- 4. Шульган І. М. Економічна ефективність застосування бурякозбиральної техніки / І. М. Шульган // Економіка АПК. 2009. № 6. С. 89 94.
- 5. Шульган І. М. Ефективність різних технологій та технічних засобів при вирощуванні цукрових буряків / І. М. Шульган // Економіка АПК. 2010.  $N \ge 2$ . С. 107 111.

**Анотація.** Досліджуються економічні та енергетичні витрати на виробництво цукрових буряків із використанням системи машин закордонного виробництва. Здійснено розрахунок беззбиткового рівня виробництва цукрових буряків (за різного рівня урожайності) з урахуванням економічних та енергетичних показників ефективності виробництва для сільськогосподарських підприємств зони Лісостепу.

**Ключові слова:** цукрові буряки, системи машин, економічна ефективність, енергетична ефективність.

Аннотация. Исследуются экономические и энергетические затраты на производство сахарной свеклы с использованием системы машин заграничного производства. Рассчитан уровень безубыточного производства сахарной свеклы (при разном уровне урожайности) с учетом экономических и энергетических показателей эффективности производства для сельскохозяйственных предприятий зоны Лесостепи.

**Ключевые слова:** сахарная свекла, системы машин, экономическая эффективность, энергетическая эффективность.

Annotation. Economic and power charges are investigated on the production of sugar beets with the using the machines system of foreign production. The calculation of break-even level of sugar beets production (at the different level of the productivity) is carried out taking into account the economic and power indicators of production efficiency for the agricultural enterprises of Forest-Steppe zone.

Keywords: sugar beets, system of machines, economic efficiency, power efficiency.

UDK 633.854.78: 330.131.5:338.432:631.11

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### THE EVALUATION OF ECONOMIC EFFICIENCY OF PRODUCING AND SELLING SUNFLOWER SEEDS AT AGRICULTURAL ENTERPRISES

Annotation. Increasing demand for oilseeds in the world agricultural markets and in the agricultural market of Ukraine has been observing in resent years. Especially popular are sunflower seeds and derived products. That situation came under heightened scrutiny. This research examines the economic efficiency of production and selling sunflower seeds at agricultural enterprises of Ukraine. It is based on the Ukrainian summary statistical reports (2006–2011) and analyzes the main economic indicators of sunflower seeds production. The factors

influencing performance of the enterprises in this profile are defined; the dynamics of sunflower seeds processing volume in Ukraine has been studied.

**Key words:** economic efficiency, sunflower production, profit, profitability of sunflower production.

The problem. Sunflower seeds production is a strategically important problem for the Ukrainian national economic development. During the studied period the enterprises of the investigated branch were in the first five branches of the food industry according to processing volume. In spite of the difficult current economical situation in Ukrainian agriculture, enterprises which produce oilseeds are profitable and able to increase the supply on the agricultural market.

The oil branch in Ukraine which is based on sunflower seeds production has a row of problems to be solved. Only in this case our country will have an internal stability and strong international market position.

The analysis of recent researches and publications. The questions connected with evaluation of economic efficiency of producing and selling sunflower seeds are studied by a large number of scientists. A considerable contribution to the research of this question Andrienko O, Diatchenko O., Fedoriaka V. and others have done. Their researches are devoted to basic aspects of the current situation of sunflower seeds market and to perspectives of its development. Special attention is paid to the world tendencies in sunflower seeds processing [1, 2, 6].

Respecting all the researches in this field we have to emphasize that in the most of them the effective management, prospects of development of the oil branch in Ukraine are not investigated enough.

The task. The purpose is to investigate and analyze the evaluation of economic efficiency of producing and selling sunflower seeds at agricultural enterprises of Ukraine; to investigate the functioning specialties of sunflower seeds processing branch; to analyze the main factors which influence the branch.

The main tasks are to investigate the economic efficiency of sunflower seeds producing at agricultural enterprises; to reveal the main tendencies of the crop producing and consumption and to emphasize the influencing factors.

The main research. Sunflower is a strategically important crop for the agriculture of Ukraine. Our country has the leading position in the world for the gross harvest of this crop. The popularity of sunflower can be explained by a significant oil release per unit of area (about 750 kg/ha on average in Ukraine) [2]. In our country share of the sunflower in total oil production is 98 % [1].

