

SECTION 1. ACCOUNTING REGION AND AUDIT

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1.1 Internal and external advantages of HACCP implementation in agricultural enterprises

In a market economy, agricultural enterprises to increase the profitability of production try to produce quality and safe for the consumer products. Agricultural products - a specific object of study, from the beginning of production to the receipt of products to the consumer, it goes through many stages, which are characterized by different quality indicators. Agricultural products are high quality if they have enough fats, proteins, minerals, vitamins, ie are safe. Production of quality products usually incurs additional costs [1].

Quality costs are the internal economic basis of the entire quality system, as their evaluation, accounting and audit create the preconditions for making optimal management decisions [2]. Since the cost of quality is one of the elements of the cost of finished products, there is a need to organize their accounting.

At the international level, accounting for product quality costs is based on risk analysis and control at critical points of the technological process (HACCP system - Hazard Analysis and Critical Control Points). There is nothing fundamentally new in the requirements of HACCP - HACCP only conveniently systematizes the numerous sanitary and technological norms and rules of production, facilitates the current control [3].

ISO 22000 brings all this to the international level of standardization for export-import relations. It is easy for enterprises with new modern equipment to apply this in production, but the standard is designed to take into account the development opportunities of all enterprises. HACCP is a management tool that provides a more structured approach to the control of identified hazards than traditional methods such as inspection or quality control [4]. The use of the HACCP system will make it possible to move from testing the final product to developing preventive methods.

Currently, there are unresolved issues regarding the organization of accounting, accounting and auditing of product quality costs in agricultural enterprises.

Product quality should guarantee the consumer satisfaction of his requests, product reliability and cost savings. These properties are formed in the course of all reproductive activity of the enterprise, at all its stages and in all links. At the same time the cost size of a product which characterizes these properties from planning of developments of production to its realization and after sales service is formed.

Such economists as: V.M. Parkhomenko, L.P. Petryshyn, O.V. Lysa, R.P. Andrushko et al. The analysis of scientific publications shows that today there are unresolved issues regarding the rationalization of accounting and auditing of costs for the quality of agricultural products.

In our opinion, "quality costs" should be understood as the cost of systematically implemented measures and processes to ensure and improve product quality for the needs of consumers, in accordance with established technological requirements and standards [5].

Based on the large number of different scientific interpretations of this category, there is a need to study the organizational principles of accounting and cost control for product quality for each of the classification groups.

Agricultural products have different purposes. According to this criterion, it is divided into three types: final consumption, intermediate and raw materials, the characteristics are given in table. 1.

Each of these types of products has its own quality indicators. Under the quality indicator is understood the quantitative expression of one or more homogeneous properties of the product that meet certain needs of consumers in relation to its intended purpose and conditions of use.

The ratio of the actually achieved quality indicator to its normative (basic) value determines the level of product quality.

Table 1

The main types of agricultural products by purpose

Type	Product characteristics
Raw materials	Agricultural raw materials are represented by those types of products used for industrial processing (sugar beet, technical varieties of potatoes, a significant proportion of grain, flax products, sunflower, etc.).
Intermediate products	Products intended for further use in agricultural production in the following cycles of reproduction (seeds, planting material, feed).
Final consumption products	These include products that are directly used due to their biological quality characteristics (fresh vegetables, fruits, berries, whole milk, etc.).

When substantiating quality indicators and establishing their specific levels for certain types of agricultural products requires a comprehensive consideration of the main factors, Figure 1.

