## ESTIMATION OF STABILITY OF UKRAINIAN AGRICULTURE

# ODHAD STABILITY UKRAJINSKÉHO ZEMĚDĚLSTVÍ

## Yuriy Hubeni, Volodymyr Snitunsky

#### **Abstract:**

The dynamics of production indicators of agriculture in Ukraine are considered. The estimation of the stability rate of agricultural production is carried out. The reasons for the unstable character of agriculture in Ukraine are determined.

#### **Keywords:**

Agriculture, Ukraine, stability of production, economic efficiency.

#### **Anotace:**

V článku je posuzován vývoj výrobních ukazatelů ukrajinského zemědělství. Z nich je odhadnuta míra stability zemědělské výroby. Dále jsou určeny příčiny nestability ukrajinského zemědělství obecně.

### Klíčová slova:

Zemědělství, Ukrajina, stabilita výroby, ekonomická efektivnost

#### **INTRODUCTION**

Ukraine is a recognized agricultural country of Europe. Its potential for agricultural production is rather great. Therefore, in the future, Ukraine's agrarian sector will have a vital influence on the agrarian market of Europe, including the European Union.

Currently, agriculture is experiencing a period of transformation. In contrast to the majority of Central and Eastern European countries, transformation of Ukrainian agriculture has been inexcusably delayed. Moreover, some methods and approaches which are used to form new agrarian policies do not achieve the goals of a "European model of agriculture."

In this paper, an attempt has been made to assess the stability of Ukrainian agricultural production. Relating to this, the results have been connected to some consequences of reforming agrarian production or measures to form new agrarian policies.

The entire investigation testifies that Ukrainian agriculture has not yet functioned as a complete and complex market system. Agriculture as a market system is still in the stage of being a structural, institutional and functional model.

#### METHODOLOGY AND SOURCES

This text is based on an investigation by the economic department of Lviv State Agrarian University, "Improvement of the organization/production structure of agriculture and economic relationships in the country in conditions of diverse economics" (state registration № 0193U029507 UA). Certain estimations, methodological techniques and general statements are the result of a complex investigation by one of the authors, Yuriy Hubeni, who wrote "Agrarian reform in the Czech Republic and the possibilities of applying this experience in Ukraine."

All data have been obtained from the official Web site of the State Commission of Statistics of Ukraine (http://www.ukrstat.gov.ua).

### ESTIMATION OF THE STABILITY OF UKRAINIAN AGRICULTURE

The conditions of Ukraine's agriculture were distinguished by depressed valuations. Though climatic conditions were stable in general (local droughts or periods of rain in some regions are normal), other economic conditions were complicated. In spite of widespread privatization of the land on the basis of average land shares, the general area of agricultural land has changed very little (-0.3%).

Table 1 – Dynamics of agricultural land in Ukraine, 1992-2003.

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Indicator	1992	1993	1994	1995	1996	1997			
Area of agricultural	41,93	41,90	41,86	41,85	41,84	41,85			
land (mln. ha)									
Index, $1992 = 100$	100,0	99,9	99,9	99,8	99,8	99,9			
	1998	1999	2000	2001	2002	2003			
Area of agricultural	41,83	41,83	41,83	41,82	41,80	41,79			
land (mln. ha)									
Index, $1992 = 100$	99,8	99,8	99,8	99,7	99,7	99,7			

However, gross production has essentially decreased (Table 2). Gross production of Ukrainian agriculture in 2003 was only 73,7 %, comparing to 1992 levels. The largest production decreases were between 1998 and 2000 (61,1% - 67,0%). A peculiarity of Ukrainian agriculture is that a considerable amount (up to 45%) of production is produced on peasant farmland. It is there, owing to increased acreage, that the situation was slightly stable. Reduced commodity production at large agricultural enterprises continues to dominate.

Table 2 – Dynamics of gross production indexes for Ukrainian agriculture, 1992-2003.