The greatest producers of sunflower seeds in Ukraine are the medium and large agricultural enterprises. In 2011 these enterprises produced 84.1 % of all sunflower seeds manufactured in Ukraine.

The sunflower production in Ukraine increases. Over the past three years about 6.4-8.6 million tons of sunflower seeds have been produced annually. Thus, in 2011 the production of these crops increased by 62.9 % compared to 2006. The crop area under sunflower has been increased by 19.0 % in the same period [3, 4] (Table 1).

Table 1
Area Sown, Production and Yield Capacity of Sunflower
in Ukraine, 2006–2011

Indicator			Deviation, (+;-)					
	2006	2007	2008	2009	2010	2011	2011 to 2006	2011 to 2010
Area sown, thousand ha	3.964	3.604	4.306	4.232	4.572	4.717	753	145
Production, thousand tons	5.324	4.174	6.526	6.364	6.772	8.671	3.347	1.899
Yield capacity	13.6	12.2	15.3	15.2	15.0	18.4	4.8	3.4

As for agrotechnology, increasing area under sunflower is not a positive indicator. It is connected with biological properties of this crop. Sunflower depletes soil, thus it is to be returned to the previous field only in several years. But due to high prices of the crop these rules are ignored. Producers want to increase their profits and do not use agro technical recommendations. This position leads to decreasing the yields and deterioration of the soil condition [6].

According to the State Statistics Service, we calculated the indices of production and sales economic efficiency of sunflower in Ukraine (Table 2) [3].

Table 2

## Economic Performance Indicators of Sunflower Production and Sales in Ukraine, 2006–2011

			Y	Deviation,				
Indicator	2006	2007	2008	2009	2010	2011	(+;-)	
							2011 to 2006	2011 to 2010
Quantity of sold produce, thousand tons	3.184	3.089	2.870	4.679	4.957	5.024	1.840	66.0
Total cost of sold produce, million hryvnyas	2.477	3.383	3.368	6.279	9.116	10.321	7.843	1.205
Net income, million hryvnyas	2.990	4.840	3.987	8.878	15.011	16.201	13.211	1.190
Profit (loss), million hryvnyas	513	1.457	620	2.599	5.895	5.880	5.367	-155
Cost of 1 hundredweig ht, hryvnyas	77.8	109.5	117.4	134.2	183.9	205.4	127.6	21.6
The average sales price of 1 hundred kg weight, hryvnyas	93.9	156.7	139.0	189.8	302.8	322.5	228.6	19.7
Profitability, %	20.7	75.9	18.4	41.4	64.7	57.0	36.3	-7.7

Thus, in 2006 the profitability was 20.7 % and in 2007 the indicator increased to 75.9 % (the highest one among all the crops). The high profitability of sunflower production was caused by increased demand for this crop. The data of Table 2 [5] show that in 2008 the prices for sunflower seeds have been decreased. The reason of that is decreased demand and increased supply. Such situation lead to reduction of the crop production profitability (18.4 %).

According to the economic results of 2011 the agricultural enterprises which produce sunflower seeds have received 6 billion hryvnyas of profits. The profitability

of producing sunflower seeds was 58 %. This is the highest level of profitability compared with other crops in 2011.

The share of sunflower in total oil production is 98 %. Amounts of sunflower seed processing are shown on Figure 1 [3].

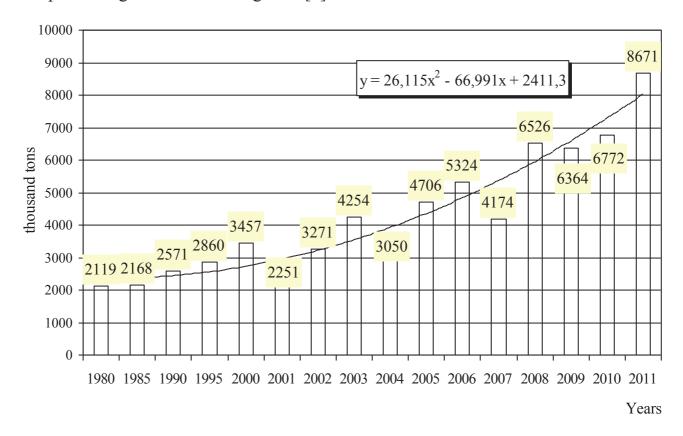


Figure 1. The Dynamics of Sunflower Seeds Processing Volume

We have analyzed the trend of sunflower processing amount changes. The polynomial trend has been used for the analysis. The authenticity approximation value is approximately 0.9 ( $R\approx0.9$ ). Thus, in spite processing of sunflower decrease the amount in some years of the studied period (2001, 2004, 2007), the main trend is that of growth.