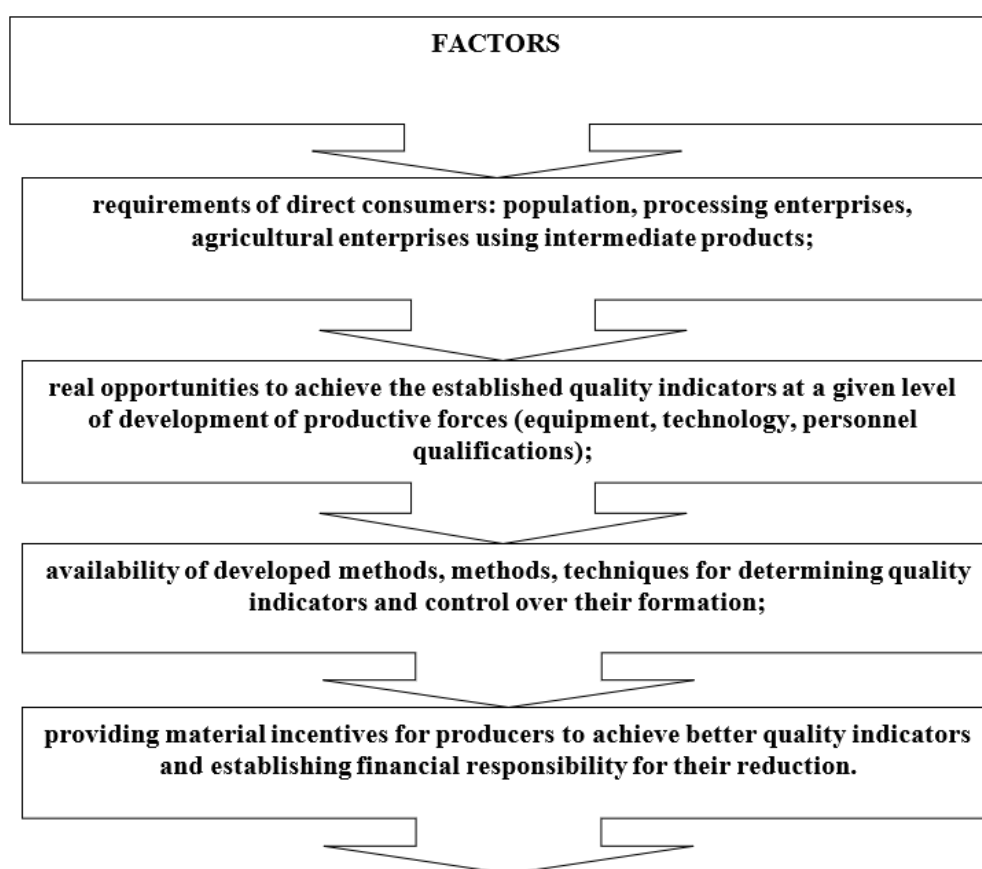


Figure 1. Comprehensive consideration of the main factors in substantiating the quality of agricultural products.

According to world experience, product quality is a function of the level of development of scientific and technological progress and the degree of implementation of its results in production. The higher the quality of products, the more the needs of consumers are met and the more effectively solved socio-economic problems of society [6]. Quality indicators, Figure 2.

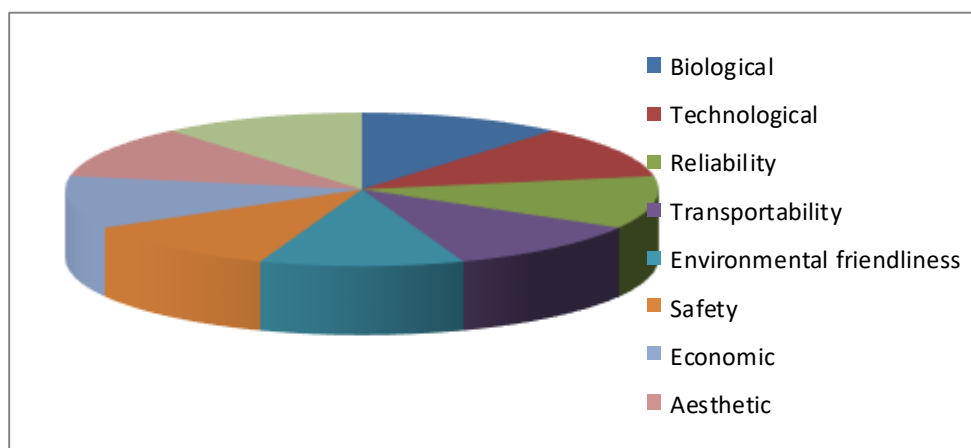


Figure 2. list of quality indicators of agricultural products.

Until recently, a system of technical regulation operated in Ukraine, in which the requirements for products, including food products, were determined by the state in cooperation with manufacturers. After signing the Association Agreement, Ukraine undertook to reform the system of technical regulation and bring it up to European requirements. In particular, it was decided to adopt European standards as national standards with the simultaneous cancellation of GOST standards, which were developed before 1992, and DSTU standards, the requirements of which did not meet European and international practice [7].

Ukraine has a Law "On Basic Principles and Requirements for Food Safety and Quality" and the introduction of innovations provides for the introduction of a European concept of product safety and quality management, which is based on a "field-to-table" approach and requires traceability under EU Regulation № 178/2002 [1]. This Law also sets the terms for the gradual transition to the application by

manufacturers of procedures based on the principles of risk analysis, hazards and control at critical points of HACCP.

HACCP is a science-based system that guarantees the production of safe products by identifying and controlling hazards [8]. The HACCP system is the only food safety management system that has proven its effectiveness and has been adopted by international organizations. For more than 40 years of using the HACCP concept, the international community has recognized that this system works best if it is based on seven principles:

- 1 - analysis of dangerous factors;
- 2 - definition of critical control points (CTC);
- 3 - definition of critical limits for CPC;
- 4 - installation of a monitoring system for the CPC;
- 5 - establishment of corrective actions, if the monitoring results indicate a loss of control in the CPC;
- 6 - establishment of verification procedures to confirm the effectiveness of the HACCP system;
- 7 - establishment of a system of documentation and data registration. HACCP is a management tool that provides a more structured approach to the control of identified hazards, compared to traditional methods such as inspection or quality control.

The use of the HACCP system makes it possible to move from testing the final product to the development of preventive methods.

Therefore, the cost management system for the quality of agricultural finished products should be implemented on a comprehensive basis.

In our opinion, the stages of the process of organizing the accounting of costs for the quality of agricultural products and their main provisions should be enshrined in the accounting policy of agricultural enterprises.

