decline of gross agricultural product...
- The lack of long-term Ukrainian and foreign investments in agriculture leaves key problems of the sector undressed, including development of marketing infrastructure (modern warehouses, refrigerating equipment, and packaging, hydro cooling technologies, irrigation, and others).
- Absence of wholesale marketing infrastructure, which could help to create and expand export markets, as well as to improve production quality.
- Unconfirmed produce quality standards in Ukraine to international standards (ISO, HASSP) that would ensure expanded export market potential.
- Undeveloped farm marketing and information distribution system for processors and exporters.
- Slow pace of the introduction of new production and processing technologies, including new product development, quality control, labeling and packaging design. (Moldovan High Value Agricultural Export Competitiveness Study, 2004).

High Value Agricultural Exports

*International market demand* largely determines the scope for the value added food sector. Rising incomes, growing health consciousness and urbanization are among the major factors contributing to changing dietary patterns in the world. As a result, there has been a common worldwide shift toward increased consumption of High Value Product (HVP). Fruits and vegetables, wine, tobacco, and all livestock products, including meat, poultry and dairy, are usually considered as HVP. The greatest growth rates over the last decade have been registered by world imports of fresh fruits and vegetables, frozen vegetables, dried fruits and fruits juices.

*High Value Products* generally produce higher revenues per hectare, higher net income per unit of production when sold in either fresh or processed form, or higher added value when processed as compared to other crops or their processed derivatives. (Moldovan High Value Agricultural Export Competitiveness Study, 2004).

*Value-added marketing* is also very important for export development. It means processing or modifying the product through cooking, combining, churning, grinding, hulling, extracting, drying, smoking, handcrafting, spinning, labeling and packaging. Other ways to add value to agricultural product include: growing something in a way that is acknowledged as safe or adding a component of information, education or entertainment. Value-added products do not have the same economies of scale as mass-produced goods, and their success heavily depends on the promotion and advertising strategy set forth by the producer (USAID Agricultural Marketing Project).

A whole range of value-adding technologies are either lacking in Ukraine or are insufficiently developed either to represent significant markets for farmers or to ensure the competitiveness of the Ukrainian agro-processing sector in world markets, including the increasingly sophisticated domestic market and Ukraine’s largest export market, Russia.
Target CIS Markets

Export sales remain an elusive notion for the majority of fruit and vegetable growers, with produce that does go for export (and, often, to domestic urban fresh markets) most often being purchased on the spot by unreliable farm-gate buyers (intermediaries) who appear during harvest season. Now Baltic countries, Russia and Belarus are the main exporters of agricultural products, including vegetables and fruits, produced by Ukrainian small and medium farmers. There are good reasons to believe that the CIS, primarily Russia, will remain Ukraine’s major HVP export destination in the foreseeable future. Even though Ukraine’s officially declared strategy is toward European integration, the high entry barriers to EU agricultural markets (including high customs tariffs, the protectionist agriculture policy and subsidies that discriminate against outside imports of agro-food products), coupled with high import produce quality requirements will continue to prevent, at least in the short term, significant access of Ukrainian HVP exports to Western markets.

In addition, there are a number of factors contributing to long term CIS cooperation with Ukrainian agro food exporters. These are:

- The large size of the CIS markets and the growing demand for HVP on those markets, particularly the Russian market;
- A familiar business environment which allows for a relatively simple establishments of partnerships and trading relations (prior to the early 1990s, the large majority of HVP was exported, either in fresh or processed from, to the markets of the FSU);
- The existence of a market niche for Ukrainian HVP exports due to product quality and consistency across the CIS;
- Price competitiveness of Ukrainian HVP due to free trade agreements within the CIS countries;
- A previously positive consumer image of Ukrainian fruit and vegetable produce on those markets that can be recaptured.

It should be noted, however, that CIS market has risk factors including: currency instability, lack of transparency in business, a volatile legislative and regulatory environment, the enhanced market competition, and the increased number of competitors from the East and the West countries. (Moldovan High Value Agricultural Export Competitiveness Study, 2004).

Target EU Markets

Some promising potential export opportunities of vegetables, fruits are currently available with different European countries: melons, apples, sweet pepper, early cabbage, early and late tomatoes, lettuce, sugar maize, pears, plums, grape, cherries and peaches and asparagus.

In opinion of AMP specialists, Germany, Scandinavian countries, Belgium, Holland, Great Britain, Austria, Czech and Poland may dominate world sales of these products markets in the future 3-5 years. Producers from the aforementioned countries have learned and acquired equipment to process, pack, and brand and merchandise high quality food products; however, they are looking for less expensive sources of commodities. Also, Ukraine supermarket networks emphasize quality of products and have begun to teach Ukrainian farmers and invest in better processing technologies, beginning with fruits, vegetables, milk products and seafood.

In 2004 Kherson oblast farmers of the cooperative “Pivdennyi Soyuz” started to export water melons to EU countries – Sweden and Holland without intermediaries. The cooperative offered a price of $0.25/kg delivered to Sweden while water melons from Spain were delivered at a price of $0.35/kg. The taste of Ukrainian water melons exceeded taste qualities of water melons from other countries in the opinion of buyers. Transportation, packing and other accompanying expenses added another $0.16/kg. However, Kherson farmers still received $0.09 per kilogram, more than four times the $0.02/kg that they brought in local markets.

In 2005 the cooperative will deliver first test consignments of pepper, onion, tomatoes and melons to the market of Sweden. Besides, it is planned to increase deliveries of water melon minimum 3 times – up to 300 tons. This year the co-op will also plan to deliver 100 tons of water melons to Holland. At present the Russian market is being studied actively for the purpose of entering it with its products (Agricultural Marketing Project).
Farmers’ Knowledge of Export Requirements
(2004 IFC Survey “Farming and Agribusiness in Ukraine”, conducted by Ukraine Agribusiness Development Project)

1) Are locally grown vegetables good enough to be exported?

According to respondents, cucumbers tend to have most adequate quality for export: 71 percent of producers believe that cucumbers are fully OK for export. As for other types of produce (tomatoes, cabbage and onions), nearly a half of respondents believed their produce quality meets quality standards required by exporters. Producers did not think that Ukrainian potatoes met export standards. Forty-nine percent believe that quality of this crop allows organizing its sale for export. Meanwhile, almost a third of producers (29 percent) tend to have quite the opposite opinion.

2) How well private farmers are aware of requirements to export of produce?

To identify the level of awareness, the survey used the following characteristics: “fully aware”, “partially aware”, and “unaware”. As a result of this survey, producers seem to be least aware of “rules of the game”, i.e. list of main requirements to the export of produce. Almost two thirds of private family farms (62 percent) are not familiar; 29 percent — are partially aware, and only 8 percent — fully aware with requirements to agricultural produce export transactions.

3) What are the private farmers’ attitudes to the need to comply with the schedule of shipments, grading and quality requirements varies?

According to the survey findings: the interviewees were evening divided between “not prepared”, ‘prepared”, and “fully prepared”.

4) How well private farmers are ready to meet the buyers’ needs regarding produce packaging?

As results revealed, the prevailing majority of private farms (73 percent) were not ready to meet such needs (especially vegetables). The main reasons are: (1) lack of domestically produces high quality packing material at acceptable price; (2) the producers can’t afford to make significant investment into packaging equipment; (3) properly packaged agricultural products are not in such great demand with buyers that would be sufficient to ensure high return on capital investment farmers might make into packaging equipment.
8.8.2. Export-Import Operations with Agricultural Produce

For the past six years, Ukraine has been a net exporter of agricultural commodities and food products. During this period exports totaled approximately USD10.1 billion, and imports USD 6.5 billion (HTRS 1-24 groups). In 2003, the total exports of agricultural products from Ukraine topped USD 2.7 billion (17 percent growth from 2002, exceeding agricultural imports (USD 2.2 billion).

Table 14. Foreign trade in agricultural produce (groups 1-24 of the Ukrainian Commodity Classification in Foreign Economic Activity), /1000 USD

<table>
<thead>
<tr>
<th>Products</th>
<th>Export</th>
<th>Import</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2002</td>
<td>2003</td>
</tr>
<tr>
<td>Total</td>
<td>2,388,934</td>
<td>2,732,287</td>
</tr>
<tr>
<td>Live animals and animal products</td>
<td>379,667</td>
<td>523,367</td>
</tr>
<tr>
<td>— live animals</td>
<td>4,902</td>
<td>8,605</td>
</tr>
<tr>
<td>— meat and meat by-products</td>
<td>209,494</td>
<td>242,179</td>
</tr>
<tr>
<td>— fish and fish products</td>
<td>13,510</td>
<td>11,402</td>
</tr>
<tr>
<td>— milk, dairy produce, and eggs</td>
<td>144,775</td>
<td>250,582</td>
</tr>
<tr>
<td>— products of animal origin</td>
<td>6,985</td>
<td>10,600</td>
</tr>
<tr>
<td>Products of crop origin</td>
<td>1,120,705</td>
<td>745,809</td>
</tr>
<tr>
<td>— saplings and other trees</td>
<td>202</td>
<td>133</td>
</tr>
<tr>
<td>— vegetables and edible roots</td>
<td>27,373</td>
<td>13,107</td>
</tr>
<tr>
<td>— edible fruit and nuts, citrus fruit</td>
<td>35,944</td>
<td>44,136</td>
</tr>
<tr>
<td>— coffee, tea, and spices</td>
<td>1,478</td>
<td>1,857</td>
</tr>
<tr>
<td>— grains</td>
<td>997,706</td>
<td>402,300</td>
</tr>
<tr>
<td>— products of flour-grinding</td>
<td>14,570</td>
<td>19,035</td>
</tr>
<tr>
<td>— oil-bearing seeds and fruit</td>
<td>42,489</td>
<td>263,560</td>
</tr>
<tr>
<td>— varnishes and gums</td>
<td>587</td>
<td>474</td>
</tr>
<tr>
<td>— materials of plant origin</td>
<td>355</td>
<td>1,206</td>
</tr>
<tr>
<td>Fats/oils of both animal and crop origin</td>
<td>342,195</td>
<td>558,800</td>
</tr>
<tr>
<td>Foodstuffs</td>
<td>546,366</td>
<td>904,311</td>
</tr>
<tr>
<td>— meat and fish articles</td>
<td>13,399</td>
<td>19,650</td>
</tr>
<tr>
<td>— sugar</td>
<td>112,225</td>
<td>199,164</td>
</tr>
<tr>
<td>— cacao and its products</td>
<td>120,119</td>
<td>158,402</td>
</tr>
<tr>
<td>— cereal products</td>
<td>28,584</td>
<td>50,723</td>
</tr>
<tr>
<td>— products of fruit and vegetable processing</td>
<td>41,987</td>
<td>81,656</td>
</tr>
<tr>
<td>— mixed foodstuffs</td>
<td>16,337</td>
<td>68,231</td>
</tr>
<tr>
<td>— alcoholic beverages and soft drinks, vinegar</td>
<td>85,934</td>
<td>164,045</td>
</tr>
<tr>
<td>— leavings and waste</td>
<td>82,371</td>
<td>108,445</td>
</tr>
<tr>
<td>— tobacco</td>
<td>45,411</td>
<td>53,995</td>
</tr>
</tbody>
</table>

Source: State Statistics Committee of Ukraine
**Import Trade**

Between 2000 and 2003, the following commodities were imported in increased quantities: food additives; poultry and fish; vegetable and fruit puree, dry concentrates; dried fruit, spices; cocoa ingredients and nuts. Some imported soya products are used as ingredients in food and compound feed industries.

Ukraine is not a WTO member and maintains relatively high import duties on imported food, especially for products produced in the country. It also maintains its own systems of veterinary and sanitary control, state standards and imported goods certification. All these non-tariff barriers to trade add to high distribution and shipping costs. Due to free trade agreements Ukraine signed with Macedonia, Russia and other CIS countries, food and agricultural products from these countries have price advantages over imported products from the U.S. For 2003, the U.S. share of total food imports (HS 1-24 groups) accounted for 2.3 percent (USD 29.6 million).

Source: State Statistics Committee of Ukraine

**Figure 17. Agricultural produce import dynamics in Ukraine /million USD**

**Export Trade**

In 2003, the following commodities accounted for the largest shares in exports of commodities included in groups 1 through 24: sunflower seed oil, 20 percent; grains, 15 percent; sunflower seeds, 8 percent; dairy and meat products, 9 percent each; sugar and confectionary made of sugar – 7 percent.

In 2003, export destinations changed: the share of agricultural commodities bound for EU countries declined from 24 percent to 14 percent, whereas the share of CIS countries in total agricultural exports increased from 38 percent to 48 percent.

**Export duties.** Presently, Ukraine has a number of export limitations in the form of duties. Live cattle, hides and skins are subject to an export duty. Also, presently there is a 17 percent duty is levied on sunflower seeds, flax seeds and red flax seeds.

**Indicative prices.** The Ministry of Economy and European Integration of Ukraine approved the list of the minimal levels of indicative prices for agricultural commodities, on which export duties apply. This includes live cattle, live sheep and rams, cattle hides, vegetables, sunflower, flax, and red flax seeds. These prices are subject to review every month. As of January 2003, the minimum prices for live cattle weighing over 350 kg/head were set at the level of USD/t 1,200-1,300 (FOB Ukrainian ports), for sunflower seeds- at the level of USD/t 275 (FOB Ukrainian ports). This regulation does not permit prices at levels that are below the minimum level during exports and secures the efficiency of the effective export duty.
For more information on export-import regulations and standards please, refer to:

USDA report UP4010 Ukraine Food and Agricultural Import Regulations and Standards Country Report 2004;
USDA report UP4021 Ukraine Exporter Guide Ukrainian Food Markets in 2004;
Found on the FAS homepage: http://www.fas.usda.gov/scriptsw/attacherep/default.asp
http://www.buyusainfo.net/body2.cfm?dbf=ccg1@search type2 =int @country=Ukraine @logic=and @ loadnav =no

Other web resources:
Ministry of Economy of Ukraine: http://www.me.gov.ua
State Customs Service of Ukraine: http://www.customs.gov.ua
American Chamber of Commerce in Ukraine http://www.amcham.ua
State Committee of Ukraine for technical regulation and consumer policy: http://www/dssu.gov.ua/control/en/index
State Foodstuffs Department of the Ministry of Agricultural Policy of Ukraine: http://www.fooddept.gov.ua
Ministry of Agricultural Policy of Ukraine: http://www.minagro.kiev.ua
Ukraine’s State Statistics Committee: http://www.ukratsvet.gov.ua
Ukrainian Grain Association: http://www.uga-port.org.ua
Trade and development Agency: http://www.tda.gov/
SBA’s Office on International Trade: http://www.sba.gov/oit/
USDA Commodity Credit Corporation: http://www.fsa.usda.gov/ccc/default.htm

Ukrainian legislation and regulations on foreign trade:
http://www.welcome.to.kiev.ua/pls/lli/llic.frame_law_result2.show?p_arg_names=law-id@p-arg-values=242
http://zakon.rada.gov.ua/cgi-bin/laws/main.cgi

All info concerning AGRICULTURAL TRADE, including logistics, transport, financial and legal services, infrastructure system, producers by branches and oblasts, trading companies and trade news, Internet-shops, commodity exchanges, can be found at: http://www.passage.com.ua.
8.8.3. Foreign Direct Investments

Inflows of foreign direct investment (FDI) into Ukraine are not significant when compared to FDI flowing into Eastern Europe and Russia. For the past three years, the inflow of foreign direct investment into Ukraine stabilized at an annual average of USD 700 million dollars. The aggregated amount of FDI into Ukraine as of January 1, 2004 totaled USD 6.568 billion. The net increase of foreign capital in 2003 was USD 1.319 billion dollars, almost double the amount recorded in 2002.