**Summary.** Sunflower is one of the most popular and widespread crops in Ukraine. It is also a very profitable crop. The profitability of sunflower seeds production during 2006–2011 has increased 1.8 times to 57.0 %.

The research shows that in 2011 the production of this crop increased by 62.9 % compared to 2006. The sown area under sunflower has been increased by 19.0 % in the same period.

The demand for sunflower seeds is comparatively constant. It proves the high liquidity of this crop. That is why scientifically grounded rotation of sunflower becomes more important for the cultivation process.

Agro-environmental characteristics of sunflower and its effect on soils quality can lead to negative consequences. That is why extensive way of cultivation by expanding of areas under this crop leads to the problem of soil depletion. Solving these problems needs comprehensive scientific approach.

#### Literature

- Андрієнко О. Не такий страшний соняшник, як його малюють / О. Андрієнко, А. Анлрієнко, І. Семеняка // Агробізнес сьогодні. 2011. № 11. С. 5–12.
- 2. Дяченко О.В. Шляхи підвищення урожайності соняшнику в умовах сучасних інтеграційних процесів України [Електронний ресурс]. режим доступу: www.nbuv.gov.ua.
- 3. Офіційний сайт Державної служби статистики України. [Електронний ресурс]. режим доступу: http://www.ukrstat.gov.ua.
- 4. Офіційний сайт FAOSTAT. [Електронний ресурс]. режим доступу: http://faostat.fao.org.
- 5. Портал Аграрного сектору України. [Електронний ресурс]. режим доступу: http://agroua.net/statistics.
- 6. Федоряка В. П. Ефективність виробництва і реалізації соняшнику в Україні / В. П. Федоряка, Л. А. Бахчиванжи, С. В. Почколіна // Вісник соціально-економічних досліджень. – 2011. – № 41(2). – С. 139–144.

**Анотація.** В останні роки спостерігається зростання попиту на олійні культури як на світових ринках, так і на ринку сільськогосподарської продукції України. Особливо популярним серед олійних культур є соняшник та продукти його переробки.

#### Таврійський державний агротехнологічний університет

У даній статті досліджується економічна ефективність виробництва соняшнику в сільськогосподарських підприємствах України. За зведеною статистичною звітністю України (2006—2011 рр.) проведено аналіз основних економічних показників виробництва соняшнику; проведено аналіз виробництва і споживання соняшнику в Україні; проаналізовано динаміку обсягів переробки соняшнику та його урожайності в Україні.

**Аннотация.** В последние годы наблюдается рост спроса на масличные культуры как на мировых рынках, так и на рынке сельскохозяйственной продукции Украины. Особенно популярным среди масличных культур является подсолнечник и продукты его переработки.

В данной статье исследуется экономическая эффективность производства подсолнечника в сельскохозяйственных предприятиях Украины. На основании сводной статистической отчетности Украины (2006–2011 гг.) проведен анализ основных экономических показателей производства подсолнечника; проведен анализ производства и потребления подсолнечника в Украине; проанализирована динамика объемов переработки подсолнечника и его урожайности в Украине.

Annotation. Sunflower seeds production is a strategically important problem for the Ukrainian national economic development. During the studied period the enterprises of the investigated branch were in the first five branches of the food industry according to processing volume. In spite of the difficult current economical situation in Ukrainian agriculture, enterprises which produce oilseeds are profitable and able to increase the supply on the agricultural market.

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UDC 631.153.4.01

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# SOCIO-ECONOMIC INFRASTRUCTURE OF AGRICULTURAL MARKET

**Summary.** We found a place of socio-economic infrastructure in the system of market infrastructure. Improved conceptual approach to the interpretation of the term "socio-economic