Tuble 2 Dynamics of gross production indexes for Oktamian agriculture, 1992 2003.									
Indicator	1992	1993	1994	1995	1996	1997			
Index of gross production	100,0	101,5	84,7	81,7	73,9	72,6			
1992=100	·				·	·			
	1998	1999	2000	2001	2002	2003			
Index of gross production	65,6	61,1	67,0	73,9	74,7	73,7			
1992=100									

However, the tendency for the "transformational decline" to be prolonged is consistent with crop production and livestock raising, though crop production has slightly better results, especially for such commodities as grain and sunflowers. Regarding the production of sugar beets, the situation is worse. We could notice rather dramatic events in the market for grain when fairly productive years, 2001-2002, according to Ukrainian standards, changed by the year 2003, requiring Ukraine to import grain (Table 3). The situation directed the attention of many institutions to the problem of regulating grain and other markets.

Table 3 – Gross production of the main types of crop production in Ukraine, mln. t., 1992-2003.

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Products	1992	1993	1994	1995	1996	1997
• Grain	38,5	45,6	35,5	33,9	24,6	35,5
1992=100	100	118	92	88	64	92
• Sugar beets	28,8	33,7	28,1	29,6	23,0	17,7
1992=100	100	112	98	103	80	61
• Sunflowers	2,1	2,1	1,6	2,7	2,1	2,3
1992=100	100	100	76	128	100	109
Products	1998	1999	2000	2001	2002	2003
Grain	26,5	24,6	24,5	39,7	38,8	20,2
1992=100	69	64	64	103	101	52
Sugar beets	15,5	14,1	13,2	15,6	14,4	13,4
1992=100	54	49	46	54	50	46
• Sunflowers	2,3	2,8	3,6	2,3	3,3	4,3
1992=100	109	133	171	109	157	205

Reducing the amount of production is not connected with the structural change of the sowing area that is typical to the transitional period. The main reason is a low yield that is, firstly, based on natural productivity of soil, and, secondly, is lower than the threshold of profitability for crops.

Table 4 – The yield of main agricultural commodities, centner/ha, 1992-2003

Products	1992	1993	1994	1995	1996	1997
• Grain	27,9	32,1	26,8	24,3	19,6	24,5
1992=100	100	115	96	87	70	88
Sugar beets	194	222	192	205	183	178
1992=100	100	114	99	106	94	92
• Sunflowers	13,0	12,7	9,1	14,2	10,5	11,5
1992=100	100	98	70	109	81	89
Products	1998	1999	2000	2001	2002	2003
• Grain	20,8	19,7	19,4	27,1	27,3	18,2
1992=100	74	71	69	97	98	65
Sugar beets	174	156	177	183	189	201
1992=100	90	80	91	94	97	104
• Sunflowers	9,3	10,0	12,2	9,4	12,0	11,2
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As we can see, the yield, according to modern standards, is rather low and has unstable characteristics. Grain crops do not attain their usual yield for Ukraine, 30 centner/ha. The yield for sugar beets oscillates near 200 centner/ha. The situation with sunflowers is unique, as they are a very productive crop in southern Ukraine.

The situation regarding livestock raising is even more distinct. Sectoral and structural changes have essentially influenced the parameters of livestock raising and the predicted period of decline was not used for creating a new economic mechanism. Its creation occurred spontaneously, largely due to the influence of the market and the pressure of big food enterprises. Production and, afterwards, consumption, of meat have declined (by half), milk

production has dropped to up to 13,7 mln. tons in 2003. However, negative trends in livestock raising continue to grow. The reason lies in the negative economic effectiveness of this branch. Possibly, it is economic nonsense, but they are realities of Ukrainian economics.

Table 5 – Gross production of the main types of livestock raising in Ukraine, mln. t., 1992-2003

Products	1992	1993	1994	1995	1996	1997
<ul> <li>Meat of all kinds</li> </ul>	3,4	2,8	2,7	2,3	2,1	1,8
1992 = 100	100	82	79	68	62	53
• Milk	19,1	18,4	18,1	17,3	15,8	13,8
1992=100	100	96	95	91	83	72
Products	1998	1999	2000	2001	2002	2003
<ul> <li>Meat of all kinds</li> </ul>	1,7	1,7	1,7	1,5	1,6	1,7
1992 = 100	50	50	50	44	47	50
• Milk	13,8	13,4	12,7	13,4	14,1	13,7
1992=100	72	70	66	70	74	72

Negative tendencies and production instability have their roots in economic effectiveness. Because of existing effectiveness, production loses its economic value; therefore in many cases this agricultural activity is to a greater extent a kind of occupation than a business. Though economic effectiveness of crop farming is slightly better, it doesn't save the situation on the whole.