Foreign direct investment (FDI) into the Ukrainian economy rose by USD 1.56 billion in 2004, up 31.5 percent on the year, suggesting that more foreign businesses have been setting up operation in the country. The overall FDI rose to more than USD 8.35 billion as of January 1, 2005 or USD 177 per capita, according to the Agricultural Statistics Committee. (http://www.ukrstat.gov.ua). Traditionally, the food industry and agricultural processing sector is one of the most attractive in terms of investment: 17 percent of total FDI or USD 852.3 million. The following Ukrainian industries were recipients of FDI: tobacco, beer, beverage, confectionary, food concentrate (dry goods and condiments) and sunflower oil sectors. Additionally, investments in sugar, ice cream, meat, fish, dairy, fruit and vegetable processing have also increased considerably. The main investors are companies based in the Netherlands, USA, Great Britain, Cyprus, and Germany. Direct foreign investments in agriculture and hunting were made into about 200 agricultural enterprises for the total amount of only USD 100 million or 2.5 percent of all investments in the country. (FCS Country Commercial Guide and FAS Reports).

Source: State Statistics Committee

Figure 19. Direct foreign investments in agriculture by country (at start of year), million USD
8.8.4. Foreign Economic Activity

Process of Ukraine’s Accession to the FAO

In 2003, Ukraine became a member of the United Nations Food and Agriculture Organization (FAO) and has gained access to the international market and statistical information system and automated systems for up-to-date scientific and technical information on food and agriculture. Ukraine is now able to participate in:

- Developing efficient systems for utilizing land, water, forest, and fish resources,
- Environmental protection,
- Creating the global fund of plant and animal genetic resources,
- Working out international quality standards for agricultural commodities, which are to be developed in compliance with the WTO requirements,
- Rendering assistance in the sphere of plant protection,
- Working out and introducing measures aimed at combating especially economically dangerous animal diseases,
- Establishing a global system of observation and transmission of information about agro-climatic conditions, current state of crops, biomass, and soil erosion (UNDP Agricultural Policy project).

Process of Ukraine’s accession into the World Trade Organization

Ukraine’s key tasks aimed at completion of the process of its accession to the WTO are as follows. The government is in the process of signing protocols on granting access to the Ukrainian commodity and service markets. Prior to that, the concerned departments must agree on a gradual reduction of tariffs before and during the transformation period after the country’s accession to the WTO.

Ukrainian agricultural produce is included in several categories sensitive commodities. WTO and Ukraine must agree on the tariff rates for such controversial commodities as fish-by products, seafood, sugar, sunflower oil, beer, and tobacco products. Also, Ukraine must modify and streamline its sanitary and phyto-sanitary standards and mitigate or remove technical barriers to trade (TBT).

USAID/Ukraine’s food safety program developed a Ukrainian Institute for Food Safety and Quality, providing support to Ukraine, Moldova, Georgia and Azerbaijan for food safety regulations, legislation and harmonization with WTO and EU requirements. It trained 1,000 individuals from Ukrainian industry and government regulatory bodies and has certified 111 of them in the US Food Drugs and Administration’s and US Departments of Agriculture Hazard Analysis and Critical Control Point (HACCP) guidelines. Seven food safety training manuals have been translated into Ukrainian and Russian and HACCP plans were actively introduced and implemented at two Ukrainian processing plants. Furthermore, relationships were established between Ukraine and U.S. regulatory Agencies such as the FDA to harmonize food safety legislation with international requirements. [http://pfid.ubwlab.org; http://www.agro-iks.org](http://pfid.ubwlab.org; http://www.agro-iks.org).

Ukraine must accept obligations on cutting back state support provided for the country’s agricultural sector. Finally, legislative changes need to be made in order for Ukraine to become a full-fledged WTO member state.

Web Resources: Ministry of Economics: [http://www.me.gov.ua](http://www.me.gov.ua)
PART 2. SMALL FARM MANAGEMENT

1. ENTERPRISE BUDGETING ON SMALL AND MEDIUM FARMS

An Enterprise is defined as a single crop or livestock commodity; most farms consist of a combination of several enterprises.

An enterprise budget is a listing of all estimated income and expenses associated with a specific enterprise and an estimate of its profitability. It is used for forward planning or making future plans, and also to provide an estimate of the enterprise’s projected costs, returns, and profit per unit for each crop or livestock commodity.

The budget is developed on the basis of a small common unit such as one hectare for crops and one head for livestock. This permits ready comparison of the profit for alternative or competing enterprises.

There are several differences between crop and livestock enterprise budgets, and each will be discussed separately in the following sections.

1.1. CONSTRUCTING A CROP ENTERPRISE BUDGET

Total production and the expected output price

The estimated yield should be the average yield expected under normal weather conditions given the soil type and input levels to be used. Input levels must be considered because seeding rates, fertilizer levels, and chemical use all affect yields.

Operating or Variable Expenses

This section includes those costs that will be incurred only if this crop is produced. Information on seed, fertilizer, and chemicals are relatively easy to obtain. Other variable costs such as fuel, machinery operating costs/services, and hired labor depend on machinery type and size and the number of tillage operations to be performed. Research, analysis and extension service bulletins are good sources of such information.

As shown in Table 15, the estimated total variable cost for cucumber production is HR 13,724.
<table>
<thead>
<tr>
<th>Item</th>
<th>Unit</th>
<th>Quantity</th>
<th>Average farm price, UAH</th>
<th>Amount, UAH</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gross income / Return</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Main product</td>
<td>tones</td>
<td>30</td>
<td>800</td>
<td>24,000</td>
</tr>
<tr>
<td>By-product 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>By-product 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>1. TOTAL GROSS INCOME</strong></td>
<td></td>
<td>X</td>
<td>X</td>
<td>X 24,000</td>
</tr>
<tr>
<td><strong>Variable Costs/Direct Costs</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seeds, planting material</td>
<td>kg</td>
<td>1.5</td>
<td>2,650</td>
<td>3,975</td>
</tr>
<tr>
<td>Fertilizer: Nitrogen</td>
<td>kg</td>
<td>82</td>
<td>2</td>
<td>164</td>
</tr>
<tr>
<td>Phosphate</td>
<td>kg</td>
<td>43</td>
<td>3.3</td>
<td>142</td>
</tr>
<tr>
<td>Potash</td>
<td>kg</td>
<td>120</td>
<td>2.50</td>
<td>300</td>
</tr>
<tr>
<td>Fuel, oil and lubricants</td>
<td>tones</td>
<td>0.42</td>
<td>1,700</td>
<td>722</td>
</tr>
<tr>
<td>Chemicals (herbicide, fungicides, insecticides)</td>
<td>kg</td>
<td>17.5</td>
<td>70.80</td>
<td>1,239</td>
</tr>
<tr>
<td>Hired labor on different operations/ Machinery operating costs:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ploughing</td>
<td>UAH</td>
<td></td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>cultivation</td>
<td>UAH</td>
<td></td>
<td></td>
<td>603</td>
</tr>
<tr>
<td>sowing</td>
<td>UAH</td>
<td></td>
<td></td>
<td>161</td>
</tr>
<tr>
<td>mineral fertilizer delivery</td>
<td>UAH</td>
<td></td>
<td></td>
<td>36</td>
</tr>
<tr>
<td>application of mineral fertilizers</td>
<td>UAH</td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>spraying</td>
<td>UAH</td>
<td></td>
<td></td>
<td>31</td>
</tr>
<tr>
<td>harvesting</td>
<td>UAH</td>
<td></td>
<td></td>
<td>1,909</td>
</tr>
<tr>
<td>transportation and delivering</td>
<td>UAH</td>
<td></td>
<td></td>
<td>51</td>
</tr>
<tr>
<td>handling/storage</td>
<td>UAH</td>
<td></td>
<td></td>
<td>513</td>
</tr>
<tr>
<td>Watering</td>
<td>UAH</td>
<td></td>
<td></td>
<td>360</td>
</tr>
<tr>
<td>construction of drip irrigation equipment</td>
<td>UAH</td>
<td></td>
<td></td>
<td>325</td>
</tr>
<tr>
<td>harvest security</td>
<td>UAH</td>
<td></td>
<td></td>
<td>350</td>
</tr>
<tr>
<td>Electricity for drip irrigation</td>
<td>KVT</td>
<td>1,520</td>
<td>0.3</td>
<td>456</td>
</tr>
<tr>
<td>T-tape</td>
<td>meters</td>
<td>5,263</td>
<td>0.41</td>
<td>2,158</td>
</tr>
<tr>
<td>Crop insurance</td>
<td>UAH</td>
<td></td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>Interest on working/variable capital (credit interest)</td>
<td>UAH</td>
<td></td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>Marketing</td>
<td>UAH</td>
<td></td>
<td></td>
<td>222</td>
</tr>
<tr>
<td>Other costs</td>
<td>UAH</td>
<td></td>
<td></td>
<td>0</td>
</tr>
<tr>
<td><strong>2. TOTAL VARIABLE COSTS</strong></td>
<td></td>
<td>X</td>
<td>X</td>
<td>X 13,724</td>
</tr>
<tr>
<td><strong>3. GROSS MARGIN (3=1-2)</strong></td>
<td></td>
<td>X</td>
<td>X</td>
<td>X 16,276</td>
</tr>
<tr>
<td><strong>Fixed costs</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Machinery and equipment costs:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>annual depreciation</td>
<td>UAH</td>
<td></td>
<td></td>
<td>270</td>
</tr>
<tr>
<td>rent</td>
<td>UAH</td>
<td></td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>interest on average investment</td>
<td>UAH</td>
<td></td>
<td></td>
<td>60</td>
</tr>
<tr>
<td>machinery taxes and machinery and equipment insurance</td>
<td>UAH</td>
<td></td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>maintenance and repairs</td>
<td>UAH</td>
<td></td>
<td></td>
<td>220</td>
</tr>
<tr>
<td>Building cost:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>annual depreciation (drip irrigation equipment)</td>
<td>UAH</td>
<td></td>
<td></td>
<td>50</td>
</tr>
<tr>
<td>rent</td>
<td>UAH</td>
<td></td>
<td></td>
<td>320</td>
</tr>
<tr>
<td>interest on average investment</td>
<td>UAH</td>
<td></td>
<td></td>
<td>24</td>
</tr>
<tr>
<td>maintenance and repairs</td>
<td>UAH</td>
<td></td>
<td></td>
<td>400</td>
</tr>
<tr>
<td>Land lease rent</td>
<td>UAH</td>
<td></td>
<td></td>
<td>20</td>
</tr>
<tr>
<td>Fixed rate agricultural tax</td>
<td>UAH</td>
<td></td>
<td></td>
<td>20</td>
</tr>
<tr>
<td>Fixed/regular labor</td>
<td>UAH</td>
<td></td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Electricity, regular water use</td>
<td>UAH</td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Miscellaneous overhead</td>
<td>UAH</td>
<td></td>
<td></td>
<td>10</td>
</tr>
<tr>
<td>Other fixed costs (fencing, hedging, ditching and others)</td>
<td>UAH</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>4. TOTAL FIXED COSTS</strong></td>
<td></td>
<td>X</td>
<td>X</td>
<td>X 1,407</td>
</tr>
<tr>
<td><strong>5. TOTAL COSTS/TOTAL EXPENSES (5=2+4)</strong></td>
<td></td>
<td>X</td>
<td>X</td>
<td>X 15,131</td>
</tr>
<tr>
<td><strong>6. NET INCOME/NET RETURN TO MANAGEMENT (6=3-4) (6=1-5)</strong></td>
<td></td>
<td>X</td>
<td>X</td>
<td>X 8,869</td>
</tr>
</tbody>
</table>

Source: USAID Agricultural Marketing Project
Ownership or Fixed Expenses

This section includes those costs that would exist even if the specific crop were not grown. These are the costs incurred due to ownership of machinery, equipment and land used in crop production and includes machinery, equipment and building fix costs, land charges and miscellaneous overhead.

Machinery fixed costs will depend on the size, age, type, and number of machines and operations used in producing the crop as well as the tillage practices used.

The land cash rent charge is the opportunity costs of land and represents a return for its use in crop production.

Miscellaneous overhead covers such expenses as a share of pickup truck expenses, farm shop expenses, marketing expenses and so on. These are expenses that cannot be directly associated with a single enterprise but are necessary and important farm expenses.

Other Considerations for Crop Enterprise Budgets

Special problems that may be encountered when constructing crop enterprise budgets include:

1. Double cropping, where two crops are grown on the same land in the same year. In this case, budgets should be developed for each crop, and the annual ownership costs for land divided between the two crops.

2. Storage, transportation, and marketing expenses may be important for some crops. Most enterprise budgets assume sale at harvest and do not include storage costs. They are assumed to be part of a marketing decision and not a production decision. However, there may still be transportation and marketing expenses even with a harvest sale. If storage costs are included in the budget, then the selling price should be that expected at the end of the storage period, not the harvest price.

3. Establishment costs for perennial crops, orchards, and vineyards present another problem. These and other crops may take a year or more to begin production, but their enterprise budgets are typically for a year of full production. It is often useful to develop separate budgets for the establishment phase and the production phase. (Ronald D. Kay “Farm Management. Planning, Control, and Implementation”, 1986)
1.2. USE OF ENTERPRISE BUDGETS

1.2.1. Role of Enterprise Budgets in Farm Management

Enterprise budget helps a farmer to decide how to combine new ideas and old ones to his best advantage. By identifying his credit and supply needs, the farm plan helps him to arrange for the timely supplies of credit, seeds, fertilizers, etc. A specific farm plan setting forth his expected output, expenses and income, serves as a sound basis upon which a credit institution can give him production credit, based on his production capability rather than his net financial assets.

Enterprise Budgets may be of help in different managerial decisions. First, having summed up the total income and costs on a specific enterprise, it is possible to make a conclusion about the enterprise's real profitability/non profitability. The farm manager should define a unit—one cow, one hectare, and determine the resource requirements and profit possible for this economic unit. These technical coefficients or resource requirements become very important in determining the maximum size of enterprises and the final enterprise combination. In addition, such an approach to the analysis of profitability of individual enterprises allows one to make necessary changes in the farm operational structure or to the channels and the amount of the use of the products. Managers will make better decisions as to the choice of particular types of crops/animals to reach the maximum farm profitability. Second, a budget estimates the amount of cash left with an enterprise after it has covered its variable costs associated with production; this is so-called gross margin.

1.2.2. Interpretation and Analysis of Enterprise Budgets

The example enterprise budget for cucumber production presented in the Table 15 shows the calculations of the main indicators, such as gross margin, total costs and estimated profit/net return to management.

Gross Margin is an income or revenue above variable costs. It is an intermediate calculation and shows the revenue remaining to be applied to fixed costs.

The formula for the gross margin is:

\[
\text{Gross margin} = \text{Gross income minus variable costs}
\]

(In our example: UAH 10,276 = UAH 24,000 minus UAH 13,724)

The gross margin is an indicator that is calculated for each crop on each farm separately. It measures the change in total farm profit when the cropping-mix changes. This gross margin allows the estimation of the revenue incurred by one crop/animal to make the farm cover its fixed costs (such as overhead, depreciation and lease payment) after the farm has covered all of its variable costs.

The formula for the total expenses is:

\[
\text{Total Costs/Expenses} = \text{Variable costs plus Fixed costs.}
\]

(In our example: UAH 15,131 = UAH 13,724 plus 1,407)

The formula for the net income/net return to management/or estimated profit is:

\[
\text{Net Income/Net Return to Management/or Estimated Profit} = \text{Gross Income minus Total Costs;}
\]

(In our example: UAH 8,869 = UAH 24,000 minus UAH 15,131)

Or

\[
\text{Net Income/Net Return to Management/or Estimated Profit} = \text{Gross Margin minus Fixed Costs}
\]

(In our example: UAH 8,869 = UAH 10,276 minus UAH 1,407)
The example enterprise budget presented in the Table 15 shows an estimated profit of UAH 8,869 per hectare above all costs. However, this may not be the maximum profit possible from the hectare of cucumber. Any enterprise budget represents only one point on a production function. For example, changing the fertilizer level would change its costs, the yield, total income, and therefore the expected profit.

The estimated profit can be compared with the estimated profit per hectare for other crops and used to select the more profitable crops and crop combinations to be grown each year. However, the profit figures must be properly interpreted, as they are the return or profit above all costs including opportunity costs on owned inputs.

The enterprise budget in Table 15 does not contain a charge for management. Therefore, another interpretation of the estimated profit is to consider it a return to management or payment for the management input.

**Break-even Analysis**

Enterprise budgets can be used to perform a break-even analysis for either process or yields. The formula for calculating the break-even yield is

\[
\text{Break-even yield} = \frac{\text{total costs}}{\text{output price}}
\]

This is the yield necessary to just cover all costs at a given output price. For the example in Table 15 it would be UAH 15,131 divided by UAH 800, or 19 tones per hectare. Since the output price is only an estimate of the expected price, the break-even yield can be calculated for a range of possible prices.

The break-even price, or the price necessary to cover all costs at a given yield level, can be found from the equation

\[
\text{Break-even price} = \frac{\text{total costs}}{\text{expected yield}}
\]

Continuing with the same example, the break-even price would be UAH 15,131 divided by 30 tons, or UAH 504 per ton. The break-even price can also be calculated for a range of possible yields. Since both the yield and output price in an enterprise budget are estimated rather than actual values, the calculation of break-even yields and prices can aid managerial decision making. By studying the various combinations of break-even prices and yields, managers can form their own expectations about the probability of obtaining a price and yield combination which would just cover total costs. The results can help managers make the decision on whether to produce or not in order to minimize losses in the short run.

**Cost of Production**

Cost of production is a term used to describe the average cost of producing one unit of a given product.

The formula for computing the cost of production is:

\[
\text{Cost of production} = \frac{\text{total cost per hectare}}{\text{estimated yield}}
\]

For example in Table 15, the cost of production for cucumber would be UAH 15,131 divided by 30 tones, or an estimated UAH 504, 36 per tone. The cost of production will change not only with changes in the estimated costs but with changes in yield. While the cost of production is becoming a widely used concept, any value is only as good as the cost and yield estimates used in the computations.

The cost of production is useful in marketing the product. Whenever the current market price is above the cost of production, a profit can be made. This can be used as a signal to sell at least part of the product perhaps even before harvest since a profit is assured on the amount sold.
1.3. LIVESTOCK ENTERPRISE BUDGETS

Livestock enterprise budgets include many of the same entries and problems as crop enterprise budgets. However, livestock budgets can also have some unique and particular problems: (1) accounting for multiple outputs; (2) accounting for the cost of raising or purchasing replacement animals to maintain a breeding herd over time, and (3) valuation of farm-raised feed fed to the animals.

Unit
The budgeting unit for livestock is usually one head, but different units such as one cow unit or 100 birds for poultry can also be used.

Time Period
Although many livestock enterprises are budgeted for one year, some feeding and finishing enterprises require less than a year. Some types of breeding livestock, such as swine, produce offspring more than once a year.

Multiple Products
Many livestock enterprises will have more than one product producing revenue. For example, a dairy would have revenue from culled cows, calves, and milk, while a sheep flock would have revenue from culled breeding stock, lambs and wool. All sources of revenue must be identified and then prorated correctly to an average individual animal in the enterprise.

Feed and Pasture
Many livestock enterprises will consume both purchased feed and farm raised feed. Purchased feed is easily valued at cost. Farm raised feed such as hay should be valued at its opportunity cost or what it would sell for if marketed off the farm.
The charge for pasture maintenance is for items such as fertilizer, seed, and chemicals that are used on the livestock pasture.

Livestock Facilities
Livestock facilities include buildings, fences, pens, working chutes, feeders, wells, windmills, feed storage, milking equipment and other specialized items used for livestock production. Operating expenses for these items include repairs and any fuel or electricity required to operate them.

Replacement of Herd, and Veterinary and Health Expenses
The variable costs of maintaining the replacement herd, as well as veterinary and health expenses should also be prorated on a per cow basis and included in the budget figures.

Land Charge
The land charge as a fixed cost can be computed as cash rent charge or as an opportunity cost on the value of the land used. The land charge should include the total number of hectares utilized by the cow and her share of the replacement herd.

Machinery and Equipment
Tractors, pickups and other machinery and equipment may be used for both crop and livestock production.
The electronic model of agricultural enterprise budgets was prepared as a separate file using actual farmer information gathered by USAID projects in different oblasts of Ukraine (see map, Figure 20).

The electronic model comprises 35 budgets for 19 agricultural products cultivated in 2003 and 2004, collected by USAID projects in nine oblasts developed in English, Ukrainian and Russian languages.

The figures on have been made available by a limited number of private farmers and house plot owners in Ukraine. Due to this, only for the major crops, namely wheat, corn, sugar beets and some kinds of vegetables (potatoes, cabbage, onion, cucumber, tomato and carrot), as well as beef, pork, milk and fish were available to put into he model.

NOTE: The numbers provided by AMP in crop budget section considerably deviate from the data provided by other projects. We would like to specify, that AMP data relates to a very intensive drip irrigation technology production in southern Ukraine (Odesa, Crimea).

Also, AMP has summarized budgets data from more than 60 AMP clients/farmers (generated by AMP Farm Business Model). Additional 15 fruits and vegetables budgets are available on AMP web-site: http://www.lol.org.ua/ukr/markbudget.php.

Figure 20. Regions where data for Agricultural Products Budgets was collected by USAID projects
2. RESOURCES AND FACTORS AFFECTING SMALL FARM ENTERPRISES

2.1. Risk Management Recommendations


Resources and Factors Influencing Small Farm Enterprises

<table>
<thead>
<tr>
<th>Output/Yields</th>
<th>Natural resources: Climate and weather conditions; soil nutrient status; mineral and organic fertilizer; pesticide incidence; irrigation; planting date; plant population/density</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Human Resources: Farmer and family size; unpaid family labor; hired labor</td>
</tr>
<tr>
<td></td>
<td>Capital Resources: Investment (land, machinery, equipment, buildings, livestock and inputs) and Capital (fixed and working)</td>
</tr>
<tr>
<td></td>
<td>Production Resources: quality and quantity; techniques employed; skills used and technology knowledge; educational background and experience; improved technology; availability of inputs and marketing</td>
</tr>
<tr>
<td>Price</td>
<td>Supply and demand conditions; increased incomes; time in which it is sold; seasonality of production; buyers; marketing channels; method of sale (direct, wholesale, to processors); sources of credit and conditions; type of packaging used; quality issues (size and grade); terms of payment; transportation costs; quota system; inputs cost; price of complementary goods</td>
</tr>
<tr>
<td>Internal Factors</td>
<td>Size or volume of farm; crop and livestock yields; enterprise selection; enterprise combination; labor efficiency; machinery and equipment; marketing methods; personal circumstances</td>
</tr>
<tr>
<td>(under total or partial control of agricultural producers)</td>
<td></td>
</tr>
<tr>
<td>External Factors</td>
<td>Land reform; prices; markets; transportation, roads, policy and legislation; credit availability; community development; technical assistance; support services (research and extension)</td>
</tr>
<tr>
<td>(provided by Government or private organizations)</td>
<td></td>
</tr>
</tbody>
</table>

Farmers have many options for managing the risks they face, and most producers use a combination of strategies and tools, such as:

**Enterprise diversification** assumes incomes from different crops and livestock activities do not move up and down in perfect correlation, so that low income from some activities would likely be offset by higher income from others.

**Financial leverage** refers to the use of borrowed funds to help finance the farm business. Higher levels of debt, relative to net worth, are generally considered riskier. The optimal amount of leverage depends on several factors, including farm profitability, the cost of credit, tolerance for risk and the degree of uncertainty in income.

**Vertical integration** generally decreases risk associated with the quantity and quality of inputs or outputs because the vertically integrated firm retains ownership or control of a commodity across two or more phases of production and marketing.

**Contracting** can reduce risk by guaranteeing prices, market outlets, or other terms of exchange in advance. Contracts that set price, quality and amount of product to be delivered are called marketing contracts or simply forward contracts. Contracts that prescribe production processes to be used and/or specify who provides inputs are called production contracts.

**Hedging** uses future prices or options formalized through contracts to reduce the risk of adverse price changes prior to an anticipated cash sale or purchase of a commodity.
Liquidity refers to the farmer's ability to generate cash quickly and efficiently in order to meet financial obligations. Liquidity can be enhanced by holding cash, stored commodities or other assets which can be converted to cash on short notice without incurring a major loss.

Crop yield insurance pays indemnities to producers when yields fall below the producer's insured yield level. Coverage may be provided through private hail insurance or federally subsidized multiple peril crop insurance.

Household off-farm employment or investment can provide a more certain income stream to the farm household to supplement the income from the farming operation.

2.2. General precautions for small farm enterprises

(TACIS Project FDRUS9902, Small Farm Management Handbook, Southern Russia; CNFA Farmer to Farmer Project and LOL Agricultural marketing Project)

1. Avoid Extreme Cropping Specialization
The lesson is to choose a cropping mix that minimizes the risk of low prices for one or the other crop. A positive side effect of diversification from an agronomic point of view is that it also avoids the spread of certain diseases and soil depletion.

2. Complete your work on time
Farms with high yields had on average lower variable costs, which mean that they used less fertilizer, pesticides and less expensive seeds. The key to their success is surely good time management. You must be on the field when it is time to do the work. If the time to seed has come, and the farmer is still repairing the tractor, then something has definitely gone wrong with farm time management. Consider replacing outdated machinery. Higher yields will compensate for the costs!

3. Apply proper seed densities
Measure the amount of seeds your seeding machine is releasing, and calculate from that the number of seeds per square meter or ha. You may be left with some surprising results. Keep in mind that it is a fairy tale that dense plant populations are better protected against frost or diseases. The opposite is true: dense populations contain result in weak single plants, and weak plants are prone to diseases and winter damages.

4. Apply agricultural inputs (fertilizer) in time
It seems to be common practice to apply even the nitrogen fertilizer during seeding. This is a guarantee for losing most of the yield increasing effect, because nitrogen hardly fixed to soil aggregates, and therefore diminishes to a large part until next spring. Nitrogen must be applied in March and April just before and during rapid root growth, when roots can immediately absorb it; timing varies with climate.

5. Save water using fertilizer
The eastern and southern regions of Ukraine frequently experiences summer drought. Water is definitely a limiting factor in plant production. One way to both save water and to increase yields is to apply fertilizer during the growing phase of the plants. For physiological reasons, plants that are sufficiently supplied with fertilizer need less water per unit of biomass to be built up.

6. Keep an eye on depreciation
Regards the results of the farms on the whole, depreciation of machinery and equipment are the most important reasons for unprofitable farms. Calculate your depreciation carefully, and don’t make the mistake of taking your cash income at the end of the year as your profit! You have to save a lot to keep your productive assets constant, which is also a good argument when preparing the tax declaration.

7. Consider machinery services
For small farms the use of contracted machinery services may be economically superior to owning equipment for anything. Common fields of contracted work are seeding of maize and sunflower, fertilizing, spraying and harvest. The most important criterion to choose a contractor is his reputation for being timely and customer oriented. The second important attribute is the quality of his equipment and work. If then the depreciation costs saved are higher than the costs of the service, it should be seriously taken into consideration.
8. Grow and diversify
The results show that small farms tend to be threatened more by non profitability than larger ones. This is mainly true for small farms engaged in capital intensive cropping (cereals and sunflower). These farms should either consider expanding to better use their machinery and labor resources or to diversify their production and shift part of their land to crops with less capital and more labor demand, as for instance vegetables. Watermelons for example need less machinery capital per UAH of monetary revenue than wheat. They require more labor (which could be seasonally hired) and give a much higher monetary result per hectare.

9. Record your activities and results
Many of the decisions that are suggested can only be made when the farmer thoroughly knows the situation of his farm during the previous period. This is only possible when all operations are carefully recorded. This includes in particular a complete inventory of farm resources and a calendar that includes all activities carried out during the cropping period.

10. Introduce the modern agricultural technologies
According to the AMP, introducing modern technology and new varieties of crops as well as establishing new distribution channels will enable Ukrainian farmers to increase the effectiveness of their operations in the shortest possible time. Some priority agro-technology issues which should be taken into account are listed below.

11. Rotate crops
Crop rotation mitigates the negative effects of unfavorable weather conditions and helps to return sustainable harvests. It is an essential and obligatory element in the package of agro technical and organizational farming techniques that allow for obtaining high and stable yields of high quality vegetables. The role of crop rotation becomes more important in the modern vegetable growing, as the processes of industry specialization and concentration intensify. Neither, fertilizers, proper irrigation or pesticides used in growing vegetables will completely eliminate weeds, insects and diseases. As a matter of fact, the better fertilized and irrigated fields are the more favorable conditions exist for development of weeds and diseases. Reduced yields of some vegetable crop grown without crop rotation is a result of one sided use of soil nutrients, accumulation of pests and diseases, and different toxins – products of plants and microorganisms life activity.

12. Use drip irrigation
It is an effective example of intensive production. The essence of drip irrigation is that what is watered is the plant, not the soil. This effect is achieved because water is delivered directly to the plant roots through elastic tapes having slit-like holes along the full length.

The following facts prove effectiveness of application of drip irrigation:

- Frugal usage of water resources (50 to 90 percent water and electricity saved against conditional irrigation systems);
- Possibility to regulate depth of damping, quantity, quality and timing of irrigation;
- Reduced labor cost;
- Less weeds as a result of non-watered row spacing;
- Improved yields (by 20 to 50 percent higher than with conditional irrigation system) and quality of fruit, easy and transportable produce due to even distribution of water and fertilizers, fruit have “technological” form and ripen evenly, which is crucial for processing enterprises;
- Reduced risk of lower yield due to the state of soil and weather conditions.

Using the drip irrigation systems as an element of modern intensive technology, one could essentially improve the culture of cultivation. It is important to remember, that the effectiveness of drip irrigation is at its best when it is used for growing vegetables, horticulture and viticulture. For field crops, drip irrigation makes no sense and is economically unjustifiable.

13. Post-harvest handling
Fruits and vegetables are at their peak of quality and taste at the moment they are harvested. Their condition will only deteriorate after that point. Good post harvest handling can help slow the deterioration process.
14. Cooling the produce as soon as possible after harvesting can help maintain high quality. Removing field heat from newly harvested produce can increase its shelf life. Wet or damp produce must be cooled, as warm, wet produce creates an environment that encourages natural ongoing biochemical reactions: respiration, ethylene production, ripening, moisture loss, aging and decay. The rapid cooling of fresh produce to its best storage temperature is called pre-cooling. There are four basic methods of pre-cooling: forced air, hydro cooling, vacuum cooling and icing. Proper humidity will also help reduce product water loss, add to product appeal and extend shelf life. The optimum relative humidity for most fruit and vegetable crops is 90 to 95 percent. Notable exceptions are dry onions, potatoes and pumpkins.

It’s also essential to have preparation and storage areas to allow adequate room for handling during peak periods. The first piece of equipment needed is a dump table for produce. Other necessary equipment items include a sink for washing, a spray hose and a drain board. The drain board is used for sorting, grading, sizing and packaging washed vegetables.

15. To receive advice on the technical aspects of crop and livestock production, where to obtain needed inputs, information on market prices, quality requirements and how to create coops and other self-sustaining producer organizations please, visit web site of the USAID Agricultural Marketing Project (http://www.lol.org) and Information System www.agro-iks.org.

3. LAND LEASE ARRANGEMENTS

This section provides information and advice in question and answer format for land share owners contemplating leasing their land. Please look up the Ukraine Land Titling Project’s website to receive additional subject information — http://www.ulti.kiev.ua

I become the owner of a land parcel, and am advised to lease out. What does it mean?

Land lease means that the owner of the land parcel transfers it into use for a certain period of time to another person in order to receive rental. While doing so, the owner of the leased out land parcel becomes the lessor, and the person who leases the land parcel under a land lease contract becomes the lessee.

For what term may a land parcel be leased out?

A land parcel may be leased out for any term between 1 and 50 years. However, it is worth noting that a short term lease (one to three years) can be disadvantageous for a lessee, while a long-term lease (for 20 years and more) will not meet your interests as a landowner. Therefore, it is very important to establish a term of lease suitable for both parties.

Whose rights are better protected by the law: those of a person who leases land based on the State Act or on the Land Share Certificate?

Certainly of the person, who leases land based on the State Act. The owner of the land parcel, certified by the State Act, knows its exact location, while the owner of the land share, certified by the Land Share certificate, is the owner of a conventional land parcel, the boundaries and location of which have not been established. Moreover, the owner of the land parcel can independently start and manage his own private family business/farm, while the owner of a land share does not have this opportunity.

How to conclude a land lease contract?

A land lease contract is concluded in writing between the landowner and the person willing to lease the land parcel. Upon request of the parties, the contract may be notarized.

The land lease contract shall be supported by:
- the parcel design map or layout of the leased out land parcel;
- the cadastre map of the land parcel showing all restrictions (encumbrances) and land servitudes imposed upon it;
- the act of demarcation of the boundaries of the land parcel in kind.

The land lease contract is subject to state registration upon its conclusion.
What kind of information shall be included in the land lease contract?
The land lease contract shall include the following:
1) the object of lease (location and size of the land parcel);
2) the term of validity of the lease contract;
3) rental payment (amount, adjustment to inflation rates, forms of payment, terms, procedure for allocation and
   revision, responsibility for delays in payment);
4) designation and conditions for the use of the leased land parcel;
5) provisions for preservation of the condition of the object of lease;
6) conditions and terms of transfer of the land parcel to the lessee;
7) conditions of return of the land parcel to the lessor;
8) existing restrictions and encumbrances on the use of the land parcel;
9) the party to bear the risk of accidental damage of destruction of the lease object or its part;
10) responsibilities of the parties.

The absence of any of the above provisions in the lease contract shall give grounds to refuse state registration
of the lease contract, and shall void it under the law.

Upon agreement the lease contract may also include additional provisions, namely: the quality condition of
the land parcel, procedure for carrying out the obligations of the parties, procedure for taking out insurance
of the object of lease, procedure for compensation of loses resulting form works to protect and improve
the object of lease, carrying out ameliorative works, reasons that may condition changes in the lease contract or
its termination, etc.

What should one do to lease a land parcel out?
First of all, you should find a person or entity ready to lease your land parcel for a certain rental fee. It can
be either an agricultural enterprise or a small family farm. Second, you should conclude a land lease contract
with this entity.

How are rental payments made?
Upon agreement between the lessor and the lessee of the land parcel, rental can be paid either in cash, or in
form of products or services. The parties can include the combination of the above forms of payment in the land
lease contract, or agree on some other forms of rental payment.

What to do, if the use of land by the lessee results in its degradation, decreased fertility or contamination?
If the activity of the lessee of the land parcel results in the above consequences, the latter shall have to fully reim-
burse the lessor for incurred damage.

Does the heir have to conclude a new land lease contract after the death of the lessor?
No, he does not, unless provided otherwise by the lease contract itself. Under Paragraph 4 of Article 32 of the
Law of Ukraine dated October 2, 2003 On Making Changes to the Law of Ukraine On Land Lease, the transfer
to another person of ownership rights to a leased out land parcel does not give grounds to change the conditions
or dissolve the lease contract, unless provided otherwise by the contract itself.

May a farmer transfer a land parcel into sublease?
He may, if it is allowed under the lease contract, or if he received the written consent of the lessor. According
to Article 8 of the Law of Ukraine On Land Lease dated October 6, 1998, the conditions of a con-
tact on sublease of the land parcel (or its part) must be specified within the contract on lease of the land par-
cel (or its part) and shall not contradict it. The term of sublease cannot exceed the period of validity contract
on lease of the land parcel.

In the event of suspension or termination of the lease contract, the contract on sublease of the land parcel shall
be terminated.
**Do acts of god conditions relieve the lessee from rental payments?**
No, under current legislation, acts of god conditions (drought, flood, fire, etc.) relieve the lessees from penalty or fine for delays in payment and from compensation of losses. However, acts of god conditions do not relieve them from paying the lease.

**What is the procedure for renewing the contract on lease of land?**
The Law of Ukraine “On Lease of Land” as of 10.02.2003 simplified the procedure for renewing the contract on lease of land. Hereof, in case the lessee continues to use the land parcel after the expiration of the term of the lease contract and in case no written objections (letters of notification) of the lessor are submitted in the course of one month after the expiration, the contract shall be renewed for the same term and on the same conditions.

**Does the lessee of my land share have the right to refuse to re-formalize the lease contract after I have received my land share in kind?**
Under the Transitional Provisions of the Law of Ukraine On Lease of Land as amended on October 2, 2003, until the allocation of their land in kind, citizens holders of Land Share Certificates are entitled to enter into contracts on the lease of agricultural land, the location which is determined in accordance with the certificates and under the law, in view of the need for rational territory design and land use compactness. After the allocation of land shares in kind to land share holders, the lease contract is to be re-formalized under the State Act for the right to private ownership of land on the same conditions as before, and may be changed only upon agreement of the parties. Thus, the lessee doesn’t have the right to unilaterally refuse the conclusion of the contract on lease of the land parcel after the allocation of the land parcel in kind and the issue of the State Act for this land parcel.

**Does the lessee of my land parcel have the right to use it after the expiration of the lease contract, stating that I owed him UAH 100 and he would not return the land until I settle this debt?**
Under Article #34 of the Law of Ukraine On Lease of Land in case of termination or dissolution of the lease contract the lessee must return the land parcel to the lessor under the provisions of the contract. The lessee has no right to hold back the land parcel upon the expiration of the lease contract, even to satisfy claims to the lessor. Thus, the lessee may not continue using the land upon the expiration of the lease contract on the grounds of the fact that the lessor is indebted to him. This action is illegal, and the lessee shall compensate the lessor for all losses incurred.

**Is notary certification of the contract on lease of land necessary?**
You are not obliged to certify the contract with a notary. But it may be done upon request of one of the parties.

**Where is it possible to find out the result of the pecuniary appraisal of the land parcel (it is not stated in the State Act for the right to ownership of land)?**
You may receive this information from the regional department of land resources, by addressing a written request to issue a reference on the pecuniary appraisal of your land parcel.

**A couple of years ago I concluded a lease contract for my land share. This year I received my State Act for the right to ownership of land. Do I need to conclude a new lease contract?**
Yes, you do. Under the Transitional Provisions of the Law of Ukraine On Lease of Land, after the allocation of land parcels in kind the lease contract is re-formalized according to the State Act for the right to private ownership of land on the same conditions as before, and may be changed only upon agreement of both parties.

**Does the lessee have the right to sub-lease the land parcel in case no such provision exists in the lease contract?**
Article #8 of the Law of Ukraine on Lease of Land dated October 2, 2003 #1211-IV, regulates the sublease of land parcels. The leased land parcel or its part may be subleased by the lessee without changes of designation if it is allowed by the lease contract or under the written consent of the lessor. Thus, in case the lease contract does not enable the lessee to sublease the land parcel, the right to this type of lease is given to the lessee only upon the written consent of the lessor. It is worth remembering, that the terms of a sublease contract must fall within the conditions of the lease contract, and the term of sublease may not exceed that of the lease.
What does the term “right of first refusal of the lessee to purchase the land parcel” mean for the parties in practice?

Article # 9 of the Law of Ukraine on Lease of Land of October 2, 2003, #1211-IV, grants the lessee the right of first refusal to buy the land parcel he leases. However, it also clarifies the procedure for exercising this right. One of the conditions is that the lessee must pay the price, for which the land parcel is sold, or in case it is sold on auction – his bid must equal the final bid of the auction. The law stipulates mandatory notification of the lessee about his intention to sell the land parcel to a third person, mentioning the price of the sale and the other sale conditions.

What rental restrictions exist?

For the lease of land parcels in private ownership, the size, form and terms of rent payment shall be established upon agreement of the parties in the lease contract under Article #21 of the Law of Ukraine on Lease of Land dated October 2, 2003 #1211-IV.

The annual amount of rent for a land parcel in private ownership may not exceed 10 percent of its normative pecuniary appraisal. But when establishing the lessor on a competitive basis, a larger sum of rent may be allowed.

The lease contract was declared void by court judgment. Shall the lessor return the rent for the land parcel?

In case the lease contract was found void, the rent, received by the lessor for the period of time, when the land parcel was actually leased out, shall not be returned. This is stipulated by Article #21 of the Law of Ukraine on Lease of Land dated October 2, 2003 #1211-IV.

With whom is it necessary to conclude a lease contract to lease the unclaimed land parcels on the territory of a village council? Are there any restrictions of the term of lease of these land parcels?

Under Article #13 of the Law of Ukraine on Procedure for Allocation in Kind of Land Parcels to Land Share Holders, of 06.05.04, #899, the unclaimed land parcels may be leased out for use by designation. The contract on lease of these land parcels shall be concluded with the respective state authorities or bodies of local self-government, as the decision about the lease of this land is to be taken by village, town or city councils or regional state administrations on the territory of which the land parcels are located.

As for the term, for which the contract on lease of the unclaimed land parcel may be concluded, under the law it is established until the receipt of State Acts for the right to its ownership by the owner, which is to be clearly stated in the lease contract. As far as it is not always possible to give a clear forecast of the time of claiming of such land parcels, it is inexpedient to conclude lease contracts for more than one year. The term of validity of these contracts may be extended for the same period of time, until the allocation of the land parcels in kind (issuance of State Acts to their owners).

What are the advantages of notarizing the contract on lease of the land parcel?

The Law of Ukraine on Lease of Land dated 10.02.03, #1211, established the obligatorily written from of the lease contract, while its notarization was established as optional, upon agreement of the parties. The notary certification of the contract gives the lessor a number of advantages:

1. The content, time and place of the deed, its conformity with the law and all the other circumstances shall be officially registered by a notary and considered established and trustworthy.

2. In case of violation by the lessee of the size and/or terms of payment of rent, the lessor shall have the possibility to claim it on the basis of a deed of execution, written by the notary.

For the notarization of contracts on lease (sublease) of land parcels shall be levied a fee of 0.01 percent of the pecuniary appraisal value of the land parcel, established under the methods approved by the Cabinet of Ministers of Ukraine; in case of absence of appraisal results – 1 percent of contract value, but no less than one non-taxable citizen’s minimal income.
Does the lessee have the right to subtract the money he paid for the issuance of the State Act for the right to ownership of land from the rent?
The conditions for the use by the lessee of the lessor’s land parcel (share), including the size, form and conditions of rent payment, are established in the lease contract. Under Article #651 of the Civil Code of Ukraine the change of contract items is possible only under the consent of both parties. In case the lease contract does not stipulate a decrease in rent and direction of these funds for the issuance of the State Act, the lessee has no right to change the provisions of the contract and pay less rent without the consent of the lessor.

Is it possible to lease a land parcel in the name of a relative, who works abroad?
Yes, in case the relative gave his written consent to the lease of his land parcel, and he is legally capable. These conditions are contained in the provisions of Article #4 of the Law of Ukraine on Lease of Land (as amended on October 02, 2003), as well as Articles ## 237, 242, 244 of the Civil Code of Ukraine.

This consent must be exposed in form of a power of attorney wherein the content of which would clearly state, that your relative gives you the right to conclude in his name a contract on lease of his land parcel.

The power of attorney must be notarized.

In case your relative is abroad, he may formalize and notarize the power of attorney at the nearest Consular Section of the Republic of Ukraine (Article #1 of the Law of Ukraine On Notary Actions).

Is it necessary to develop a parcel plan to lease the land parcel out?
The parcel plan shall not be developed in case the land parcel is leased out without changing its designation.

In case the designation of the land parcel is changed – it is necessary to first develop a parcel plan.

The parcel design plan shall be developed by a land survey company upon request of the landowner.

Does the lessor have the right to unilaterally dissolve the contract on lease of his land parcel?
Under Article #31 of the Law of Ukraine on Lease of Land #1211-111 of 10.02.2003, the unilateral dissolution of the contract on lease of land is not allowed. However, there are two exceptions from this rule:

1. In case the lessor has this right provided for by the contract;

2. In case the lessee delays rent payments for more than three months, the lessor may unilaterally dissolve the lease contract under Article #782 of the Civil Code of Ukraine.

In all the other cases the pre-term dissolution of the contract on lease of land may be carried out only by court judgment.

When does the contract on lease of the land parcel take effect: from the moment of signing, or from the moment of registration?
The contract is considered concluded from the moment of signing, however, under Article #18 of the Law of Ukraine On Lease of Land #1211-111 of 10.02.2003, it shall take effect from the moment of its state registration. The procedure for state registration is established by law.

May I lease my land parcel out to a subsidiary farm? Who shall sign the contract from the side of the subsidiary farm?
Under Article #90 of the Land Code of Ukraine the landowner has the right to lease out his land parcel.

Under Article #5 of the Law of Ukraine on Subsidiary Farms, the subsidiary farm is entitled to lease land, however, only in case the total land area used by the farm does not exceed two hectares.

While keeping the above-mentioned norm you can be sure, that the contract on lease of land that you signed shall not void because of the subsidiary farm exceeding this restriction.

The contract on lease of land shall be signed in the name of the lessee by the head of the subsidiary farm or his authorized representative (Article #7 of the Law of Ukraine on Subsidiary Farms).
Is it possible to lease land from a fellow villager, who has changed citizenship?
Yes, but for no more than 12 months. Under current land legislation, in case for some reason a foreign citizen becomes the owner of an agricultural land parcel he must alienate it in the course of one year. Thus, this foreign citizen may not be a lessor of an agricultural land parcel.

Agreement to lease a land share (SAMPLE #1)

Village_________________; _______________ rayon ; ________ oblast 05/23/2005

The citizen of Ukraine _______________________________________________ (hereinafter Lessor), acting sui juris and ______________________________________________ (hereinafter Lessee), in the person of ___________________________________________________________, acting pursuant to the Statute (hereinafter referred to as the Parties) have made this Agreement upon the following:

1. Subject of the Agreement

1.1 Lessor does hereby agree to grant, and Lessee does hereby agree to take in lease for agricultural use a land share (pai) with a total area of 5.55 conventional cadastral hectares and worth 50 000 hryvnas according to land certificate series XP ¹ 4356789.

1.2 A land certificate is converted to lease for commodity agricultural production preserving the existing scheme of crop rotation.

2. Term and termination of the Agreement

2.1 This Agreement shall come into effect once it is signed by the Parties and passed state registration in accordance with legal procedures. This agreement shall be valid till 05/23/2010.

2.2 The Agreement shall be terminated in the following cases:

2.2.1. Upon its expiry date;

2.2.2. Upon lessor’s obtaining the State Act to a land parcel on the basis of his land certificate;

2.2.3. Pre-term repudiation of the Agreement on the basis of:

– Parties mutual consent expressed in writing.

– Court decision on one Party application suing the other Party for non-performance of its obligations under this Agreement.

– Lessee’s delay in paying rent for more than one month; in this case Lessor may unilaterally cancel the Agreement.

2.3. Neither of the Parties can unilaterally repudiate the Agreement unless the case of delayed payment stipulated by this Agreement.

2.4. Lessor shall preserve all rights to dispose of a land share.

2.5. Should the right to ownership of a land parcel pass to another person, this Agreement shall remain valid for a new landowner.

3. Payment procedures

3.1. Lessee shall pay Lessor a rent of 1.5 percent or more of land share value indexed according to the legislation of Ukraine. At the moment of signing the Agreement rent sum is 750 hryvnas. In case of further indexation (increase in) value of a land share the sum of rent will change accordingly and will constitute 1,5 percent of land share value indexed according to the legislation of Ukraine.

3.2. Upon the Parties consent Lessee may pay rent in kind or as labor-rent, which should be documented by the additional agreement. The additional agreement shall necessarily include class, sort, and quantity and one-item price of production released to pay off rent. Additional agreements lacking these data shall not be valid even in case both Parties shall sign them. Additional agreements are subject to state registration under procedure established for this Agreement.

3.3. Lessee shall pay due rent yearly and not later than on 12/31 of the financial year.

3.4. Should Lessee fail to pay due rent in time, he shall pay fine as indicated in item 5.1.

4. Rights and obligations of the Parties

4.1. The Parties shall have a right to:

4.1.1. Introduce changes and amendments to this Agreement upon their mutual consent expressed in writing.

4.1.2. Use appropriate fertilizers to preserve soil fertility.

4.2. Lessor shall have an obligation to:

4.2.1. Abstain from interfering in Lessee’s productive activity.

4.2.2. Abstain from actions that may prevent Lessee form executing provisions of this Agreement.
4.3. Lessee shall have an obligation to:
4.3.1. Preserve initial designation of a land share stated in item 1.2 within the whole term of this Agreement.
4.3.2. Maintain ecological balance and fertility of a land share.
4.3.3. Attribute to his own expense and responsibility all costs regarding use of a land share, use and protection of the tract of land containing a land share.
4.3.4. Pay rent in due time according to the procedures stipulated by this Agreement.
4.3.5. Keep to the procedures of using a land share. Sublease of a land share to third persons is prohibited.
4.3.6. Return a land share to Lessor in state not worse than on the first day of lease and eligible for its designated use within 7 calendar days after termination of the Agreement.

5. Parties liabilities
5.1. In case of Lessee’s default to pay rent timely for any reasons a fine shall be imposed on him equivalent to 1% of amount owed for each day.
5.2. In case of Lessee’s untimely return of rented lands to Lessor (item 4.3.6) for any reasons, Lessee shall pay Lessor a fine equivalent to 10% of indexed value of a land share.
5.3. Risk of casual damage or destruction of crops, cattle or improvements performed by Lessee on a rented land share shall be attributable to Lessee.
5.4. Lessee shall compensate Lessor’s losses caused by action or non-action, including using inadequate fertilizers, which led to deterioration or pollution of a land share.
5.5. The parties shall not be liable for partial or total failure to perform their obligations under this Agreement, if such failure was caused by force majeure, events that neither Lessor nor Lessee could foresee and prevent (flooding, fire, earthquake, other natural disasters, etc).

6. Other provisions
6.1. Lessor shall not compensate Lessee’s expenses on introduction or elimination of improvements carried out by Lessee on the tract of lands where Lessor has the right to a land share.
6.2. Should there arise any disputes concerning this agreement, they shall be settled through negotiations, and where it is impossible – judicially.
6.3. If neither of the Parties to this Agreement declares its will to terminate it in one month before the expiry date, the Agreement shall be considered prolonged on the term and conditions provided for in this Agreement. Lessee shall have no right to cultivate and sow the land, if harvest is to be gathered after the expiry date of the Agreement.
6.4. Should there occur any relationships in course of exercising this Agreement that are not stipulated here, they shall be governed by the current legislation of Ukraine.

This Agreement is made in three copies, one for each of the Parties, and one for the institution conducting its state registration.

Signatures, legal addresses and requisites of the Parties

Lessee:______________

Lessor:_______________

This Agreement is registered in the Book for registration agreements to lease a land share of ___________________________________ Rada by ¹.

05/23/2005

____________________ / __________________/
(SEAL)
2. Agreement to lease a land parcel (SAMPLE #2)

v. _______ of _______ village rada: ___________ rayon: _______ oblast
05/23/ 2005

The Parties: ___________________________________________ (hereinafter Lessor or his
authorized person) and ______________________________________ (hereinafter Lessee)
who acts pursuant to ____________________________________________ have made this Agreement
upon the following:

Subject of the Agreement

1. Lessor does hereby agree to grant, and Lessee does hereby agree to take in chargeable use (rent or lease)
and for a fixed term a land parcel for commodity agricultural production located on the territory
of ______________ rada ______________ rayon________________oblast.

Lease object

2. A land parcel (parcels) with a total area of 5.55 ha is conveyed to lease, including 5.0 ha of arable land,
0.30 ha of pasture, 0.20 ha of hayfield. Location and boundaries of a lease object are shown on the plan
in the State Act for the right to private ownership of land series EP ¹ 4257808, issued on 05/20/2005.
3. A land parcel should not contain any immovable property or other infrastructure objects.
4. A land parcel is conveyed to lease without buildings and other objects.
5. Normative money appraisal of a land parcel is 50 000 hryvnas.
6. A land parcel conveyed to lease should not have any drawbacks that may impede its effective use under
this Agreement.
7. The object of lease shall not have other features that may affect lease relationships.

Term of the Agreement

8. The Agreement shall be valid from 05/23/2005 to 05/23/2010 Lessee who has faithfully performed his obli-
gations under the Agreement shall have the prior right to renew the lease for a new term. In this case
Lessee should inform Lessor in writing about his will to renew the lease one month before termination of
the Agreement at the latest.

Rent payment

9. For a one-year use of a land parcel Lessee shall pay Lessor a rent equivalent to 1.5 percent of normative
money appraisal of a land parcel(s) estimated (indexed) pursuant to the law and amounting to 750 hryv-
nas at the moment of signing the Agreement. In case of further indexation of (increase in) value of a lease
object the sum of rent will change accordingly and will constitute 1.5 percent of normative money apprais-
al indexed according to the legislation of Ukraine, without signing additional agreements.
Upon the Parties consent Lessee may pay rent in kind or as labor-rent, which should be documented by the
additional agreement. The additional agreement shall necessarily include class, sort, and quantity and one-
item price of production released to pay off rent. Additional agreements lacking these data shall not be valid
even in case both Parties shall sign them. Additional agreements are subject to state registration under pro-
cedure established for this Agreement.
10. Inflation indexes shall be taken into account in calculating sum of rent.
11. Rent payments shall be made from Sept 1 to Dec 31of every payment year for the current year.
12. Production and services to pay off rent shall be provided through filling up a pay-sheet. Upon Lessor’s
request Lessee should provide him with a reference on the sum of rent paid and the sum of debt if it exists.
13. The sum of rent shall be revised once a year in case of:
• changing conditions of farming provided for by this Agreement;
• fluctuation in land tax, increasing prices, tariffs, including aftermaths of inflation;
• deterioration of land parcel that was not caused by Lessor’s fault, formally certified;
• in other cases provided for by the law.
In any case amount of rent payment cannot exceed 1.5 percent of normative money appraisal of a lease object.
14. In case of Lessee’s default to pay rent in terms fixed by this Agreement a fine shall be imposed on him
equivalent to 0.5 percent of due sum for each day.

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Conditions of land parcel use
15. A land parcel shall be leased for growing vegetative agricultural production.
16. Land parcel designation lies in agricultural commodity production.
17. Conditions for maintaining the state of a lease object should be as follows: Lessee should preserve soil fertility and percentage of humus present in land when he starts leasing it. If Lessee receives ploughed land, he should return it ploughed as well. Sublease is prohibited.

Conditions and terms of conveying a land parcel to lease
18. A land parcel shall be conveyed to lease without designing a disposal project.
19. There shall be no other terms of leasing a land parcel.
20. A land parcel shall be conveyed to lease on the day of state registration of this Agreement in accordance with the Act of its conveyance-acceptance (on the day of signing this Agreement in case when state registration is not performed).

Terms of returning a land parcel
21. After termination of the Agreement (closeout or repudiation) Lessee shall return to Lessor a land parcel within 3 calendar days after the termination date, in accordance with the Act of conveyance-acceptance, and the condition of the land parcel shall not be worse that on the day of its receiving. In case of deterioration of a land parcel leading to changes of its state Lessor shall have the right for restitution in agreed by the parties. If the Parties fail to reach the agreement about the amount of restitution, their dispute should be settled in court.
22. Any costs spent by Lessee on improving quality of a land parcel without Lessor’s consent that cannot be separated from damages to this land parcel shall not be restituted.
23. Lessor should not give Lessee his consent to carry out works on improving the state of a land parcel.
24. Lessor shall have the right for compensation of damages caused by Lessee’s failure to meet his obligations under this contract. The damages are considered as follows:
   • actual losses suffered by Lessor because of Lessee’s non-performance or improper performance of terms of the Agreement and costs spent or due to be spend by Lessor in order to restore his violated right;
   • revenues that Lessor could have actually obtained if Lessee performed his obligations under the Agreement properly.
25. The sum of actual and other expenses shall be determined basing on officially certified data.

Restrictions (encumbrances) regarding use of a land parcel
26. There are no restrictions (encumbrances) established for a land parcel under lease, it is free from the third parties rights.
27. Conveying a land parcel to lease shall not be the reason for terminating or changing restrictions (encumbrances) and other rights of the third parties, if such a situation occurs in the future.

Other rights and obligations of the Parties
28. Lessor shall have a right to:
   • demand Lessee to use a land parcel according to its designation stipulated by the Agreement to lease;
   • demand Lessee to keep to the environmental safety norms of land use and preservation soil fertility, to the state standards and rules, including local regulations for building up settlements;
   • demand Lessee to keep to regulations for water protection zones, shelter belts, sanitary control and sanitary protection zones, zones on special regime for land use and territories under special protection;
   • demand Lessee to pay rent timely.
29. Lessor shall have an obligation to:
   • convert to lease a land parcel in state stipulated in this Agreement.
   • ensure realization the third parties’ rights concerning a land parcel under lease pursuant to the law;
   • abstain from actions that may prevent Lessee from enjoying his right to use a land parcel under lease;
   • compensate Lessee for his capital outlays regarding improvement of lease object state performed by Lessee with Lessor’s consent;
   • inform Lessee about specific characteristics and drawback of a land parcel that may cause harmful effects to the environment or worsen the state of a lease object.
30. Lessee shall have a right to:
   • farm independently on land keeping to the provisions of the Agreement to lease;
   • plant perennials with Lessor’s written consent;
   • obtain production and revenues;
   • develop water facilities and reclamation projects with Lessor’s written consent.
31. Lessee shall have an obligation to:
- start using a land parcel as stipulated by the Agreement to lease a land parcel registered according to the prescribed procedure (in case it is subject to state registration);
- execute restrictions (encumbrances) to the object at scope stipulated by the law or by the Agreement to lease a land parcel;
- keep to the regulations for using lands of nature reserve, sanitary, recreational, historical and cultural designation.

**Risks of casual destruction and damage of a lease object or its part**
32. Casual destruction and damage risks of a lease object or its part shall be attributable to Lessee.

**Lease object insurance**
33. Pursuant to the Agreement a lease object shall not be subject to insurance in the interim of lease.
34. The Parties shall not insure a lease object.
35. Neither of the Parties shall be obliged to insure a lease object.

**Amendments to and termination of the Agreement**
36. Amendments to the Agreement shall be introduced in writing with Parties mutual consent. Should the Parties fail to agree about the amendments to the Agreement, the dispute shall be settled in court.
37. This Agreement shall be terminated in the following cases:
- upon its expiry date
- lessee’s obtaining acquisition of the right to ownership of a land parcel;
- buy-out of a land parcel for communal purposes or mandatory alienation of land because of public necessity according to the procedure prescribed by the law;
- liquidation of a legal person-lessee.

This Agreement shall also be terminated in case of its cancellation and in other cases stipulated by the law.
38. The grounds for terminating the Agreement through its cancellation are as follows:
- Parties mutual consent;
- court decision on application of one party suing the other for neglecting its obligations under this Agreement and as a result of casual destruction of a land parcel under lease or causing damage to it that have strong negative impact on its usage, and in other cases stipulated by the law.
39. Lessor may unilaterally cancel the Agreement if Lessee fails to pay timely full rent for more than 3 months, and losses that Lessee may suffer shall not be compensated. Lessee should return a lease object to Lessor within three calendar days from the cancellation date according to the procedures stipulated by this Agreement.
40. Conveying the right to ownership of a land parcel under lease to another person and restructuring of a legal person-Lessee shall not lead to amendments or termination of the agreement.

**Parties responsibility for default or improper execution of the Agreement**
41. The Parties shall be liable for default or improper execution of the Agreement pursuant to the law and to this Agreement. In case of Lessee’s untimely return of a land parcel to Lessor because of any reasons, Lessee shall pay Lessor a fine equivalent to 10% of normative money appraisal fixed for the day the default.
42. The default party shall be exempt from liability if it can prove its guiltlessness.

**Final provisions**
43. The Agreement shall come into force once it is signed by the Parties and registered (if it is subject to state registration).

The Agreement is made in three copies of equal legal effect that shall be kept by Lessor, Lessee and the institution conducting its state registration — ________________ rayon office of Kharkiv Regional Department of public enterprise “State Land Cadastre Center under Ukraine State Committee on Land Resources”.

The Agreement shall necessarily be supplemented with:
- plan or scheme of a land parcel;
- cadastral plan of a land parcel indicating restrictions (encumbrances) and servitudes to its use;
- act on defining land parcel boundaries in kind;
- act of acceptance-conveyance of a lease object.
Parties' requisites

Lessee:
(name, surname of a physical person – lessee, passport data or the name of the legal person acting on the
grounds of personal document (name, who and when certified it).

Data of state registration of a business subject (who and when registered it),

USREO* code (for physical persons – identification code), requisites of bank, location, full address

Signature ___________________(________) __________“___”, 200___ (SEAL)

Lessor:
(name and surname of a physical person – lessor, passport data, identification code,
location, full address

Signature ___________________(________) __________“___”, 200___

The Agreement was registered in _________________________________ rayon office _____________ of public
enterprise “State Land Cadastre Center under Ukraine State Committee on Land Resources” regional depart-

(SEAL) 

(Signature)  

(Initials an surname of the official conducting state registration)

* Ukraine State Registration of Enterprises and Organizations
4. CONTRACTING AGRICULTURAL COMMODITIES

CONTRACT AGREEMENT SAMPLE
This section provides the sample of the contract agreement that can be used when the buyer orders certain quality and quantity of commodities from an agricultural producer. Such agreements are extremely important for the processing enterprises where the stable supply of raw materials is necessary; the contracting agreement may be also advantageous for the wholesale companies.
More information on the subject may be found on USAID Agricultural Marketing Project’s website http://www.iol.org.ua

THE CONTRACT of sale and purchase

_______ 2005.

Buyer on behalf of the Director, working on the basis of the Statute, on the one hand,
And, hereinafter referred to as
Seller, the passport series number issued by ____________________.
Identification code: ____________________.
on the other hand have concluded the present contract as follows:

1. Subject of the contract.
1.1. The seller agrees to produce and supply ____ tons of cucumber – hereinafter the Goods, and the Buyer to accept cucumber in the specified volume and to pay in terms specified in the present contract.
1.2. The seller produces cucumbers on the area of _____ ha at the address: ____________________.
1.3. The buyer transfers to the Seller cucumber seeds in quantity of __________ kilograms for a total sum of ____________________, including VAT of __________ under the conditions of reimbursement for financial assistance.
1.4. The seller who received the financial assistance from the Buyer (for cucumber seeds) transfers the property rights for the produced cucumbers to the Buyer.
1.5. The seller has no right without written agreement of the Buyer, to sell to other physical and legal persons the cucumbers which have been produced from seeds provided by the Buyer.
1.6. The seller is obligated to invite the authorized agronomist of the Buyer to assist in determination of plant density and predicted yield. This will occur from the moment full shoots appear to the beginning of cucumber fruit production. This is reflected in the corresponding act, which is composed, formed and signed by both parties.
1.7. The seller provides his support for unobstructed inspection by the agronomist of the Buyers cucumber crop condition during the fruit production period.

2. The order for delivery and related calculations.
2.1. Production should correspond to State standards 3247-85.
2.2. The seller agrees to supply cucumbers which possess the following quality indicators with respect to diameter size.
   1st size — 5 up to 15 mm.
   2nd size — 16 up to 23 mm.
   3rd size — 24 up to 26 mm.
2.3. Cultivation of the following hybrid cucumbers of Dutch varieties is recommended:
   Atlantis F 1
   Ajax.
   Cultivation of other hybrids is made under written agreement of the parties, on the specified site according to item 1.2 of the present contract.
2.4. The Buyer agrees to pay for the cucumbers which have been produced from seeds provided to the Seller, based on the quantity and quality of cucumbers in bunkers of the sorting machine and based on the percentage of each size supplied.
   Manual sorting — 3-5 cm — 3.50 UAH. Not less than 5 %.
   1-st bunker — 2.00 UAH — not less than 5 percent;
   2-nd bunker — 1.30 UAH — not less than 30 percent;
   3-rd bunker — 0.90 UAH — not less than 30 percent;
   4-th bunker — 0.30 UAH but no more than 25 percent;
   5-th bunker 0.15 UAH but no more than 5 percent.
2.4.1. In case of a change in the market prices for the cucumbers, either up or down, prices will be reconsidered as agreed.

2.4.2. Cucumbers having a diameter of 26-33 mm, and length from 9 cm, but less than 12 cm in the third bunker will be paid for at a price of 0.30 UAH/kg, according to the reception control and analysis by the “Buyers laboratory” and is agreed to in the corresponding act with signatures of both parties.

2.4.3. Cucumbers having diameter of 26-33 mm and length from 11 cm, but less than 14 cm in the fourth bunker will be paid for at a price of 0.15 UAH/kg, according to the reception control and analysis of the “Buyers laboratory” and is agreed to in the corresponding act with signatures of both parties.

2.4.4. Cucumbers produced over the specified volume set out in item 1.1 of the contract are accepted on contractual prices agreed to at the moment the cucumbers are accepted.

2.5. Payment for the cucumbers will be made in cash by the accounting cash department of the Buyer within 5 bank days from the moment of delivery of cucumbers to the Buyer, or payment can be transferred to the account of Seller electronically.

2.6. Delivery of produce is carried out at the expense of the Seller. The unloading of produce is carried out at the expense of the Buyer.

2.7. When the delivery of the cucumbers is by means of the transport of the Buyer, the price of the cucumber decreases by the amount of the transportation costs.

2.8. Delivery of produce is carried out according to a schedule of delivery which is an integral part of the Contract and which is developed after full germination of cucumbers, but not later 06/01/2005.

2.9. The Seller agrees to supply the cucumbers without the steam or flower.

2.10. Delivery of cucumbers is carried out by separate sets. The set means any quantity of cucumbers of one hybrid placed in container and transported in one vehicle. If several sets are presented in one vehicle, their registration by one document can be done.

2.11. Delivery of cucumbers to the Buyer is made at the collection point of the Buyer.

2.12. Final acceptance of cucumbers by groups, quantity and quality, is made by the Buyer after results of the reception control and the analysis by the Buyers laboratory. If the Seller is not represented at time of reception these results are obligatory for Seller.

2.13. By delivering goods inappropriate to the Contract provisions the Buyer has the right not to accept and not to pay for all supplied sets of cucumbers.

2.14. The Seller is obliged, at time of delivery of the cucumbers, to provide information on nitrate content in cucumbers.

3. Responsibilities of the parties.

3.1. The parties bear the mutual responsibility for exact and duly performed duties of the accepted obligations according to the current legislation of Ukraine and the provisions of the present Contract.

3.2. The seller is obliged to return the financial assistance provided by the Buyer in full on or before 07/25/2005.

3.3. On infringement by the Seller of item 1.4 and item 1.5 of the present contract, the Seller compensates the losses suffered by the Buyer in this connection at a rate equal to the cost of the half-received volume of cucumbers, and also reimbursement of the financial help provided according to item 1.3 of the present Contract.

3.4. On infringement by the Seller of item 1.4 and item 1.5 of the present Contract the Seller in addition pays a fine to the benefit of Buyer at a rate double the discount rate of the National Bank of Ukraine which was in force at the time financial help was provided. Also, the Seller is charged for the sum of losses for the financial assistance as of the moment of rendering the financial help until the moment the final mutual payments are agreed to with the Buyer.

3.5. In case of delayed payment for the supplied cucumbers, the Buyer pays a fine at a rate of double the discount rate of the National Bank of Ukraine deducted against the sum of debts of the Seller for every day payment is in arrears.

4. Economic court.

4.1. To the present contract the legislation of Ukraine is applied. All disagreements concerning or arising in connection with the present contract, will be solved by the Parties through negotiations, otherwise all disagreements will be solved in Economic court via arbitration.

5. Force majeure

5.1. Obligations of each of the Parties under the present Contract, except for payment obligations or payments of insurance compensation, stop for the period and in the amount that such party is subjected by an obstacle in performance of obligations by circumstances of force-majeure. In case of occurrence of force-majeure, the party immediately gives notice concerning stoppage of execution of the obligations to other party, specifying the reason for the arisen circumstances. At cancellation of the force-majeure circumstances the party continues immediately the performance of the obligations as soon as it becomes possible after the end of such circumstances. Within the framework of the present Contract the force-majeure circumstances include the following: floods, earthquake and
other physical natural phenomena, military actions, strikes and prohibitive acts of the government of Ukraine. The corresponding acts confirming the above mentioned circumstances and their duration are made clear by the Commercial and Industrial Chamber of Ukraine. Any force-majeure circumstances do not cancel financial obligations of the parties.

6. The final provision.
6.1. The present contract comes into effect from the date of signing the corresponding Contract.
6.2. Neither party has the right to transfer the rights and obligations under the contract without the written consent by the other party.
6.3. Any changes and additions to the contract will be valid only when they are accomplished in written form and signed by the authorized persons of both parties.
6.4. The term of action of the contract is until December, 31, 2005.
6.5. The present contract is made in duplicate, one for each of the parties.

7. Other treaty provisions.
7.1. The buyer is the payer of the fixed agricultural tax and the payer of the VAT.
7.2. The seller is a natural person.

Juridical addresses of the parties: BUYER SELLER
Some comments re the sample contracting agreement (USAID Agricultural Marketing Project)

One of the most complicated problems in contracting agricultural commodities setting the price. In many cases the parties are not willing to mention the fixed price in the agreement. This reluctance can be explained by significant price fluctuations for agricultural commodities. There are several methods to define prices in the agricultural agreement. They include:

1) Fixed price;
2) Variable price – it varies to reflect current market conditions;
3) Price set on the basis of market or stock prices;
4) Price of mixed type – part of it is fixed and the other part is variable;
5) Price is defined on the basis of sales results. This method of price definition is not applied often in Ukraine; still as to the world experience of agricultural commodity contracting there is the practice of price definition basing on the results of the following sales. For example, in the conditions of free market the price on red beets may be defined as the percentage of the sugar sales price.

Despite of the diverse methods of price definition the legislation is trying to limit the abilities of the parties that, of course, does not benefit to the development of the economic turnover. The requirements for price definition in the Civil Code are rather liberal, but open the door for confusion. According to the Civil Code, the price is not referred to as an essential condition of the agreement. The situation with the Economic Code appears to contradict the Civil Code. According to Article 189 of the Economic Code, the price is an essential condition; it should be stated in UAH. To fulfill the requirements of the Economic Code fully, you are to fix the definite price in the agreement – so the price may be mentioned in the agreement in the form of the united file or ion any annexes to the agreement, for example, in the annex of specification.

The question is: how to set the unfixed price in the contracting agreement while not violating the Economic Code. The practice shows some rather frequent examples when the Parties set the minimal price in the agreement, and afterwards sign the changes to the agreement with the actual market price. Such practice, to our regret, does not support the establishment of the long-term economic relations; such agreements are extremely hazardous for the seller. If the parties have not achieved an agreement concerning the new price, the seller has the right to demand that the buyer fulfill the obligations according to the minimal price mentioned in the agreement.

To set the unfixed price it is enough to fix the price in the agreement and note that the price may be changed if specific conditions occur. For example, one can fix the price and note that if on the date of commodity transfer the stock price on this agricultural product differs more than 10 percent from the price set in the agreement, so the supplied commodities will vary.

At the same time, operating with the unfixed price the parties should write down the rules of new price calculation in the agreement very carefully. For example: the expressions “market price”, “stock price”, “price that was formed in the region” are not enough to consider the price mentioned in the agreement. The word expression should be exact, for example, “The commodity is sold for UAH 0.3/kg. If the average price on the wholesale market of the city is different from the mentioned agreement price by more than 10 percent, the price of the commodity should be equal to the price on the mentioned market on the date commodity transfer.

If the order for price definition was not set accurately, the agreement may either be admitted as not valid or the price mentioned in the agreement may come into effect.
5. INFORMATION SUPPORT SYSTEMS FOR UKRAINE’S AGRICULTURE AND THE FOOD INDUSTRY


Access to Informational Support Systems in Agriculture and Food Industry through the Internet has been opened for the first time in Ukraine through the efforts of the ICSC-World Laboratory. The website is an easily accessible source of timely and useful information, facilitating contacts of farmers and businesses with input suppliers, buyers and contractors, as well as leading to increased sales.

Information resources (databases) available on the web provide a wide array of technical and market data on
- **Agricultural production**, including: Crop Production; Animal Production; Animal Disease; Bee-keeping; Farm Research Database;
- **Processing Industry**, including Meat Industry; Poultry Production; Seafood Production; Cold Chain Technology; and HACCP Training and Implementation through International Institute of Food Safety and Quality

Interactive services of the Agro-IKS website: Exchange by business information (Business Board); Questions & Answers Board; News Board; Guest Book; and Virtual Commodity Exchange.

Informational resources (databases) on the web cover:

(A) Nine computer aided atlases with information on varieties, diseases and pests on 682 Crops and 4390 Crop varieties, including
- Atlas of 1299 varieties for 61 Vegetable crops
- Atlas of 1773 varieties for 67 Field and Technical crops
- Atlas of 426 varieties for 327 Feed crops
- Atlas of 289 varieties for 14 Fruit crops
- Atlas of 191 varieties for 14 Berry crops
- Atlas of 89 varieties for 29 Spice and Aromatic crops
- Atlas of 38 varieties for 70 Medicinal Crops
- Atlas of 276 varieties for 79 Flower and Garden crops
- Atlas of 7 Sub-tropical crops

(B) Computer-aided directories of (1) 266 weed crops; (2) 390 plant diseases; (3) 707 pest insects

(C) Databases and program package on Livestock Production, including
- 12 livestock species categorized by productivity groups with specifications on 60 breeds; Stock-breeding work; Feed production; Livestock feeding programs; Livestock keeping practices

(D) Databases and program package on Livestock Disease
- Full information on clinical symptoms, therapy and prevention from 1337 diseases for five groups of livestock
- Glossary of Terms and Guide to temperature and lifetime norms for livestock and domestic animals
- Directory of 500 modern veterinary products for livestock

(E) Databases and program package on Beekeeping
- Manual on Beekeeping, embracing 295 articles
- Questions & Answers Manual for beginning Beekeepers with 288 questions answered
- Month by month Calendar of beekeeping works
- Glossary of Terms
- Addresses of Companies

The Beekeeping manual provides generic information on bees and bee family composition and nest, functions of the queen bee, reproduction and development of bees, seasonal changes, accumulation of the food stock, detailed technology of beekeeping, breeding, accident prevention, key factors of high productivity and vitality of bee families etc.

(F) Research development database covers 277 entries in 24 sections, including
- Agrarian economics (86)
- Livestock production, products and protection of animals (68)
- Farming (39)
- Veterinary medicine (39)
- Agricultural mechanization (36), etc.
(G) Meat Industry website (http://pfid.ubwlab.org/meat/default.asp) with data on
- Profiles of 783 enterprises of the meat industry, including 358 stock-breeding farms
- Equipment Supply for meat processing industry with price, characteristics and contact information
- Mixed fodder, vitamins and food additive producers
- Sausage casing producers
- Meat industry standards

(H) Poultry Production website: http://pfid.ubwlab.org/poultry/default.asp
- Profiles of 462 of Poultry industry operators
- Data on 130 poultry breeds and 37 crosses with pictures
- Data on 561 poultry diseases and 595 veterinary products
- List of standards and norms currently in force
- 47 most important regulatory documents and 25 scientific articles on poultry production practices

(I) Fish and Seafood website: (http://pfid.ubwlab.org/fish/default.asp)
- Profiles of 542 fish industry operators, including 145 aquaculture enterprises
- Data on major commercial species harvested and cultured in Ukraine and non-traditional species
- Profile on 49 fish diseases, including pathogens, symptoms and preventive measures
- List of industry standards currently in force
- 70 articles to help fish farmers in ponds construction, aquaculture practices, veterinary and sanitary activities, evaluation of fish and seafood quality

Computer aided Atlases, directories and programs of the Agro-IKS Information Support System for distribution among farmers and extension specialists on CDs:

(A) Seven Computer aided Atlases on Crop Production, which enable display and printout of information on
- Varieties, pest resistance, seed properties
- Biological classification of pests – insect, diseases and weeds, and pest control practices; for 731 crops and 6432 varieties

Descriptive Crop Attribut Production data base contains
- 872 pesticides
- 654 crop diseases
- 720 pest insects
- 267 weed species
- 12413 entries in the Pesticide Applicability Guide

Graphical Database includes 2559 pictures

(B) 11 Directories in Livestock Production, which cover wide array of data on
- Keeping, feeding and reproductive management of livestock
- Disease therapy and prevention
- Description of species and breeds for
  - cattle,
  - swine
  - horses
  - sheep
  - rabbits
  - fur animals
  - poultry
  - beekeeping
  - fish farming
With an attribute database covering 5542 entries and graphical database including 461 pictures

(C) Farm Business Bookkeeping and Accounting, a computer program for Farm businesses allowing
- input and correction of primary information without detailed specification of source of assets
- filling up, visual display and printout of seven mandatory financial accounting and statistical forms:
  - computer-aided keeping of nine analytical registers:
    - Form B-1: Fixed Assets and Depreciation Costs
    - Form B-2: Stocks, Finished products and Goods
    - Form B-3: Production Costs
    - Form B-4: Money and Financial Results
    - Form Â-5: Payments and other Transactions
    - Form Â-6: Sale of Goods and Services
    - Form B-7: Settlements with Suppliers and Contractors
    - Form B-8: Salaries and Deductions; Turnover & Balance Statement

(D) Farm Business Planning, computer program with 90 analytical forms including:
Basic – Farm Profile (three forms); Market Analysis (two forms); Production Plan (13 forms); Marketing Plan (four forms); Organizational Plan (four forms); Financial Plan (six forms); Risks Estimate (three forms); Prospective Financial condition (four forms), and

Complementary: (1) Retrospective Analysis of Financial condition (four forms); (2) Solvability Assessment (three forms); and Forecast of Harvest Output (four forms)
ANNEX 1. AGRICULTURE DEVELOPMENT IMPLEMENTING PARTNERS

Foreign Agricultural Service (FAS)
Agricultural Attaché
4, Hlybochytska St., 5th Floor, Kyiv 04050, Ukraine
Tel.: (38044) 490-4005
Fax: (38044) 490-4110
E-mail: agkiev@usda.gov

Foreign Commercial Service (FCS)
4, Hlybochytska St., 4th Floor, Kyiv 04050, Ukraine
Tel: (38044) 490-4018; Fax: (38044) 490-4046
E-mail: kiev.office.box@mail.doc.gov
Ukraine Country Commercial Guide (prepared by FCS-Kyiv)
http://www.buyusainfo.net/body2.cfm?dbf=ccg1&search_type2=int&country=Ukraine&logic=and&loadnav=no

USAID/US Agency for International Development, Mission for Ukraine, Belarus and Moldova
Earl Gast, Director
19, Nizhniy Val St., Kyiv 04071, Ukraine
Tel: (38044) 537-4600/4625768/4927100
Fax: (38044) 537-4684 http://www.usaid.kiev.ua

American Chamber of Commerce in Ukraine
42/44 Shovkovichna St., Kyiv, Ukraine
Tel: (38044) 490-5800; http://www.amcham.ua

The Peace Corps. in Ukraine:
111-A, Saksaganskogo St, Kyiv, Ukraine, 01032
Tel: (38044) 220-1183; 220-1793; 220-5706; fax; 220-6351; http://www.pcukraine.org

The World Bank:
2, Lysenka, Kyiv, Ukraine, 01034
Tel: (38044) 490-6671/72/73/79; http://www.worldbank.org.ua

European Union, Delegation of the EU Commission in Ukraine/ TACIS
10 Kruglouniversytetska St, Kyiv, Ukraine 01024
Tel: (38044) 253 30 20; http://www.delukr.cec.eu.int

The United Development Program in Ukraine
1 Klovskiy Uzviz, Kyiv 01021 Ukraine
Tel: (38044) 253-9363, fax 253-2607; http://www.un.kiev.ua

The EBRD
27/23 Sofievskay St. Kyiv, Ukraine
Tel: (38044) 464-0132; http://www.ebrd.com/country/Ukraine

British Embassy DFID(Department for International Development)
9 Desyatynnya St. Kyiv 01025 Ukraine
Tel: (38044) 462-0011/12/14; fax 38044-4620013; http://www.britemb-ukraine.net

Embassy of Sweden
Address: Ivana Franka St. 34/33 3rd fl. Kyiv 01030
Tel: (38044) 462-0580; (38044) 462-0581; Web-site: http://www.sweemb.kiev.ua/

Canadian Embassy
31 Yaroslaviv Val, Kyiv, Ukraine 01901
Tel: (38044) 464-0248; http://www.infoexport.gc.ca/ua

CIDA / Canadian International Development Agency
Technical Cooperation Sector;
Address: 31 Yaroslaviv Val, Kyiv, 01901;
Tel: (380044) 464-0248; web-site: http://www.acdi-cida.gc.ca
ANNEX 2. AGRICULTURAL PROJECTS

USAID/Land O'Lakes
Key Personnel: Robert Lee, Chief of Party; Andriy Yarmak, Deputy Chief of Party
Address: 6, Gogolivska Str. office 15-16, Kyiv 01054
Tel: (38044) 4821053, 4820118
E-mail: leeagcon@megalink.net; web-site: http://www.landolakesinc.com/ http://www.lol.org.ua

USAID / CNFA
Key Personnel: Patrick Norrell, Regional Director;
Address: 21 Pushkinskay Str., apt.39
Tel: (38044) 490-6509; Fax: 234-8305; E-mail: PNorrell@cnfa-kiev.org

USAID/UNDP
**Agriculture Policy for Human Development Project,** 2/12/2001-2/11/2005
Key Personnel: Alexander Shevtsov, Chief of Party
Address: 1/14 Sadovaya St., 4 floor, Kyiv 01001
Tel: (38044) 253-5869, 253-5866, 253-5482, and fax: 253-5611;
UNDP in Ukraine Tel: 253-9363, fax: 253-2607
E-mail: shevtsov@agpol.kiev.ua; Web-site: www.undp.org

USAID/Chemonics
**Ukraine Land Titling Initiative,** 2/12/2001-3/19/2006
Allan Slipher, Chief of Party
Address: 36, Ivana Franka Str.,
Office # 3, 3 floor, Kyiv, 01030
Tel./fax: (38044) 238-6086; E-mail: aslipher@chemonics.com; e-mail adress: office@ulti.kiev.ua

USAID
**Development Credit Authority,** 27.09.2002 — 27.09.2007
Implementing Partner: Bank “Nadra”;
Tel: (38044) 205-3019;

USAID/DAI
**BIZPRO Project,** 2000 — 2005
Patrick Rader, Chief of Party
E-mail: orader@dai.kiev.ua; Web-site: www.bizpro.org.ua

USAID/LSU
**Partnerships for Food Industry Development Project (Cooperative Agreement)** — 1/15/2001-1/14/2008
Lakshman Velupillai, Chief of Party, and Gennadiy Palshyn
Address: 32A, Turgenivska Str.; Kyiv
Tel.: (225) 5786963, Fax: (225)5786775;
(044)2468167;(044) 2167012
E-mail: lvelupillai@agcenter.lsu.edu; Ubwlab@ubwlab.org; www.pfid.ubwlab.org

PFID/PHASE 2
**International Institute for Food Safety and Quality**
Mironyuk Gennadiy, Director
Tel. 5137010

USAID/IBM Global Services
**Ukraine’s Accession to WTO,** 01/08/2003 – 30/06/2005
Farhat Farhat, Chief of Party; E-mail: fyfarhat@hotmail.com
British/DFID Rural Livelihoods Program in Ukraine (URLP), 2001-2005
Address: 18, Smirnova Lastochkina Str., office 3 Kyiv, 04050
Tel: (38044) 272-1760, 272-3758, 272-2369
E-mail: icp@icp.org.ua; Web-site: http://www.icp.org.ua

IFC Agribusiness Development Project in Ukraine, 2003-2005
30-A Spaska, block2, 6th floor
Tel: (38044) 490-6400

Canada-Ukraine FARM Program 2003 – 2008 (Facility for Agricultural Reform and Modernization Program)
Address: 4 Bohomoltsa St. Kyiv, 01024
Tel.: (38044) 253-9520 (38044) 256-2539
Web-site: http://www.sasktrade.com/farm

Canada-Ukraine Grain Project, 2003–2005
4, Bogomoltsa Str., Building OKP, 2nd floor, suite 9; Kyiv, 01024, Ukraine
Tel: (38044) 256-2540, fax: 256-25555

Canada-Ukraine Credit Union Strengthening Project
15 Kreschatik St, Suite 6, Kyiv, Ukraine 01001;
Tel: (38044) 228-1797

TACIS Support to SME in Rural Sector Project
19-21 Kreschatik St, office 46; http://www.rural.sme.org.ua

German Institute for Economic Research and Policy Consulting
8/5A Reitarskay St., Kyiv 01034, Ukraine
Tel: (38044) 228-6529, fax 228-6336; http://www.ier.kiev.ua

International Charitable Foundation HEIFER Project International Ukraine
14 Vasylkivska St., office 720; Kyiv 03040, Ukraine
Tel: (38044) 490-7629; Fax: (380044) 494-2609; http://www.heifer.org.ua
ANNEX 3. CONSULTING COMPANIES

PROAGRO – http://www.proagro.com.ua/eng/about/company
Tel: (38044) 494-4638, 494-4639, 269-5077
#42, 31 Bozhenko St., Kiev, 03680 Ukraine;

AGRIMARKET – http://www.agrimarket.info

AGROPERSPECTIVA – http://www.agroperspectiva.com

Address of edition:
Agrarika, Ltd.
Vorovskogo St., 22,
GSP-601, Kiev, 01601, Ukraine
Tel: (38044) 216-9171, 216-8119
Fax: (38044) 216-8919, 494-4889
e-mail: info@agroperspectiva.com

UKRAGROCONSULT – http://www.ukragroconsult.com
29 B, Timoshenko St, office 5
Kyiv, 04205, Ukraine
Tel: (38044) 451-4634, 451-46-34

AGRO-Soyuz Ltd. –http://www.agrosoyuz.ua
1 Nizhnedneprovsk St.,
Yubileyny, Dnepropetrovskaya oblast, 52005, Ukraine
Tel:(38056) 370–0451
Fax: (38056) 370–0452
ANNEX 4. PRIVATE ASSOCIATIONS

National Association of Private Farmers and Land Owners,
3 Grinchena St., Kyiv
Tel: (38044) 235-1310, 234-3241

Union of Village Women,
Poltavska oblast,
Zinkevskiy Region, Village of Lyutenski Budischa;
Tel/fax: (3805353) 31364 or 31093, 99596

Board of Women Association
35 Zabolotnogo St. office 137, Odesa 65069
Tel/fax: (380482) 541886

Union of Agricultural Cooperatives of Ukraine
Tel: (38044) 220-5514, 220-9157

Ukrainian National Association of Credit Unions
Tel: (38044) 219-4486, Tel/fax: (38044) 246-9090;
http://www.unascu.org.ua

All-Ukrainian Association of Credit Unions
Prorizna Str., Kyiv, Ukraine, 01001
Tel. (+38 044) 228-79-09

National Association of Extension Service
9 Suvorova St. Kyiv; Tel: (38044) 451-4456;
http://www.dorada.org.ua

Ukrainian Agrarian Confederation,
53/80 Saksaganskogo St. 10th floor, Kyiv; Tel: (38044) 462-0064

Ukrainian Grain Association,
Vladimir Klimenko, vice-President
53/80 Saksaganskogo, Kyiv; Tel: (38044) 227-6577, 227-7066;
http://www.uga-port.org.ua

Associations of Insurers, Agricultural. Sector of Ukraine
6 Bratskaya St., Kyiv 04070
Tel: (38044) 490-9085, 490-9086

Association of International Freight Forwarders of Ukraine (AIFFU)
112-B Saksahanskoho St., Apt. 20,
01032 Kiev, Ukraine ; Tel/fax: (38044) 235-4021, 235-5840, 235-5115
http://www.ameu.org.ua/indexe.htm

Association of Customs Brokers of Ukraine
2 Solomyanska Ploscha office 503 (left wing)
Tel: (38044) 248-8202, Fax: (38044) 248-82-03
E-mail: info@ambu.com.ua; http://www.ambu.com.ua
ANNEX 5. RESEARCH INSTITUTES and CENTERS

Institute for Economic Research and Policy Consulting in Ukraine
8/5-A Reytarska St. Kyiv, 01034
Tel: (38044) 228-6529, 228-6336

National Agrarian University
(38044) 257-8242

All Ukrainian Center of Economical and Political Research by O. Rozumkov
(38044) 201-1191

Institute of Agrarian Economy
Tel: (38044) 258-4821

Institute of Reform
Tel: (38044) 246-6520

Joint Institute of Economy of National Academy of Sciences of Ukraine
Tel: (38044) 290-8444

Land Policy Institute
Tel: (38044) 234-8947

Land Cadastre Institute
3 Narodnogo Opolcheniay
Tel: (38044) 277-7344, fax: 277-7333

Main Scientific-Research and Project Institute of Land
Tel: (38044) 275-7388

Ukrainian Hydro Meteorological Center
6 Zolotovoritna St., Kyiv, 01601
Tel: (38044) 229-1890, 239-9324

AgroRisk Ukraine ltd.
15 Kikvidze St., apt.18
Tel: (38044) 295-1067, 296-4011
ANNEX 6. UKRAINIAN GOVERNMENT and REGULATORY AGENCY CONTACTS

Ministry of Agrarian Policy of Ukraine,
Agricultural Policy Minister, Tel: (38044) 226-3464, 226-3376
http://www.minagro.kiev.ua

State Statistic Committee of Ukraine
3 Shota Rustaveli St., Kyiv 01023
Tel: (38044) 227-1311
http://www.ukrstat.gov.ua

Ukrainian State Committee on Land Resources
12 Myzeiny provulok, Kyiv
Tel: (38044) 291-0926, 226-2170; fax 226-2154

Sanitary and hygiene issues related to all food products, MRLs.
State Sanitary Doctor of Ukraine
Ministry of Health Care of Ukraine
7 Grushevskogo St., Kyiv 01021 Ukraine
Tel: (38044) 293-2439
Fax: (38044) 253-6975
E-mail: moz@moz.gov.ua; interdep@moz.gov.ua
http://www.moz.gov.ua

Institute of Ecohygiene and Toxicology of the Ministry of Health Care of Ukraine
(responsible for state sanitary and hygiene expert examination)
6 Heroiv Oborony St., Kyiv 03680 Ukraine
Tel: (38044) 251-9700
Fax: (38044) 251-9643
E-mail: office@medved.kiev.ua
http://www.medved.kiev.ua/home/index_en.htm

Animal health issues, safety of all animal products and seafood.
State Department of Veterinary Medicine of Ukraine
Ministry of Agricultural Policy of Ukraine
24 Khreschatik St., Kyiv 01001 Ukraine
Tel: (38044) 229-1270; 229-4761
Fax: (38044) 229-4883

Department of Veterinary Medicine Control on the Border and Transport
24 Kreschatik St., Kyiv, 01001 Ukraine
Tel: (38044) 229-4981, 229-4887
http://www.minagro.kiev.ua/veterinary

Plant health issues
Main State Phytosanitary Inspection Service of Ukraine
Ministry of Agricultural Policy of Ukraine
7 Koloskova St., Kyiv 03138 Ukraine
Tel: (38044) 264-7707
Fax: (38044) 264-3107
E-mail pgsu@bigmir.net

Committee of Ukraine for Technical, Regulations and Consumer Policy Ukraine
(Derzhspozhyvstandart of Ukraine)
174 Gorkogo St., Kyiv 03680 Ukraine
Tel: (38044) 268-8412
+380 44 268-74-26 fax
E-mail: dstu1@dstu.gov.ua; http:// www.dssu.gov.ua
The Ukrainian Chamber of Commerce and Industry
33 Velyka Zhytomyrska St., Kyiv 01601, Ukraine
Tel: (38044) 212-2911
Fax: (38044) 212-3353
E-mail: ucci@ucci.org.ua; http://www.ucci.org.ua

Central Sanitary and Epidemiological Station of Ministry of Public Health of Ukraine
41 Yaroslavskaya St., Kyiv 04071 Ukraine
Tel: (38044) 416-4354
Fax: (38044) 417-3775
E-mail: cses@g.com.ua

Pet Food and Feed Additives Registration
State Scientific and Control Institute of Veterinary Drugs and Feed Additives
11 Donetska St., Lviv 79019 Ukraine
Tel: (380322) 523-372
Fax: (380322) 521-193
E-mail: dndki@scivp.lviv.ua; http://www.scivp.lviv.ua (Ukrainian version only)

Plant Variety Registration
State Service for Plant Variety Rights Protection
Ministry of Agricultural Policy of Ukraine
15 Generala Rodimtseva St., Kyiv 03041 Ukraine
Tel: (38044) 257-9933
Fax: (38044) 257-9934
E-mail: sosp@sops.gov.ua;
Homepage: http://www.sops.gov.ua/index.en.htm

Seed Certification
State Seed Inspection Service
Ministry of Agricultural Policy of Ukraine
Solomyanska Ploshcha 2, Suite 408 Kyiv 03035 Ukraine
Tel: (38044) 244-0211
Fax: (38044) 244-0210
E-mail: seeds@cantata.kiev.ua

Registration of Trade Marks
State Committee of Ukraine on Intellectual Property
Ministry of Education and Science of Ukraine
8 Lvivska Ploscha, Kyiv 04655 Ukraine
Tel: (38044) 212-5080, 212-5082;
http://www.sdip.gov.ua/ (Ukrainian only)
ANNEX 7. BUSINESS CONTACTS of the MAIN FARM EQUIPMENT & INPUTS SUPPLIERS

The Main Farm Equipment Suppliers

AGRO-SOYUZ CORPORATION
20 Panasa Myrnoho St., Kyiv 01011, Ukraine
Tel/Fax: (38044) 290-0102, 290-0450
http://www.agrosoyuz.ua
Represents various US and other countries manufacturers in Ukraine

AMAKO
Brovarska St., v. Proliski, 08322 Kyiv oblast, Boryspil region, Ukraine
Tel: (38044) 490-7781; Fax: (38044) 490-7780
http://www.amacoint.com
One of the largest agricultural. machinery parts and services supplier in the CIS (Ukraine, Russia and others).
Former joint venture partner of the John Deere Company and currently is a distributor of AGCO, Amity Technology, Wil-Rich Inc., Great Plains.

FARMCO, LTD./NOVOFARM
4 B. Khmelnitskogo St., 5th Floor, Dnipropetrovsk 49051, Ukraine
Tel: (380562) 348-524
Fax: (380562) 347-507
http://www.farmco.com.ua
The Farmco/NovoFarm Company specializes in sales of agricultural production and farm machinery. Represents products from CNH machinery.

RISE-AGROTECHNIKA
152 Zabolotnogo St., Kyiv 03143, Ukraine
Tel: (38044) 252-13-80, 252-1614, 252-5678;
Fax: (38044) 252-5780
http://www.rise.kiev.ua
Rise-Agrotechnika is a subsidiary of the Rise holding company and is the exclusive distributor of John Deere machinery in Ukraine.

RAMBURNS-AGROTECH (formerly doing business as United Agrotechnical Company Ltd.)
1 Mashinobudivnykiv St., Chabany, Kyiv 08162 Ukraine
Tel: (38044) 252-5199/5299, 266-7163/7183
Fax: (38044) 252-5499
http://www.united-agro.com.ua
Ramburs-Agrotech, formerly named United Agrotechnical Company Limited was created in 1998 as a branch of the Swiss-based United Grain Group. Since 2002 Ramburs-Agrotech became an official dealer of AGCO Corporation, and in 2003 obtained the rights as AGCO’s exclusive distributor for Massey Ferguson and Agricultural-Chem brands in Ukraine.

AGCO CORPORATION
1 Mashinobudivnykiv St., Chabany, Kyiv 08162 Ukraine
Tel. 38-044 5692040/41; http://www.agcocorp.com
The Main Multinational Input Suppliers (seeds and chemicals)

<table>
<thead>
<tr>
<th>COMPANY</th>
<th>PHONE</th>
<th>ADDRESS</th>
</tr>
</thead>
<tbody>
<tr>
<td>BASF</td>
<td>(044) 268-5227</td>
<td>4/6 PATRISA LUMUMBY</td>
</tr>
<tr>
<td>BAYER</td>
<td>(044) 246-9345</td>
<td>55 TURGENEVSKAYA ST.</td>
</tr>
<tr>
<td>CARGILL</td>
<td>(044) 230-1440</td>
<td>3 MECHNIKOVA ST., 4TH FL.</td>
</tr>
<tr>
<td>CROMPTON UNIROYAL CHEMICAL</td>
<td>(044) 490-9595</td>
<td>1 VASILKOVSKA ST., # 108</td>
</tr>
<tr>
<td>DOW</td>
<td>(044) 490-6926</td>
<td>9/2 CHERVONOARMIYSKA ST., #47</td>
</tr>
<tr>
<td>DU PONT</td>
<td>(044) 495-2676</td>
<td>3 GLAZUNOVA ST.</td>
</tr>
<tr>
<td>FMC</td>
<td>(044) 250-7286</td>
<td>10 GERROYEV OBORONY, #114</td>
</tr>
<tr>
<td>MONSANTO</td>
<td>(044) 490-7575</td>
<td>4 LEPSE AV.</td>
</tr>
<tr>
<td>NUNHEMS</td>
<td>(044) 494-4560</td>
<td>4 TOPOLEVA ST.</td>
</tr>
<tr>
<td>RIJK ZWAAN</td>
<td>(044) 241-9737</td>
<td>4 BOTKINA ST.</td>
</tr>
<tr>
<td>SUMITOMO</td>
<td>(044) 490-5822</td>
<td>9/2 CHERVONOARMIYSKA ST.</td>
</tr>
<tr>
<td>SYNGENTA</td>
<td>(044) 494-1772</td>
<td>14 VASYLKIVSKA ST., 5TH FLOOR</td>
</tr>
</tbody>
</table>
Other Inputs Manufacturers and Suppliers in Ukraine

18. http://www.irita.dp.ua Irita, Gardening tools and implements
27. http://www.mycelium.cl.zp.ua/ Mushroom spawn lab and supplier;
29. http://www.oilseed.marka.net.ua/ Institute of Oilseed crops;
35. http://www.soya.kr.ua Private Farm Monich — soy bean seeds;
36. http://www.ssft.net/tac/turas/turas.html Tiras agrodealer;
The Main Food Processors in Ukraine:

2. http://www.chumak.com/ Chumak (cannery);
6. http://kp.km.ua/~adams/ Adams (Cannery);
8. http://ridnamarka.com.ua/ Ridna Marka (Juices);
15. http://www.ukrwine.kiev.ua/ grape processors
ANNEX 8. INTERNATIONAL WEIGHTS and MEASURES and EQUIVALENTS

1 acre = 0.4047 hectares / 1 hectare = 2.4691 acres
1 ounce (oz) = 28.352 g / 1 kilo = 35.27 ozs
1 pound (lb) = 16 ozs = 0.4536 kilos / 100 kg = 220.459 lbs
1 hundredweight (cwt) (USA) = 100 lbs = 45.36 kilos / 100 kilos = 2.2046 cwts
1 short ton (sht) = 2000 lbs = 907.185 kg / 1 metr. T = 0.98419 lgts
1 long ton (lgt) = 2240 lbs = 1016.058 kilos / 1 metr. T = 0.98419 lgts
1 quintal (q) = 2204.59 lbs = 100 kilos
1 pud (russ) = 16.38 kilos
1 bag = 200 lbs = 90.72 kilos
1 gallon = 4 quarts = 8 pints = 4.547 l / 1 hl = 21.997 gallons (UK/Australia)
1 gallon = 4 quarts = 8 pints = 34.785 l / 1 hl = 264.20 gallons (USA, Canada)
1 bu = 36.71 (brit.) respec. 35.241 (americ.)

**Bushels (bu)**

Wheat, Soybeans, Peas, Potatoes…… 1bu = 60 lbs = 26.217 Kilos 100 Kilos = 3.674 bu

Rye, Corn, Linseed Millet 1bu = 56 lbs = 25.40 Kilos 100 Kilos = 3.937 bu

Barley, Buckwheat 1bu = 48 lbs = 21.77 Kilos 100 Kilos = 4.593 bu

Oats (USA) 1bu = 32 lbs = 14.52 Kilos 100 Kilos = 6.887 bu

Oats (Canada) 1bu = 34 lbs = 15.4 Kilos 100 Kilos = 6.485 bu

Oats (Australia, New Zealand) 1bu = 40 lbs = 18.14 Kilos 100 Kilos = 5.513 bu

Rice (paddy) 1bu = 45 lbs = 20.41 Kilos 100 Kilos = 4.900 bu

Rapeseed 1bu = 50 lbs = 22.7 Kilos 100 Kilos = 4.405 bu

**Quarter (qr)**

Wheat 1qr = 480 lbs = 217.728 Kilos / 100 kilos = 0.4592 qrs

Rye, Corn, Linseed, Millet 1qr = 448 lbs = 203.200 Kilos / 100 kilos = 0.4921 qrs

Barley (Australia) 1qr = 400 lbs = 181.440 Kilos / 100 kilos = 0.5511 qrs

Oats (Australia) 1qr = 320 lbs = 145.142 Kilos / 100 kilos = 0.6889 qrs

**Conversion Rates**

**Bu/acre into tons/hectare:**

Wheat, Soybeans, peas, potatoes bushels X 0.0672

Rye, Corn, Linseed, Millet bushels X 0.0627

Barley, Buckwheat bushels X 0.0538

Barley (Australia, New Zealand) bushels X 0.0560

Oats (USA) bushels X 0.0359

Oats (Canada) bushels X 0.0381

Oats (Australia, New Zealand) bushels X 0.0448

Rice (paddy) bushels X 0.0504

Rapeseed bushels X 0.0560

**lbs/bu into kg/hl**

Kg/hl = 1.2872 lbs/bu

°F into °C

°C = 5/9x (°F -32) °F =9/5x °C +32
USAID/UNDP Agricultural Policy for Human Development Project


Derzkomstat/State Statistics Committee of Ukraine
Agriculture of Ukraine Statistical Yearbook, 2004
Private Farmers in Ukraine, 2004
Food Balances and Food Consumption in Ukraine, 2004
Private Households of Ukraine, 2004

DFID Europe and Central Asia Rural Livelihoods Lesson Sharing Workshop

FAO Farm Management and Farming Systems:

IFC / Ukraine Agribusiness Development Project
• 2003 Survey, entitled Development of Farming and Agribusiness Sectors in Ukraine
• 2003 Survey, entitled Specifics of Farm Produce Processing and Marketing in Ukraine
• 2004 Survey, entitled Farming and Agribusiness in Ukraine


Land O’ Lakes Agricultural Marketing Project
Report, entitled Agribusiness and Marketing Strategic Guidelines, 2003


National Bank of Ukraine
Bulletin of the National Bank of Ukraine for 2000–2004

OECD and the World Bank
Report, entitled Achieving Ukraine’s Agricultural Potential: Stimulating Agricultural Growth and Improving Rural Life, 2003

Sibley International
Report, entitled Ukrainian Dacha and Small Plot Production, Input Consumption and Potential Clients, January 2001

TACIS Project FDRUS$9902, Small Farm Management Handbook (Southern Russia)

Foreign Commercial Service, U.S. Embassy in Ukraine
Ukraine Country Commercial Guide http://www.buyusainfo.net/body2.cfm?dbf=ccg1&search_type2=int&country=Ukraine&logic=and&loadnav=no

USAID Private Farmer Commercialization Program
Report, entitled Moldovan High Value Agricultural Export Competitiveness Study, Chisinau, 2004

USDA Foreign Agricultural Service, U.S. Embassy in Ukraine
Report #UP 4010, entitled Ukraine Food and Agricultural Import Regulations and Standards, 2004

USDA Foreign Agricultural Service, U.S. Embassy in Ukraine
