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ANALYSIS OF THE LEVEL OF INVESTMENT ENSURE AND CHARACTERISTICS OF ITS RELATIONSHIP WITH THE RESULTS OF AGRICULTURAL ENTERPRISES IN KHARKIV REGION

The level of investment ensure of agricultural enterprises in Kharkiv region was analyzed. The researched set of agricultural enterprises was divided into groups in terms of capital investment per 1 ha of agricultural land. The volume of investments, as well as the composition, structure and direction of investment ensure of selected agricultural enterprises in Kharkiv region. The relationship of investment ensure of agricultural enterprises in Kharkiv region with the results of their activities was characterized. The rates of increase of investments and profits of researched enterprises were compared. The differences in the structure of directions and sources of investment in enterprises with different levels of investment ensure was defined. The impacts of the agricultural enterprises' direction of production on the level of investment ensure was evaluated. The relationship between the structure of commodity products of agricultural enterprises and their level of investment ensure was established.

Keywords: investment ensure, agriculture, agricultural enterprises, direction of production, effectiveness, directions and sources of investment.

Problem. Under the current conditions in Ukraine, increasing the volume of investments carried out by agricultural enterprises is a key to increase production, improve product quality, efficient operation and development of agricultural enterprises, increase the effectiveness of the agricultural sector, and to ensure and maintain economic growth. One of the most important challenges both to enterprises and the agricultural industry is to find sources of investment and identify the directions of investment funds. Therefore, in our opinion, it requires careful study of the peculiarities of investment ensure of agricultural enterprises at the regional level.

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Analysis of recent research and publications. The comprehensive study on investment ensure of agricultural enterprises carried out by a number of economists, including I.A. Blank, O.E. Gudz, M.I. Kisil, M.Y. Kodenska, Y.O. Lupenko, T.V. Mayorova, N.S. Myedvyedkova, A.P. Pavlyuk, P.T. Sabluk, I.V. Yukhnovsky and others. However, not enough attention is paid to the analysis of investment ensure of agricultural enterprises in Kharkiv region and characteristics of its relationship with the results of these enterprises.

The goals of the article. The main goal of this research is an analysis of the level of investment ensure and characteristics of its relationship with the results of the agricultural enterprises in Kharkiv region; determining differences in the structure of directions and sources of investment of enterprises with different levels of investment ensure; the assessment of the impact of agricultural enterprises' direction of production on their level of investment ensure.

Results. To assess the impact of investment on performance of agricultural enterprises in Kharkiv region, the researched set of enterprises was divided into 7 groups in terms of capital investment per 1 ha of agricultural land, which includes 382 enterprises in 2013 (Table. 1, 2). The highest level of investment per area unit occurs in enterprises with smaller land-use, high headcount per agricultural area unit and that mainly specialize in livestock production. The operating performances ratios of agricultural enterprises are improving with the growth of their investment ensure, as evidenced by trends of profit growth per area unit and the level of profitability.

1. The impact of investment ensure on indicators of the efficiency of agricultural enterprises in Kharkiv region, 2013.

•	Groups of enterprises by investments per 1 ha of agricultural lands UAH							
Indicators	to	100,01-	200,01-	400,01-	800,01-	1600,01-	over	Average on set
	100,00	200,00	400,00	800,00	1600,00	3200,00	3200,00	OH SCt
Number of enterprises in group	67	33	60	76	82	44	20	382
Investment per 1 ha of agricultural land, UAH	37	151	294	581	1176	2077	6446	833
Area of agricultural land, ha	3173	2726	2912	2550	3052	2342	1425	2756
Number of employees, persons	47	47	54	52	74	79	112	62
Net sales revenue per 1 ha of agricultural lands, UAH	5024	5512	5352	6165	6798	8202	20248	6475
The share of livestock in net sales,%	6,2	12,1	9,0	29,2	39,3	24,2	40,1	24,4
Profit per 1 ha of agricultural lands, UAH.	71	-121	53	668	972	1459	3545	606
The level of profitability of agricultural, %	1,4	-2,1	1,0	12,1	16,7	21,6	21,2	10,3
The level of profitability of crop, %	4,8	0,5	3,7	14,3	13,2	25,2	29,6	11,0
The level of profitability(loss) of livestock, %	-31,5	-18,0	-19,8	7,3	22,5	11,7	10,6	8,2

