



**Раздел 4**  
**ОБЩЕСТВЕНИ НАУКИ**  
**Section 4**  
**SOCIAL SCIENCES**

**ORGANIZATIONAL AND ECONOMIC ASPECTS OF FOOD QUALITY**

**N. P. Chorna\***

*of Ternopil National Economic University*

Revised 25 November 2013, Accepted 30 January 2014

**Abstract:** Approaches to development and implementation of quality management systems at different hierarchical levels are analyzed in the paper. Features of the application of modern methods of quality control and based on its systems in the sphere of quality assurance in food production are defined. Key challenges of forming an effective organizational and economic mechanism of quality control of food products are outlined. Necessity of state control in the sphere of standardization of food production and the implementation of appropriate regulatory measures to stimulate the introduction of certified quality management systems in the scope of national food production is emphasized.

**Key words:** quality, food, management system, organizational and economic mechanism.

**STATEMENT OF THE PROBLEM**

The activity and productivity of life of human society directly depends on the availability and affordability of high-quality food products. At the same time, in connection with the transition to the new conditions of economic and technological structures, changing the fundamental principles and factors of food security of the population. The actual problem is not so much the presence or availability of a certain amount of food, as its stable quality and safety for consumers' health.

**ANALYSIS OF RECENT RESEARCH AND PUBLICATIONS**

It is worth noting that the issue of ensuring a good quality of food at different hierarchical levels studied by many scientists, including D.F. Krysanov, P.A. Layko, A.S. Lysetsky, P.T. Sabluk, L.G. Chernyuk, O.B. Shmaglii, I.R. Yukhnovsky, etc. The authors offer the basic mechanisms for ensuring the population of the state with high-quality food products. At the same time, the problem of quality control in the production of food at both macro- and microeconomic level remains uncharted. Relevant issues, in particular, are the implementation of international legal standards for the quality and safety of food in national legislation, the optimization of the organizational structure of food quality management, expanding tools of modern methods of quality control in the food industry.

**THE MAIN MATERIAL**

Quality is one of the most important tools used in contemporary conditions for product positioning at the market

and has two key characteristics – the level and consistency. The quality level must provide the position of the goods at the target market. The quality of the product is identified with the goods ability to carry out its functions. And, from a marketing standpoint, the quality should be measured in the definitions of consumer perception, that is, the enterprises should choose the level of quality that meets the needs of the target market and quality levels of competitors (Balabanova L.V. et al, 2012, p. 20).

On the other hand, with the customer's perspective the quality of the goods is a measure of compliance with the totality of the characteristics and properties of the product set of needs and expectations of the buyer, the ability to meet the needs in the use of the goods. This indicator varies with the level of requirements for products.

Ensuring food quality, as well as any other products or services, it is impossible without establishing an effective quality management system. Quality management is considered as a coordinated activities aimed at ensuring the optimum quality of goods (services) produced (provided) enterprise (industry).

Solving problems of good control at different hierarchical levels requires the use of a number of quality management methods, which are traditionally divided into classic and modern.

Classical methods of quality management that have emerged, mostly in the first half of the XX century

\* E-mail:MMV.Roza@gmail.com

and are the foundation of modern quality management systems include:

1. Statistical methods for quality control, allowing to identify and distinguish between random and systematic deviations of quality as well as explore the reasons for their occurrence.

2. Benchmarking - the study and implementation of management practices of successful companies by comparing them with their own.

3. Cyclical model of quality management PDCA (Plan-Do-Check-Act).

4. "Juran Triad" - the quality management process ensures a consistent combination of three things: quality planning, quality control, quality improvement.

5. Methods of technical design quality Taguti designed to control the quality of the planning stage. Such management includes three stages:

- system design, aimed at the development of a prototype unit of production, using the latest advances in science and technology;

- parameters design – choice of variables values for which the projection objects receive the maximum resistance to external influences;

- tolerances design – the development of cost-effective performance of projected units.

In order to account the peculiarities of the current stage of development of the world economy classical methods of quality management have been supplemented by a number of new modern techniques. Among them are six methods that, in our opinion, the most appropriate to apply in the process of quality control in food production.

1. The concept of "Just-in-Time» – the system of business organization in which the parts arrive at the next stage of the cycle only when the need for them arises (the precise term). Under such conditions there is no accumulation of raw materials, parts, documents, at some stage the firm can quickly rebuild its production in accordance with the requirements of quality.

2. Methodology processing of economic information and management estimates that more efficient is improvement not itself products as well manufacturing processes. The main characteristics of such processes – the flexibility and minimum costly.

3. Reengineering - a radical restructuring ("from scratch") of the main business processes in response to customer needs for rapid improvement in the quality characteristics of products.

4. The concept of "six sigma" (USA, 1981) - focusing on the most important characteristics of products for the consumer and ensuring such level of efficiency that would guarantee on one million of transactions only 3-4 defects (Balanovska T.I., Boretska S.P., 2012, p. 241).

5. Deployment of quality function ("house of quality") – the transformation of customer needs into specific product characteristics and thereof combinations.

6. The concept of continuous quality improvement "Kaidzen" - improving the efficiency of production processes with the participation of each employee in own workplace. Great importance is attached not so much the quality of the result, as the quality of the process to achieve it (the work).

In the context of improving the food quality these methods, in our opinion, can contribute to the solution four important tasks (Figure 1), including:

- A complete satisfaction of the consumers needs.
- Optimization of production processes.
- Development and implementation of organizational and economic mechanisms of control.
- Development of the concept of ensuring the quality of food.

At the level of the national economy for the implementation of quality systems that meet the international standard and improve the quality of domestic products, it is necessary to create and develop a network of educational and research institutions at all levels, consulting and certification centers. The implementation of the state policy in the field of food quality management should be carried out taking into account the current state of development of the domestic market.

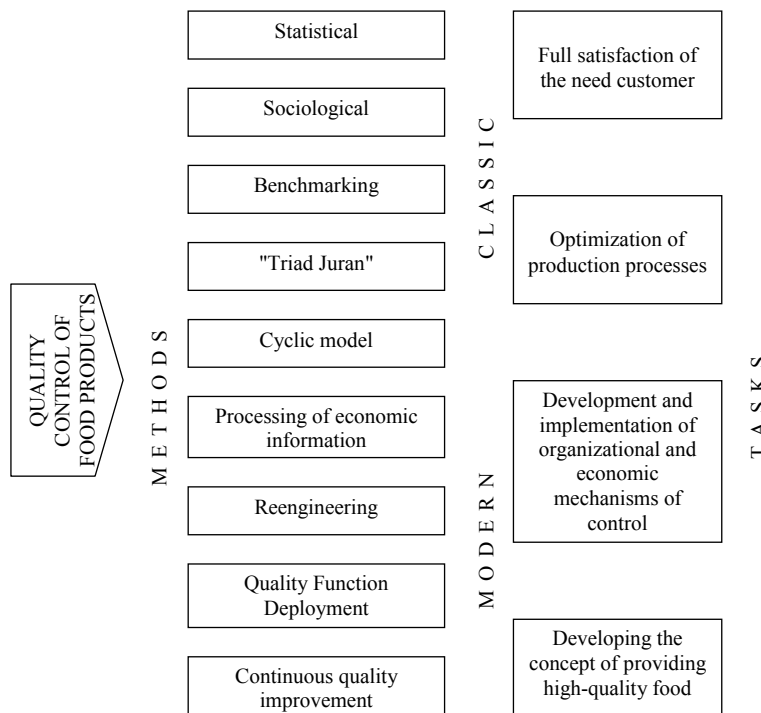


Figure 1. Methods and problems of food quality management

Special attention should be given raw material supply of food production, form, mainly with the participation of agricultural enterprises. According to experts, a significant increase in the production of high-quality agricultural products and foodstuffs is possible upon condition:

- forming an effective system support the agricultural producer, in accordance with the requirements of the WTO and the EU;
- harmonization of national standards of agricultural and food products with international standards;
- develop and implement a national program of crediting high quality agricultural lending products and foodstuffs (Layko P.A. et al., 2005, p. 21).

At the same time, only the protectionist and program-target methods of management at the sectoral level, in our opinion, the organizational and economic mechanism of quality control in food production is not limited. As evidenced world experience, effective quality management is not possible without the introduction of standardized quality management systems.

The quality management system must function so as to provide assurance that the problems associated with product quality are cautioned and not solved as incurred. Consequently, such a system should be focused on carrying out preventive measures, precluding the possibility occurrence of defects and inconsistencies.

It is believed that in process of preparation for the establishment of a quality management system is necessary to solve a number of problems:

- establish the needs and expectations of customers and other interested parties;
- formulate policies and goals of the organization in the field of quality;
- establish processes and responsibilities that necessary for achievement the purpose of the quality;
- identify the necessary resources to achieve its goals;
- develop methods to measure and determine the effectiveness and efficiency of processes;
- identify the range of tools to prevent inconsistencies and eliminate their causes;
- develop and implement appropriate processes for continual improvement of the quality management system (Shapoval N.I., 2007, p. 217).

At the same time, in the field of food production listed tasks have their own specifics, which is to account for the value of the priority sector output for the life of human society. In particular, the important problem is the ratio of high-quality food products and its accessibility (both physical and social) for all segments of the population.

However, in spite of certain specificity in the production of food products are widely used general principles of quality management system ISO, including customer focus, management leadership, involvement of people, processuality, systematic, permanent improvements, the validity of decisions, mutually beneficial relationships with partners.

Though the existence of the enterprise quality management system and certification is voluntary, but it is in today's highly competitive offers certain advantages in the market, helping in the formation of positive public opinion about the company, its position in the market, reputation, etc. (Vandyak N.P., 2008, p. 194).

Consequently, the result of the implementation of the

quality system is the increase in production and sales, increase production efficiency by reducing costs and losses associated with flaw. Furthermore, due to strengthening of goodwill companies increased their investment attractiveness rating. For the domestic food industry the importance of implementing quality systems consists in the fact that, since the certificate of conformity of the quality management system is international, its presence facilitates the access of domestic products to foreign markets.

Analysis of the domestic market of food products shows that a significant threat to the quality of food is the small processing plants, especially the dairy and meat industries. Namely these businesses is create more price competition largest producers. As evidenced the world practice, the government should set high demands on the quality of food and raw materials used to produce food and thus regulate the relevant market (Layko P.A., 2005, p. 21).

**Conclusions.** Therefore, to improve the functioning efficiency of the organizational-economic mechanism to ensure the quality of food products, in our view, it is necessary introduction of the following measures:

- creating an enabling environment for high-performance activities of research institutions (legislative base, adequate financing);
- the production of green crops and livestock products for advanced technologies;
- processing of agricultural products using modern technologies without the use of harmful ingredients;
- effective control of the specialized government food quality in accordance with international standards;
- encouraging the introduction of certified quality management systems in the domestic food industry and agriculture.

One of the most effective means of solving quality issues in food plants is the introduction of a quality management system. It must be designed so that it covers the entire life cycle of products in three main principles: security, governance and quality improvement. At the same time, to maximize the effectiveness of the mechanism of ensuring the quality of food is also a priority of the government should be to promote the production of high-quality competitive products using resource-saving and environmentally friendly technologies.

## REFERENCES

- [1]. Balabanov L.V., et al. Marketing of company. Kyiv, 2012, 645 p.
- [2]. Balanovska T.I., Boretska Z.P. Modern and classical methods of quality control: features and prospects of application. In: *Scientific Bulletin of National University of Life and Environmental Sciences of Ukraine. Series: Economics, agricultural management, business*. 2012, 1, p. 239-246.
- [3]. Vandyak N.P. The mechanism of providing high quality products in food business management system. In: *Economic Analysis*. 2008, 2, p. 192-196.
- [4]. Layko P.A., et al. Quality of agricultural products and foodstuffs as a crucial component of food security. In: *Economy of APC*. 2005, p. 12-21.
- [5]. