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Prospects for the Use of Modern Methods of Management Accounting

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Abstract: this article studies the activities of clusters as a modern solution for organizing management accounting, in which, along with the organizational and legal mechanisms of clusters, the widespread introduction of modern areas of management accounting in the accounting system is studied. At the same time, recommendations are developed on determining the methodological foundations of the effective use of the "Just in time" system in accounting policy for the purposes of management accounting as a source of information for the effective management of clusters, the development of their forecast indicators.

Keywords: Cluster, Management Decisions, Management Accounting, Modern Methods of Management Accounting, "Just In Time", Costs.

1. Introduction

In the context of New Uzbekistan, providing financial support to clusters, along with reducing the cost of products created by them, is one of the key factors in the development of today's economy. In particular, product cost is considered one of the main indicators reflecting economic efficiency in the financial and economic activities of clusters. For this purpose, in order to achieve economic efficiency, it is necessary to reduce product costs and effectively organize their accounting. At the same time, this process is not only an important direction of cluster activity but also one of the key issues in the functioning of cooperations integrated within these sectors.

Naturally, the agro-industrial clusters operating in our country cover multi-sectoral activities, and although their strategic directions defined for management purposes are oriented toward the interests of the clusters, accounting—especially management accounting information—plays a crucial role in making direct management decisions. For this reason, the widespread application of modern methods of management accounting and the establishment of methodological foundations of accounting policy within them serve to ensure greater accuracy of costs.

Literature review

The Strategy "Uzbekistan — 2030" [1], adopted with the aim of realizing the will of our people to build a free, prosperous, and powerful New Uzbekistan, creating all necessary conditions for every citizen to develop their potential, educating a healthy, knowledgeable, and spiritually mature generation, forming a strong economy that has become an important link in global production, and ensuring justice, the rule of law, security, and stability, identifies "Ensuring the well-being of the population through sustainable economic growth" as one of its key directions. This direction not

only determines the priority areas of the national economy but is also considered a practical program for the sustainable development of industry through "efficient use of the local raw material base and the development of industry based on advanced technologies," including "the establishment of clusters and the launch of enterprises producing high value-added finished products."

Although the concept of clusters and its content and essence began to emerge in the literature from the 2000s, this term still does not have a precise definition, as various stakeholders (developers of legal frameworks, research institutions, and economic sectors) apply it in different contexts and directions (Galvez-Nogales & Webber, 2017; Steffens, 2016) [2]. One of the most widely used definitions is the geographic concentration of interconnected firms and institutions (Porter, 1998) [3]. Another related definition refers to an "agglomeration or production network," where geographical proximity enables economies of scale, interactions among various actors, information flows, and access to markets (Galvez-Nogales & Webber, 2017; Wardhana et al., 2017) [2]. In the context of the agricultural sector, the term agro-cluster is commonly used to describe the concentration of agricultural activities in a specific region and its surroundings that generate income and employment opportunities (Galvez-Nogales & Webber, 2017) [2].

At present, systematic work has also been carried out in our country to establish clusters, create their legal frameworks, and develop organizational mechanisms for their operation. "A cluster is a group of enterprises that unites all participants of the value chain (farmers, processing enterprises, exporters) toward a common goal. The cluster system is an integrated system that encompasses processes from the cultivation of raw materials to the delivery of processed finished products to the consumer" [4]. In other words, the cluster system is not only limited to agriculture but also covers industry and service sectors, determines development directions in accordance with modern requirements, and serves as a system that encourages free and efficient labor. Most importantly, clusters play a significant role in the sustainable economic development of regions, and this approach allows for the identification of economically priority sectors and projects.

The main objective of cluster activities is "to obtain higher income with lower costs and to improve financial performance." In achieving this goal, not only the creation of effective management but also the establishment of methodological foundations of management accounting to ensure the transparency of accounting information is of great importance [5], [6]. In this regard, it is advisable to analyze the accounting and analytical tools used, since the final product of analyzing accounting data and management accounting registers consists of management reporting forms and other targeted reports developed to address managerial tasks beyond the system. Taking into account the specific characteristics of a particular enterprise and the individual features of constructing its management accounting system, the implementation of organizational and communication activities in relation to the accounting process is also an important issue.

2. Methodology

In this study, data collection, observation, and a systematic approach were employed to examine the concept of management accounting, as well as to determine the accuracy and transparency of cost accounting through the application of modern methods of management accounting for the purpose of making effective management decisions [7]. In addition, comparative and systematic analysis, along with economic and statistical methods, were used to ensure the effective organization of management accounting.