Source: author's calculations based on the data of Main Department of Statistics in Kharkiv region [1]

2. The impact of investment ensure' increasing on change of indicators of the efficiency of agricultural enterprises in Kharkiv region, 2013.

in Kharkiv region, 2010.									
№ of	Groups of enterprises in terms of capital investment per 1 ha of	Rat	tio to 1-st group, times	5	Deviation of the level of profitability compared with the 1-st group (+, -), p.p.				
group	agricultural land	investment	net sales revenue	profit	agricultural	crop	livestock		
1	до 100,00	1,0	1,0	1,0	-		-		
2	100,01-200,00	4,1	1,1	-1,7	-3,6	-4,3	13,6		
3	200,01-400,00	8,0	1,1	0,7	-0,4	-1,1	11,7		
4	400,01-800,00	15,8	1,2	9,4	10,7	9,5	38,8		
5	800,01-1600,00	32,0	1,4	13,6	15,2	8,5	54,0		
6	1600,01-3200,00	56,4	1,6	20,4	20,2	20,4	43,2		
7	понад 3200,00	175,1	4,0	49,7	19,8	24,8	42,1		

Source: author's calculations based on the data of Main Department of Statistics in Kharkiv region [1]

A significant increase in profitableness and level of profitability (with the achievement of its positive level in the livestock) observed in the group of enterprises with investments from 400 to 800 uah per 1 ha of agricultural land. Investments and net sales revenue per area unit as well as the number of employees in this group are below than average on whole set of enterprises but operating performance ratios are accordingly higher in crop.

We can argue that the profit growth rate is significantly behind the pace of investment growth – enterprises from group where amount of investments per 1 ha of agricultural land exceeding 1600 uah reach the highest operating performance ratios. However, it's necessary to increase the value of investment in fixed assets of 175.1 times to obtain the growth of net sales revenue of 4 times and the growth of profit of 49.7 times.

It should be noted than compared to enterprises with the lowest level of investment ensure, there are reduction of profits (1.7 times) and decreasing of level of profitability (as a whole - 3.6 p.p., crop - 4.3 p.p.) in the group of enterprises with investments from 100 to 200 uah per 1 ha of agricultural land. At the same time, in the group of enterprises with investments from 200 to 400 uah per 1 ha of agricultural land there is decreasing of level of profitability of agricultural (0.4 p.p.) and crop (1.1 p.p.). So, the composition, structure and direction of investment funds are also important along with the increase in investment.

We determined that composition and structure of investment of agricultural enterprises depend on the level of their investment ensure (Table. 3). Thus, in the group of enterprises with the lowest level of investment ensure, which specializing in crop production, there are a domination of investments in machinery, equipment and inventory – their share is 83.3 %. The group of enterprises with the highest level of investment ensure includes enterprises that mainly specialize in livestock production – as a result, there are a significant increasing in the share of buildings and structures (16,6 %, set average – 11,9 %) and long-term biological assets of plant growing and cattle breeding (3,9 %), while the share of machinery, equipment and inventory is 74,5 %.

3. The directions and sources of investments of agricultural enterprises in Kharkiv region depending on their investment ensure 2013.

	Groups of enterprises in terms of capital investment per 1 ha of agricultural land							Avoraga	
Indicators	to 100,00	100,01-	200,01-	400,01-	800,01-	1600,01-	over	Average on set	
		200,00	400,00	800,00	1600,00	3200,00	3200,00	on set	
Number of enterprises in group	67	33	60	76	82	44	20	382	
Investment per 1 ha of agricultural land, UAH	37	151	294	581	1176	2077	6446	833	
Total capital investments, %	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	
including, by type of assets									
Tangible investments:	99,7	98,6	96,7	99,9	99,9	100,0	99,9	99,7	
buildings and structures	2,5	11,5	10,7	5,5	16,2	6,1	16,6	11,9	
machinery, equipment and inventory	83,3	70,6	59,9	71,6	66,5	80,2	74,5	72,0	
transport vehicles	8,7	8,9	14,9	12,9	8,1	12,0	3,6	9,1	
long-term biological assets of plant growing and cattle breeding	0,8	2,8	8,0	9,6	8,3	1,6	3,9	5,7	
other tangible investments:	4,4	4,7	3,2	0,4	0,9	0,1	1,3	0,9	
Intangible investments:	0,3	1,4	3,3	0,1	0,1	0,0	0,1	0,3	
including, by sources of investments									
Equity funds	92,3	100,0	91,7	88,5	87,2	82,7	77,8	84,8	
Bank borrowings	7,7	0,0	8,3	11,5	12,8	17,3	22,2	15,2	
Budgetary financing	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	
Other sources of investments	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	