Table 6 – Level of profitableness of the main types of agricultural products of Ukraine, 1992-2002

Products	1992	1993	1994	1995	1996	1997
♦ Grain	346,0	361,1	214,1	85,6	64,6	37,5
◆ Sunflowers	541,6	505,6	224,1	170,9	53,0	19,4
♦ Sugar beets	142,9	143,5	66,0	31,2	3,8	-10,4
♦ Beef	131,2	88,0	29,8	-19,8	-43,1	-61,5
♦ Milk	39,6	42,0	-5,2	-23,2	-44,0	-53,7
Products	1998	1999	2000	2001	2002	
♦ Grain	1,9	12,0	64,8	43,3	19,3	
♦ Sunflowers	22,0	54,5	52,2	68,7	77,9	
♦ Sugar beets	12,0	14,8	6,1	1,5	-8,6	
♦ Beef	-59,3	-57,9	-42,3	-21,4	-40,5	
♦ Milk	-46,7	-36,6	-6,0	-0,8	-13,4	

As we can see, all types of products, except to some extent sunflowers and grain, are failing. However, the indicators are only generalizations. Looking at a cross-section of the regions, the situation is even worse. Western and northern regions that traditionally specialized in raising livestock were forced to change to grain production. This has tragic consequences for the material basis of livestock raising and fodder production. Currently, 75% of the production capacity of livestock raising and fodder production has been irrevocably lost. The economic problems of agricultural enterprises are a threat. It is especially complicated against a background of real increases in the economy. Social and

demographic problems of the country are becoming more profound.

Table 7 – Level of profitableness of Ukrainian agriculture, 1992-2002

	1992	1993	1994	1995	1996	1997
Agricultural sector	99,3	29,8	45,8	10,6	-11,2	-23,9
◆ Crop production	206,5	214,6	123,2	55,5	29,7	14,5
♦ Livestock raising	76,1	56,7	15,7	-16,5	-39,7	-54,3

	1998	1999	2000	2001	2002
Agricultural sector	-28,3	-22,1	9,0	5,0	-1,9
◆ Crop production	-3,3	8,0	30,8	35,8	22,3
♦ Livestock raising	-49,9	-46,6	-33,8	-6,6	-19,8

The existing economic situation is a result of the prolonged and unsystematic agrarian reform. Fragmented economic decisions which are not based on the entire concept of agricultural development do not have clear theoretical grounds and don't allow the completion of effective economic changes in this industry. At the same time, other problems are stressed in the country. They are connected with the new place that the countryside holds in the system of state-making. The problem of economic, social and demographic development of the countryside is waiting to be addressed. Regional ecological politics demand new approaches.

As we can see, a solution to the problem of agricultural production stability has its roots in successful completion of agrarian reform. As a result, an agricultural economic system should be developed which will satisfy European standards and traditions. Agrarian reform demands conceptual arrangement, legislative security and an institutional, structural and functional solution.

At the same time, the experience of many countries of Central and Eastern Europe, especially the Czech Republic, can be useful and instructive. Gains in the sphere of conceptual formation and program documents and the institutional guarantee of new agrarian policies are also especially useful.

#### **CONCLUSIONS**

The agriculture of Ukraine possesses great potential for development that can be used on the condition of qualitative and complex completion of economic transformation in the country. Agriculture and its production and economic indicators are unstable and do not satisfy the principles of "sustainable development."

Dynamic and gradual development of agriculture in Ukraine can occur on condition of qualitative and expeditious completion of its transformation on principles of a "European model" of agriculture.

Institutional and structural support for a market model of agrarian economics deserves special attention as well as the formation of agrarian policies on the principles of economic democracy, competition and private property.

Forming agrarian policies, one should take into consideration modern trends and integral aspirations of Ukraine in regard to the European Union.

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(The Ukrainian transliteration)

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