3. Result and Discussion

It is necessary to effectively utilize the available opportunities in agro-industrial clusters and to introduce modern equipment and technologies for product cultivation. At the same time, in order to ensure economic growth, it is appropriate to continue efforts aimed at increasing the competitiveness of produced goods and their export potential [8]. For this purpose, implementing

measures aimed at reducing product cost, which is one of the key factors of economic growth in agro-industrial clusters, and properly organizing cost accounting is considered one of the pressing issues.

At present, within this direction, the search for opportunities to reduce the cost of value created by clusters as a result of ongoing reforms is regarded as a relevant problem from the standpoint of economic efficiency. It is well known that the lower the product cost, the higher the profit obtained by the entity. On the other hand, reducing the cost of production may also have negative effects, particularly through its impact on product quality, as cost reduction may sometimes lead to quality deterioration. In order to prevent such adverse outcomes, the purposes of management accounting require the use of modern methods to ensure effective cost management and their proper allocation across accounting objects.

If "minimization of production costs" is selected as a method for evaluating costs in cluster activities, cost management will be associated with reducing these costs. At the same time, it is also possible to adopt the criterion of "maximizing efficiency at fixed costs" within хозяйств. This does not imply that costs remain unchanged; if their increase leads to improved efficiency, they may rise [9]. Therefore, managers must determine in advance the growth rates of specific costs. Achieving efficiency at fixed costs requires the application of more complex tools compared to simple cost reduction. This primarily involves optimizing existing resources, implementing "Just in Time" delivery, managing product assortment, and applying various methodologies of production planning.

Under current economic conditions, it is advisable to use modern methods of product cost calculation for management accounting purposes. Among such methods, "Standard Costing," "Direct Costing," and the "JIT" ("Just in Time") system can be highlighted. The application of these methods has become necessary in agro-industrial clusters as a result of organizing accounting based on international standards and the separation of management accounting from financial accounting [10]. One of these methods is the "JIT" ("Just in Time") system.

This method of product cost calculation is mainly based on principles such as "producing goods only when there is demand" and "manufacturing exclusively according to customer orders," which ensures that products are continuously aligned with demand and prevents unnecessary expenditures in production [11].

The JIT system, in turn, is a management strategy that aligns suppliers' raw material orders directly with production volumes. Clusters use this strategy to increase efficiency and reduce waste by acquiring only the goods necessary for the production process, thereby lowering costs. This method requires manufacturers to accurately forecast production volumes and helps prevent losses (Figure 1).

As a result of applying this method in the accounting practice of agro-industrial clusters, a portion of fixed costs is treated as variable costs [12]. Consequently, administrative expenses included in period costs decrease, and the responsibility of хозяйств for their performance increases, which in turn enhances their material incentives.

Through effective cost management, the "JIT" system of product cost calculation предусматривает the reduction of work in progress in production, minimization of resource consumption, and the timely execution of production from the moment orders are received [13].

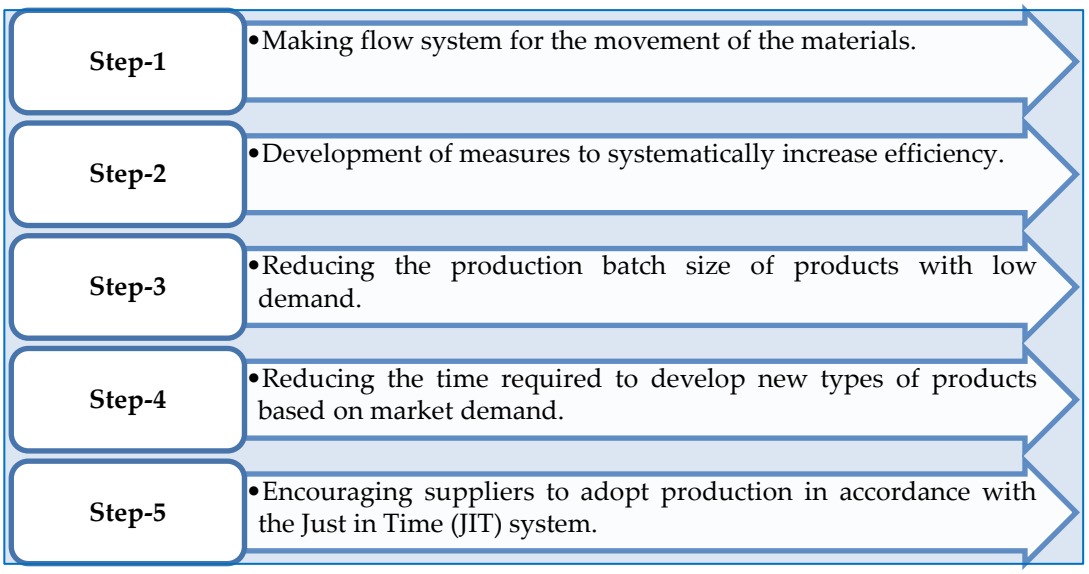

Figure 1. Stages of preventing losses in agro-industrial clusters through the "Just in Time" system.

For agro-industrial clusters, forecast indicators are considered one of the key tools of the management accounting system for predicting the entity's future financial and economic activities to a certain extent. Typically, these indicators are developed to cover a period of 3 to 5 years. In this process, the financial responsibility centers of the entity must provide a detailed description, taking into account the reporting periods [14]. At their level, not only are various indicators evaluated step by step to achieve management objectives, but if the planned indicators lead to significant changes, they should be adjusted over specific periods, including quarterly and annual intervals. Unfortunately, at present, it can be observed that methodological issues related to the development of forecast indicators for management accounting purposes have not been sufficiently studied in the relevant literature.

The application of the "JIT" accounting system improves the quality of cost management and control and enables more accurate pricing. It also simplifies the accounting of production costs. Through this, it becomes possible to forecast costs for enterprise activities, determine what types of products should be developed in the future, and plan their supply in advance.

Table 1. Conditions for the Effective Application of the "Just in Time" Method in Agro-Industrial Clusters.

Directions	Description
Production program (business plan)	Stable demand (characterized by very low variability).
Location/Regions	Available space should be expanded (JIT warehouse operations require lower costs compared to maintenance expenses).
Production process	Short setup time and high availability of production equipment.
Production capacity	Availability of flexible reserve production capacities.
Skill level	The most important requirement for employment in the process is to have a 100% qualification level.
Planning	a) Resources should be centrally managed using JIT within the production program; b) Resource consumption should be decentralized using JIT.

Supply	Ensuring connections with selected (alternative) suppliers in case resources are not delivered on time by primary suppliers.

By applying the JIT method in agro-industrial clusters, the following advantages can be achieved:

- Reduction of inventory holding costs (warehouse personnel, warehouse equipment, rental of storage facilities, etc.);
- Reduction in order processing time (due to smaller batch sizes, reduced setup time, and minimized downtime);
- Improvement in the supply of materials, spare parts, and semi-finished products through locating suppliers closer to producers in order to ensure efficient use of local resources (additionally contributing to job creation and regional development);
- Long-term planning capabilities for suppliers and improved distribution of goods;
- Rationalization of production through the specialization of suppliers in ordered goods, and others.

In general, management accounting is based on comprehensive performance indicators and a forecast balance, which rely on five key components characterizing the main strategic aspects of enterprise activity. These components should include the following elements: financial and economic activity, which represent the traditional elements of any accounting and management system; the consumer component of activity, which reflects the company's competitive environment and determines its competitive strategy. Based on customer orientation, key performance indicators influencing enterprise evaluation and the achievement of strategic goals are calculated, while process activities are also determined by important competitive strategies [15]. The cognitive component reflects the current role of the enterprise in its growth and the increasing importance of development trends. This element of strategy reflects the direction of development in employee culture, technology, and qualifications, and serves as an indicator of the quality of the company's internal processes. Activities related to the organization of strategic management accounting, as an accounting process, take into account strategic initiatives, strategic changes, planned and ongoing developments, as well as institutional changes in the external and internal environment, including the positions of stakeholders and competitors.

4. Conclusions

In modern management accounting practice, one of the most commonly used tools employed by clusters is a system of comprehensive performance indicators aimed at effectively managing and implementing cost control and product cost calculation objectives. Their application makes it possible to identify the most problematic areas in the activities of agro-industrial clusters, as well as potential opportunities for development and improvement.

The "JIT" system of product cost calculation differs from other accounting methods in that it aligns with the ongoing economic reforms in the sector. Organizing cost accounting through the "JIT" system for management accounting purposes allows not only the reduction of certain types of costs but also ensures accurate product cost calculation and makes it possible to reduce it by up to 10 percent.

We believe that organizing cost accounting in agro-industrial clusters through the "JIT" system makes it possible, along with reducing specific types of costs, to ensure accurate calculation of product cost and achieve its reduction.

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