Source: author's calculations based on the data of Main Department of Statistics in Kharkiv region [1]

The feasibility of investment activities of agricultural enterprises formed by the accumulation of own investment and by attracting credit resources, state support for investment projects and other funding sources. The main source of investment financing in fixed assets in agricultural enterprises in Kharkiv region are equity funds obtained from the normal business activities – the share ranging from 77.8 to 100%, while set average is 84.8%. Moreover, equity funds are the most important source for groups of enterprises with lower investment ensure. Quite common is the idea that equity funds (the main of which is profit) should be a primary and dominant source of investment ensure of agricultural enterprises [2-5]. From our point of view, total domination of equity funds of agricultural enterprises in the structure of investment financing sources leads to the dependence of enterprises' development on their profit. In addition, the amount of equity funds of agricultural enterprises is not enough to fully meet their investment needs such as: technical re-equipment, reconstruction and expansion of production; increasing production of competitive products, implementation of which will ensure growth in revenues and profits. We agree with the statement O.E. Gudz about objective need in investment banking loans for the development of agricultural enterprises due to limited equity and budgetary funds [6]. We believe that for development of agricultural enterprises there is an urgent need to create conditions for agricultural enterprises to borrow funds and loans on reasonable terms, as well as corresponding budgetary financing of investment projects.

The borrowing of bank loans is an important source of financing capital investments only in groups of agricultural enterprises with the highest level of investment ensure due to the high profit level. At the same time, other groups of enterprises are facing a number of problems that do not allow full use of this source of investment financing, namely: high cost of loans and increased requirements for potential borrowers; risk capital management in enterprises; the threat of reduction of enterprises' asset liquidity due to the need repayment of debt in the short term; increased uncertainty due to the financial crisis. Thus, the feasibility of investment activities of agricultural enterprises in general, and borrowing credit resources in particular, determined by their financial situation.

It should be noted that despite the importance of such sources of investment financing, as both funds of national and local budgets, their share in all selected groups of enterprises is 0%. The same applies to other sources of funding - they are completely absent in all selected groups of enterprises.

In our own researches, we proceed on the basis that specialization of agricultural enterprises and their direction of production largely determine the indicators of investment ensure.

Based on the impact assessment of direction of production of agricultural enterprises in Kharkiv region on level of their investment ensure in 2013, it is arguable that with the increase in ongoing investments there are changes in direction of production of agricultural enterprises – the specialization of enterprises in crop production reduced for livestock production.

Agricultural enterprises with lower investment ensure mainly focused on growing sunflowers, wheat and maize - the most profitable crops, which are consistently in high demand and do not require large investments. In turn, enterprises with higher investment ensure mainly specialize in livestock production (production of eggs and milk), while maintaining the cultivation of sunflower (some companies – as a side-line to support the primary industry).

We have determined that with an increase in investments in the formed groups there is a tendency to increase the efficiency of both the whole and individual areas of crops and livestock. Conspicuous is the fact that there is a high loss ratio of corn in groups of agricultural enterprises with investments per 1 ha of agricultural land below 1600 uah (loss ratio ranged from 12 to 29%), while level of profitability was 17.5% in the group of enterprises with the highest level of investment ensure. Similar trends are observed in the production of barley and sugar beet, as well as pig and poultry production where exist wasteful production in the groups of enterprises with lower investment ensure, and a high level of profitability in the group of enterprises with the highest level of investment ensure (50.4%, 93.6%, 12.4% and 60.3% respectively). However, growing cattle remains unprofitable in all groups of enterprises regardless of the investment volume.

Conclusions. 1. With the growth of investment ensure, agricultural enterprises in Kharkiv region improved their performance indicators - there are growth trends in profit per area unit and the level of profitability. However, the profit growth rate significantly behind the pace of investment growth. Therefore, important not only investment volumes, but also the composition, structure and direction of investment ensure.

- 2. The highest level of investment ensure recorded in the group of enterprises that have the lowest land-use, the highest number of employees and mainly specializing in the production of livestock.
- 3. In groups of enterprises with different levels of investment ensure the structure and sources of capital investment largely determined by direction of production and efficiency of agricultural enterprises. The main source of investments for groups of enterprises with lower investment ensure is equity funds; for groups of enterprises with highest investment ensure significantly increases the value of bank loans.

- 4. There is a correlation between the structure of commodity products of agricultural enterprises and their level of investment ensure. With the increase in the investment volumes there are changing in the direction of production of enterprises reduced share of crop production in the structure of sales in favor of increasing livestock production.
- 5. Agricultural enterprises with lower investment volumes predominantly focused on growing sunflowers, wheat and maize the most profitable crops, which are consistently in high demand and do not require large investments. In turn, enterprises with higher investment ensure mainly specialize in production of horticulture and livestock production (increase in milk, pig, egg production), while maintaining the cultivation of sunflower.
- 6. The highest loss ratio of livestock production in all groups, without exception, observed in growing cattle, pigs and poultry. The main reason for the lack of its effectiveness is reduce of wholesale prices for the products on the one hand, and on the other the increase in the cost of meat due to rising prices for forage, other feed and increased energy costs.

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Гуторов О.І., Калашніков А.О. Аналіз рівня інвестиційного забезпечення та характеристика його взаємозв'язку з результатами діяльності сільськогосподарських підприємств харківської області. Проаналізовано рівень інвестиційного забезпечення сільськогосподарських підприємств Харківської області. Досліджувану сукупність сільськогосподарських підприємств поділено на групи за обсягами

капітальних інвестицій на 1 га сільськогосподарських угідь. Досліджено обсяги інвестиційних вкладень, а також склад, структуру та напрями інвестиційного забезпечення виділених сільськогосподарських підприємств. Охарактеризовано взаємозв'язок рівня інвестиційного забезпечення сільськогосподарських підприємств Харківської області з результатами їх діяльності. Порівняно темпи нарощування інвестицій та прибутку досліджуваних підприємств. Визначено відмінності в структурі джерел інвестування підприємств 3 різним інвестиційного забезпечення. Оцінено вплив виробничого напряму господарської діяльності сільськогосподарських підприємств на рівень їх інвестиційного забезпечення. Встановлено залежність між структурою товарної продукції сільськогосподарських підприємств та рівнем їх інвестиційного забезпечення.

Ключові слова: інвестиційне забезпечення, сільське господарство, виробничий напрям, ефективність діяльності, напрями та джерела інвестування.

Гуторов А.И., Калашников А.О. Анализ уровня инвестиционного обеспечения и характеристика его взаимосвязи с результатами **деятельности** сельскохозяйственных предприятий Харьковской области. Проанализирован уровень инвестиционного обеспечения сельскохозяйственных предприятий Харьковской области. Исследуемая совокупность сельскохозяйственных предприятий Харьковской области разделена на группы по объемам капитальных инвестиций на 1 га сельскохозяйственных угодий. Исследованы объемы инвестиционных вложений, а также состав, структура и направления инвестиционного обеспечения сельскохозяйственных выделенных предприятий. Охарактеризована взаимосвязь уровня инвестиционного обеспечения сельскохозяйственных предприятий Харьковской области с результатами их деятельности. Проведено сравнение темпов наращивания инвестиций и прибыли исследуемых предприятий. Определены различия в структуре направлений и источников инвестирования предприятий с разным уровнем инвестиционного обеспечения. Оценено влияние производственного хозяйственной деятельности сельскохозяйственных направления предприятий на уровень их инвестиционного обеспечения. Установлена зависимость между структурой товарной продукции сельскохозяйственных предприятий и уровнем их инвестиционного обеспечения.

Ключевые слова: инвестиционное обеспечение, сельское хозяйство, производственное направление, эффективность деятельности, направления и источники инвестирования.