

Brief characteristics of agricultural economy and farms in Ukraine

The period of 1991-2005 in Ukraine has evidenced fundamental changes in social and economic relations and establishing of principally new economy in the country. Its key attributes – financial, monetary, budget, bank, customs, and other systems, which define economic infrastructure of independent state – were formed almost from a null point. From 1991 until 1999, the country went through long economic crises, which was accompanied with heavy reduction of GDP, industrial and agricultural production, and salary. Still, the last five years Ukraine has seen considerable improvement of the situation. The results of the policy pursued in this period were high economic growth rates, stability of national currency, as well as positive shifts in population wellbeing. Within 2000-2005 GDP in Ukraine grew almost 2.5 times – up to UAH 424.7 bn. Agricultural produce volume added 19%. Investments are more actively entering the country. Not only increase of the mentioned indicators is one of the highest in countries with transition economy, but also among European states. On the other hand, per capita nominal value of social and economic indices is still very low. Meanwhile, experts schedule the fastest growth for Ukraine further on. As soon as in a decade, the country's GDP is likely to boost 2.5 times.

Agricultural industry will have serious impact on rising economic figures in the country. Ukraine's potential in this area is nothing but enormous. The state has all opportunities for further developing of agrarian sector and its turning into highly efficient export-capable economic field, which is likely to ensure food security of the state. Ukraine accounts for almost a third of chernozym (black soil) areas and 27% of arable land in Europe (per capita figure in Ukraine is around 0.68 hectares, while the European index is on average 0.25 hectares).

Agricultural industry of Ukraine has recently seen formation of new economic relations built upon the principles of private property for land and other assets and creating of economic background for more active businesses. As a result, the industry underwent notable structural changes, in particular, the role of population farms has greatly increased. Hence, agricultural area owned and used by population expanded 1.8 times versus 2000 and made 15.4 mn hectares as of early 2006.

As of January 1, 2006, agricultural land given for individual farming, collective and individual horticulture, for hayfields and livestock pasture made 10.1 mn hectares, which is by 141% more than in 2000.

Nearly 58 ths. agricultural enterprises operated in Ukraine in 2005 covering the agricultural area of 21.7 mn hectares. 68% of them have the territory of up to 100 hectares, 14% – from 100 to 500 hectares, 7% – from 1,000 and 2,000 hectares, 3% – from 2,000 to 3,000, and 3% – over 3,000 hectares. Average farm size exceeds 1,200 hectares of agricultural area. As of the beginning of 2005, Ukraine had more than 42.4 ths. farms, which owned and used 3.1 mn hectares of agricultural land (2.9 mn hectares of these as arable land). In comparison to the previous year, average farm size expanded by 6 hectares reaching 72 hectares.

In general, some 4 mn people were involved in agricultural business (by 2.4% less than in 2003), and 1.6 mn of them (40%) are engaged in individual farming.

The tendency of growing agricultural produce volumes has been maintained in the last few years. Foremost, it relates to higher gross production of crop growing, which in turn is very dependent on climatic conditions. In the last five years, the least

yielding years were 2000 and 2003, when bad weather conditions caused abrupt decrease in crop growing production (in particular – grain crops).

Although gross production figures throughout 2004-2005 were the decade highest, they only made 63% of production volumes reported in 1990.

Individual population farms remain key agricultural producers – on average they account for 60% of all gross product. The rest 40% fall for agricultural enterprises and farms.

Analysis of the last three years (2003-2005) shows positive tendencies in economic efficiency of agricultural enterprises. Within this period, the year 2003 was obviously a problem for agrarian sector – because of objective reasons, related first of all to severe climatic conditions. But 2003 was not a failure. Profitability of companies' performance in 2003 made -0.03%, while it was even lower at -1.9% in 2002, which still yielded results in terms of production. The last two years – 2004 and 2005 – were successful not only in production estimates, but also by degree of profitability. Profitability level reported by agricultural enterprises in 2005 made 14.6% and became the highest one in the history of independent Ukraine. At the same time, the portion of profitable companies is keeping low at 65%.

However, in the last two years it is not improved efficiency of production and as a result lower production costs, or even price rise, which is hidden by general high profitability of agricultural enterprises. At present, most of agricultural companies are forced to be engaged in other businesses to make profit, such as processing of agricultural produce, services, trade, and even finance activities. Hence, in 2004 net profit of reporting companies amounted to UAH 2.69 bn. Net revenue received from agricultural produce sales including subsidies and payments made UAH 2.17 bn (81%), but as soon as in 2005 this ratio dropped to 68% (net revenue in 2005 made UAH 3.58 bn). These particular extra sources of revenues promoted the high indices.

