# COST MANAGEMENT SYSTEMS AS A FACTOR IN INCREASING THE PRICE COMPETITIVENESS OF PRODUCTS OF AGRICULTURAL ENTERPRISES<sup>1</sup>

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Every company strives to achieve a competitive advantage and to dominate the competition. To ensure success in domestic and global markets, such an enterprise must have either a more attractive price or better product quality. The company is also interested in minimizing costs, which can result in lower prices to increase sales aimed at developing new markets or expanding available ones.

The theory and practice of management in a market economy recognizes that costs are the most important object of management. The profitability and competitiveness of economic entities depend on their size. However, as the analysis shows, agricultural enterprises fail to reduce production costs, achieve optimal levels of profitability, and carry out expanded reproduction, which characterizes the low level of production cost management. To increase the efficiency, financial stabilization, and price competitiveness of agricultural enterprises, it is necessary to form an effective cost management system, constantly monitor them, implement organizational and economic measures to reduce them, and increase production per unit cost. Therefore, the study of the issue of improving cost management systems in agricultural enterprises is extremely relevant.

The issue of cost management has been widely analyzed in the works of many scientists. It is worth noting the scientific publications of Okhrimenko I.V. [1], Partin H.O. [2], Davydovych I.E. [3], Kolisnyk M. [4], Mazur O.I., Bohatska N.M. [5] and others [6; 11-13]. However, the literature sources do not fully present the essence of the cost management system in agricultural enterprises under the conditions of increased competition.

The purpose of the article is to analyze the cost of production and to develop an effective cost management system to ensure the price competitiveness of agricultural products at agricultural enterprises.

The efficiency of production at agricultural enterprises depends on a set of various factors. Ensuring the profitability of agricultural businesses requires maximizing profits from the sale of products, as well as minimizing production costs, which will contribute to the implementation of expanded reproduction and an increase in their competitiveness.

In 2019, all categories of Ukrainian farms gained agricultural products (at constant prices of the year 2016) of UAH 680982.4 million, which is 45.7% more than in 2010, and by 1.4% compared to the previous year. The largest increase in agricultural production occurs at agricultural enterprises: respectively by 75.2% compared to 2010 and by 2.7% compared to 2018. If in 2010, agricultural enterprises produced 48.3% of agricultural products, including crop products – 53.6%, livestock – 38.8%, in 2019, it was 66.1%, 69.9%, and 51.3% respectively. That is, it was agricultural enterprises that have been the main producers of agricultural products in recent years, not households. Agricultural enterprises and farms are gradually increasing their share of total agricultural production.

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Production volumes are closely related to the advancement of fixed and current assets in the production process. The dynamics of costs for the production of agricultural products in agricultural enterprises of Ukraine are presented in Table 1.

Analysis of the data presented in Table 1 shows that in 2019 the costs of agricultural production at agricultural enterprises of Ukraine increased compared to 2010 by almost 6.2 times, and since 2018 – by 4.6%. At the same time, agricultural production (at constant prices of the year 2016) increased by 75.2%, respectively, and compared to the previous year – only by 2.7%.

Years	Production costs, UAH million	Years	Production costs, UAH million	
2010	75009,6	2016	288499,3	
2013	127190,3	2017	404970,2	
2014	154313,5	2018	442993,4	
2015	228519,6	2019	463271,6	
2019 in % compared to 2010	617,6	2019 in % compared to 2018	104,6	

Table 1. Expenditures on agricultural production at agricultural enterprises of Ukraine for 2010-2019 \*

\* Source: compiled by the author based on the source [7-9]

The economically unstable environment harmed the cost of agricultural production (Table 2).

Table 2. Indices of prices for industrial products and tariffs consumed in agriculture (to the previous year, percent) \*

(to the previous year, percent)								
Index	2010	2013	2014	2015	2016	2017	2018	2019
Aggregate index of costs for agricultural production	116,9	101,0	117,9	150,9	113,5	121,8	113,9	99,4
Including material and technical resources of industrial origin	115,5	99,7	120,0	145,6	104,2	124,6	115,9	98,4

\* Source: compiled by the author based on the source [7-9]

As Table 2 shows, the costs of agricultural production at agricultural enterprises in Ukraine increased from year to year. If in 2010, the total cost index was 116.9% compared to the previous year; in 2015, the costs increased by more than half (by 50.9%), and in 2017 – by 21.8%. A significant increase in costs is primarily due to the rise in the price of material and technical resources of industrial origin, which are used in agriculture. Moreover, the increase in their value in some periods outpaced the growth of costs. Thus, in 2014, 2017, and 2018, the cost index for such resources exceeded the total cost index by 2.1; 2.8, and 2%. Oil products (by 4.6%), construction materials (by 6.5%), and wages increased by 21.9% in 2019 compared to the previous year. Traditional types of material and technical resources became cheaper, in particular, fuel – by 28.9%, mineral fertilizers and chemical plant protection products – by 19.1%. In general, the total cost index for agricultural production in 2019 is 99.4% compared to 2018.

It is worth noting that the sales prices of agricultural products grew at a slower pace than costs. The sales price index exceeded the cost index only in 2010, 2014, and 2015 for the period under review. In 2018, sales prices of agricultural products increased compared to the previous year by only 9.3%, and in 2019, they decreased by 7.6%.

Despite some annual increase in sales prices (except for 2013 and 2019), the income of agricultural producers did not always cover their costs (Table 3).