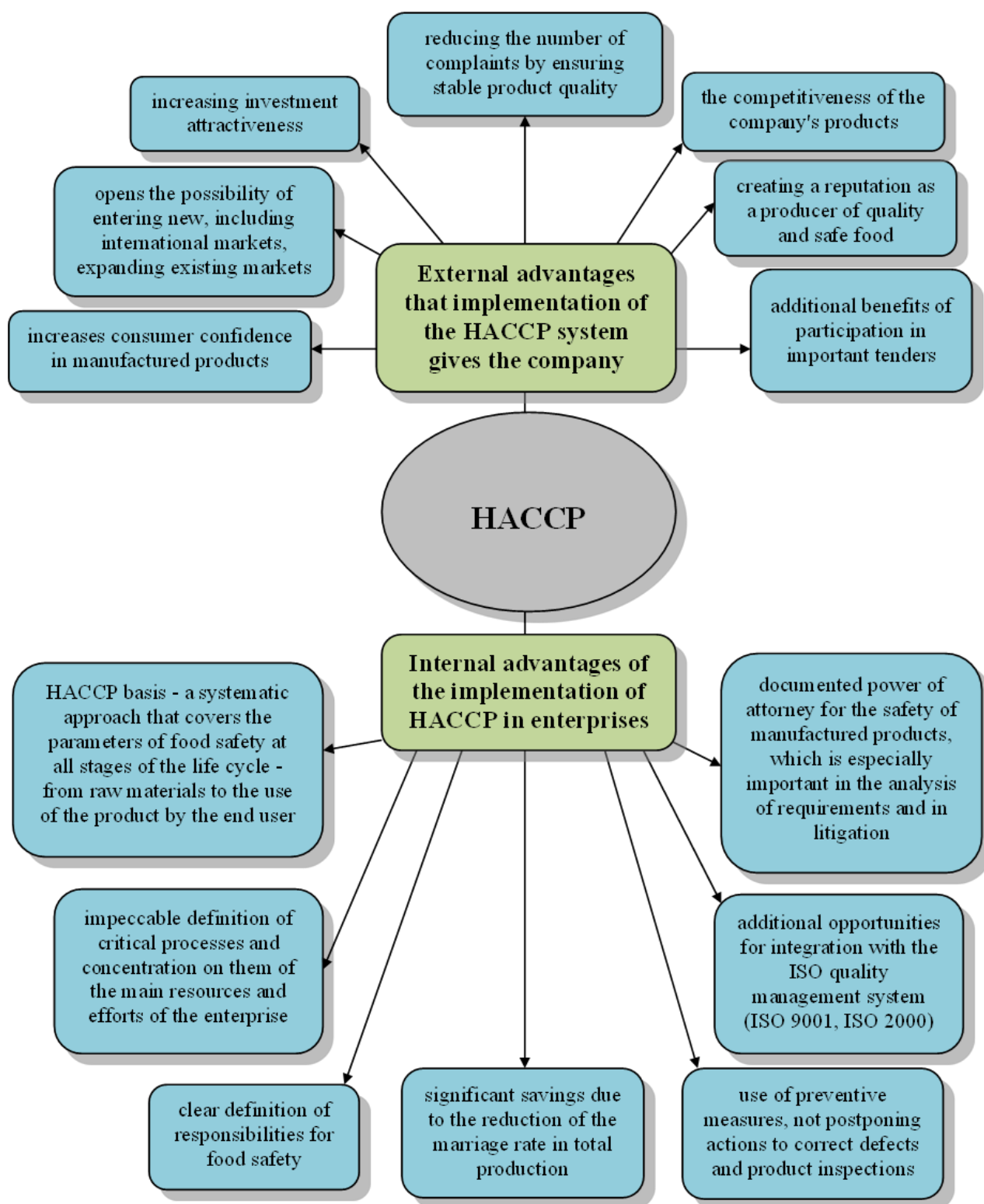


Figure 3. internal and external advantages of HACCP implementation in enterprises.

The Order on the accounting policy of the enterprise must contain a section on the accounting of product quality costs or a separate "Regulation on quality costs" should be developed. In this Regulation, it is necessary to collect information, both accounting and general management, regarding costs for the quality of agricultural

products, taking into account the requirements of the standards of European trade networks, Figure 4.



Figure 4. List of costs to improve the quality of agricultural products.

Author's own generalizations*

External audit of product quality should be carried out by buyers and customers of agricultural products, as well as third-party independent accredited organizations. The purpose of the internal quality audit should be not so much to identify existing errors and violations in the production process, as an analysis of the possibility of improving product quality. It is expedient for agro-industrial enterprises to conduct an internal audit to declare their products to quality standards.

Some of the market operators mistakenly believe that the introduction of the HACCP system is necessary only for new enterprises and does not apply to existing small and medium-sized enterprises.

To accelerate the pace of implementation of HACCP systems in Ukraine, a computer program HACCP-TRADING has been developed, which allows to apply permanent procedures of the System in digital form without the use of paper media.

Economic rivalry of enterprises, individual associations, their struggle for markets focus not only on price but also largely on non-price factors. Among these factors are advertising, creation of favorable conditions for sale of production, maintenance after sales service of buyers and the special place is occupied by quality of production. It is clear that at the same price a product of higher quality will be in greater demand.

High-quality agricultural products provide higher profitability and financial stability of the enterprise, enhances the image, promotes the entry of agricultural enterprises into the world market.

At present, there are no methodological recommendations in Ukrainian legislation on accounting for product quality costs and National Accounting Regulations (Standards), so agricultural enterprises organize accounting at their own discretion and in accordance with their needs.

Due to the improvement of quality and rational use of other non-price factors, the company can get not temporary advantages over competitors, as in lower prices, but long-term, as the latter takes a long time to improve the product and make necessary changes in its production technology.

Therefore, in order for Ukraine to enter the international markets with agricultural products, it is necessary to strengthen control over the safety and quality of all agricultural products, especially food.

Agricultural and food enterprises need to implement the HACCP system, strengthen state control over food safety, and conduct audits of the effectiveness of state control systems for food safety and the quality of agricultural products.

Agricultural enterprises should conduct an internal audit to declare agricultural products to EU quality standards. The purpose of the internal quality audit should be to analyze the possibility of improving the quality of agricultural products and reducing costs, monitoring the implementation and improvement of technological processes. At the research stage of the internal audit, collect evidence regarding the objects of the product quality audit. For this purpose, use methods of chemical control and testing of products, technical diagnostics of equipment condition, and others. Based on the results

of the audit, labeling of products should be carried out, which would reflect the level of its quality.

To speed up the pace of HACCP systems implementation in Ukraine, it is advisable to use the HACCP-TRADING computer program. Since this program allows you to use the System's ongoing procedures in digital form and without the use of paper media.