Mechanisms of agricultural support by the state had an important role in recent positive performance of agricultural enterprises. There are definitely some hardships in implementing of these measures – foremost it relates to terms of VAT reimbursement and undue financing of budget programs. But one should not underestimate their role. For instance, if these mechanisms were stopped in 2005 and 2004, profitability of agricultural enterprises would make 9.6% and 8.5% correspondingly. By and large, should price conjuncture of 2005 be preserved, a quarter of those companies, which report by 50-cx form, will be able to run effective business without subsidies and compensations.

Material and technical capacities of Ukraine's agricultural industry are in a sad state. The biggest problem is a market of agricultural machinery and fuels and lubricants. From year to year, the stock of machinery essential for main technological operations is getting old and smaller – the rate of equipment outdate is 10 times faster than the renewal tempos.

Crop growing

In general, crop growing sector has recently seen the end to slowdown in production, except for the year 2003 (in 2003 considerable downturn in grain production was fostered by unfavorable weather conditions).

In the course of reforming and shaping of agricultural industry in 1990-2005, crop growing took a leading role in Ukraine's agriculture. The share of crop growing within gross production volume made on average 61% in the last five years, while it

had 50% in 1990. Meanwhile, gross agricultural production volumes in the fruitful 2005 dropped by 36.6%, whereas plant growing only lost 20.8%.

As compared to 2004, in 2005 the segment saw some reduction of output. Grain production shrank by more than 3.8 mn tons, though wheat production went somewhat up. Crop yield of sugar beet and potato went notably downward, but the yield of sunflower, vegetables, fruit and berries, as well as grapes did rise (on average – by a thousand tons (see table 1).

Table 1. **Indices of main agricultural crops production in dynamics over 2000-2005**

	2000	2001	2002	2003	2004	2005
Gross yield, ths. tons						
Grain crops	24,459	39,706	38,792	20,234	41,809	38,016
- incl. wheat	10,197	21,348	20,549	3,599	17,520	18,699
Sugar beet	13,199	15,575	14,376	13,392	16,600	15,468
Sunflower	3,457	2,251	3,270	4,254	3,050	4,706
Potatoes	19,838	17,344	16,619	18,453	20,755	19,462
Vegetables	5,821	5,907	5,825	6,538	6,964	7,295
Fruits and berries				1,697	1,635	1,690
Grape				505	374	443
Crop capacity, centners/hectares						
Grain	19.4	27.1	27.3	18.2	28.3	26.0
Wheat	18.1	30	30.4	14.7	31.7	28.5
Sugar beet	177	183	188	201.2	238.6	248.2
Sunflower	12.2	9.4	12	11.2	8.9	12.8
Potato	122	108	104	105.9	101.8	82.0
Vegetables	112	123	124	139.3	148.7	157.1
Fruits and berries **				56	58.1	63.7
Grape				59	45.2	54.9

Source: State Statistics Committee of Ukraine

** Re-calculated into area of implantations in fruit-bearing age

One of the determinants of falling gross volumes in crop growing production was sizable reduction of crop area. From 1990 through 2005, some 20% of all crop areas were withdrawn from crop rotation by all categories of farms. Crop areas shrank from 32.4 mn hectares in 1990 to 26 mn hectares in 2005. In particular, crop areas of agricultural enterprises in this period were cut by 40% (from 30.4 to 18.4 mn hectares), while individual farms of population expanded the area 3.8 times (from 1.9 to 7.6 mn hectares). However, such a notable increase of areas among population farms was not a result of these farms being interested in commodity production, but rather became a necessity after transfer of land rights in the course of land reform and reforming of agricultural enterprises.

Ukraine is an export-oriented agrarian state and an independent country from the point of view of food supply security, as it is fully meets domestic demand. Ukraine produces up to 2% of world grain produce, including some 3% of wheat, 6% of all potatoes, and by sunflower seed production Ukraine is one of the world leaders having produced 15% of world production volume in 2005. Over the last years, only

in 2003 and partially in 2000 – due to severe climatic conditions – Ukraine was forced to import agricultural produce, in particular, grain – to maintain the essential stock for consumption.

When we speak of human achievements and successes and mention the features, which helped achieving it, we often forget about the cornerstone of all – human health. In the same way, speaking of crop growing, one should keep in mind the land as a cornerstone of key specialization of Ukrainian agriculture. Ukraine is one of the world leaders by quality composition of land. Its territory is home to 8% of world reserves of chernozym (black soil). At the same time, because of violated scientifically based systems of land farming, natural fertility keeps falling. Land farming in Ukraine has been recently held upon negative balance of humus, nitrogen, phosphor, and potassium in the soil, which cut the land energy potential by more than 10%. With low content of phosphor in the soil, efficiency of nitrogen fertilizers' application is also decreasing. Another important problem is high plough degree of the land. By estimates of the Land farming institute, this Ukraine's figure is one of the highest worldwide – more than 80%.

Negative processes of reforming period in the entire agroindustrial sector effected fertilizers application – another crucial component of crop growing production. Hence, the volume of mineral fertilizers applied in the period from 1990 till 2005 reduced almost 10 times, while application of organic fertilizers plummeted nearly 20 times. The share of areas enriched with mineral fertilizers shrank from 85% to 32%, and organic fertilized land – from 21% to 3% (picture 10). The recent years show positive tendencies in application of mineral fertilizers, which is related to upturn in domestic production of all types of fertilizers. At the same time, the volumes of organic fertilizers application are likely to keep falling due to negative trend of livestock reduction (livestock is a main supplier of raw stock for organic fertilizers production).

By and large, agricultural produce and foodstuffs form a considerable part of Ukrainian export. In the last five years, the portion of agricultural produce and foodstuff export made 14% on average within the commodity pattern and put the group to the second rank among commodity groups. Foreign trade balance is positive and preserves a stable growth tendency: in 2001 – USD 698 mn, in 2002 – USD 1,275 mn, in 2004 – USD 1,564 mn, and in 2005 – USD 1,612 mn. Ukraine's potential for increase of agricultural produce export is rather high – foremost thanks to corresponding natural resources available. The proof is the fact that over the last five years Ukraine restored positions of main grain exporter to the world market (except for low-yield 2003).

Within the main pattern of agricultural produce and foodstuff exports, plant growing products (commodity group 06-14 according to Ukrainian Commodity Classification for Foreign Economic Relations) has been keeping kept 33% on average in the last three years. Meanwhile, around 70% of all export of the products was contributed by grains and 20% - by oil crop seeds (sunflower).

We should emphasize the year 2005, which is notable for the largest grain export volume in the history of Ukraine's independence – 12.5 mn tons, which outran the corresponding figure of the last year by 65%. Around 36% of these or 4.5 mn tons of grain was exported as harvest of 2004, the rest of the volume belonged to the new harvest. At the end of 2005 – beginning of 2006, there was some chance for repeating of the situation of 2002-2003 (in 2002, low domestic prices encouraged grain exports, later on in 2003 because of poor harvest yield the country had to import grain). However, favorable weather conditions of winter-spring 2006 stabilized

the situation. By forecasts of the Ministry of agrarian policy of Ukraine, grain crop in 2006 is expected to reach the level of 36-38 mn tons.

Animal husbandry

Animal husbandry in Ukraine is less successful than crop growing. Profitability rate in this segment is much lower, as the country keeps eyeing a reduction in the livestock population. Although recently the process slowed down a bit, yet for animal husbandry the year 2003 was not such a success as the previous two years, which showed notable upturn of production (5.6-7%). Despite some accretion in production volumes by individual farms of population (+0.5%), gross production volume by the sector lessened by 3%, including by 11.5% – among agricultural enterprises. One should note that the population farms have been boosting animal husbandry produce for the sixth year running. In western regions of Ukraine, almost all of animal husbandry produce (90-97%) is being produced by population.

In 2005, gross production of animal husbandry output in all categories of farms was by 4% higher than in 2004. There was a tendency of shrinking livestock population, but at the same time – expanding population of pigs and poultry.

In 2005, eggs production volumes increased by 9.1% - up to 13,046 mn eggs, milk production stood almost unchanged at 13,714 ths. tons. Individual farms of population in 2005 accounted for more than 68% of animal husbandry output.

Ukraine preserves the tendency of lowering livestock with expanding poultry population. In comparison to the beginning of 2004, in early 2005 all categories of farms reduced cattle population – by 9% (including cows – by 7.4%, sheep and goats – by 8.3%). At the same time, population of pigs added 9%, and poultry population was up by 5.2%) (see table 2).

Table 2. **Production of livestock and poultry**
(as of the end of the year)
(all categories of farms, ths. heads)

	2000	2001	2002	2003	2004	2005
Cattle	9,423.7	9,421.1	9,108.4	7,712.1	7,158.2	6,514.1
Pigs	7,652.3	8,369.5	9,203.7	7,321.5	6,640.0	7,052.8
Sheep and goats	1,875.0	1,965.0	1,984.4	1,858.8	1,778.8	1,629.5
Horses	701.2	693.4	684.3	637.1	-	
Rabbits	5,557.1	5,912.5	6,181.9	5,367.0	-	
Poultry	123,722.0	136,811.0	147,445.4	142,373.8	154,001	161,993.5
Bees, ths. families	2,849.3	2,907.8	2,810.5	2,757.7	-	

Source: State Statistics Committee of Ukraine