As the data of Table 3 prove, 83.4% of agricultural enterprises of Ukraine in 2019 made a profit, the rest were unprofitable. Although the number of unprofitable enterprises decreased 2.3

times during the study period, the level of profitability of all activities reached only 16.1%, and operating activities – 19.3%, which is not enough to carry out expanded reproduction. To ensure expanded reproduction in agricultural production, the level of profitability should be at least 40-45% [10], and taking into account the cost of land – 25% [6, p. 3].

Agricultural producers are not able to significantly influence sales prices. Therefore, they have the opportunity to increase income and efficiency of agricultural production and remain competitive in the market by reducing costs.

The following aspects have a significant impact on the costs: the scale of the enterprise, the structure of the production program, the duration of a technological process, condition of material and technical base, the capacity utilization, the quality of factors of production, information support of the management process, organization of sales, financing, lending, etc. [6, p. 83]. The formation of costs is significantly influenced by the permanent disparity of prices for agricultural and industrial products, disparities in the equivalence of relations between the enterprises of the agro-industrial complex of all spheres. The state is unable to ensure the equivalence of exchange, inter-sectoral proportions, and price parity, which requires more constructive and effective measures of the state regulation.

		Enterprises that received a		Enterprises that received		Profitability level, %	
Years Net profit UAH million	Not profit	net profit		a net loss		1 Iontability level, 70	
		in % to the		n % to the		of all	
	million	total	financial result,	total	financial result,	activitie	of operating
		number of	UAH million	number of	UAH million	activitie activit	activities
		enter-prises		enter-prises		8	
2010	17253,6	69,6	22094,9	30,4	4841,3	17,5	24,5
2013	14925,7	80,3	26186,6	19,7	11260,9	8,3	11,7
2014	21413,4	84,7	51668,0	15,3	30254,6	9,3	21,4
2015	101912,2	88,9	127525,5	11,1	25613,3	30,4	43,0
2016	89816,3	88,4	102496,1	11,6	12679,8	25,6	33,6
2017	78457,7	86,7	91764,1	13,3	13306,4	18,7	23,5
2018	70461,8	86,7	93249,0	13,3	22787,2	14,2	18,9
2019	90167,0	83,4	114666,4	16,6	24499,4	16,1	19,3

Table 3. Financial results of the activities of agricultural enterprises of Ukraine for 2010-2019 \*

\* Source: compiled by the author based on the source [7-9]

The problem of cost and revenue management cannot be solved only by market methods or a combination of market levers with the methods of public management of economic processes. The reduction of costs depends significantly on the formed effective internal cost management system at individual enterprises.

The cost management system plays an extremely important role in developing a strategy of enterprise behavior in market conditions, substantiation of management decisions under the influence of the external and internal economic environment, in establishing an effective internal mechanism and management, creating effective planning, control, and analysis of costs.

The cost management system should include a set of functions of planning, forecasting, rationing, accounting, analysis, control, regulation of costs, and motivation to reduce or optimize the level of costs, as well as the organization of the cost management system. In this case, the main objects of management in the cost management system are, in addition to the direct costs of production, the financial condition of the enterprise. Despite the specific strategic goals, each company should aim, on the one hand, to ensure continued solvency, and on the other hand to strengthen and upgrade the material and technical base.

A key component of an effective cost management system, in our opinion, is a cost management mechanism, which should include appropriate levers and tools that significantly affect the number of costs. The choice of components of this mechanism involves appropriate organizational, technological, and economic measures aimed at obtaining the optimal cost and increasing the profitability of enterprises.

Important tools of the cost management mechanism, which significantly affect the number of production costs, include methods of cost accounting and calculation. In the scientific works of domestic scientists, preliminary, post-process, out-of-order, and normative methods of accounting for production costs are more often used [11; 12]. In foreign scientific research, such systems and methods as absorption-costing, direct-costing, target-costing, and kaizen-costing have become widespread in management accounting [13]. It is worth noting that although foreign methods of accounting and costing are considered progressive, they have some drawbacks. The disadvantages include their cumbersomeness, complexity, and cost taking. Besides, the latest concepts of cost management systems are based on the division of costs into fixed and variable, which is a debatable issue.

The need to ensure the competitiveness of products in the context of globalization of markets, increasing the level of informatization, and intensification of competition encourages a fundamental improvement of the cost management system of economic entities. Therefore, as noted by Partin H. O., the modern world pays special attention to the formation of a strategic model of cost management, which is based on a comprehensive analysis of competitive advantages and weaknesses in the enterprise, its participation in shaping the value of products for consumers, studying life cycle stages of its products, and the research of the peculiarities of the influence of external and internal business environment on the level and behavior of its costs [2, p. 43].

**Conclusions.** It has been proved that during the studied period (2010-2019) there was an increase in costs at the agricultural enterprises of Ukraine regardless of the volume of production. Several factors that do not depend on the manufacturer significantly influence the formation of costs. Therefore, increasing the intensity of agricultural activities requires more effective measures of state regulation and cost management.

Under the conditions of increasing internal and external competition, a decrease in profit, an increase in losses, and a decrease in expenses are the most accessible ways of increasing the profitability and competitiveness of production of agricultural enterprises. The development of an effective internal cost management system of an individual enterprise will ensure the optimal cost, increase profitability and financial stabilization of economic entities. A key component of the cost management system is the cost management mechanism, which should include appropriate levers and tools that affect the amount of costs. Among these tools, progressive methods of cost accounting and calculation, which have not become widespread at domestic agricultural enterprises due to the relevant shortcomings, should play an important role.

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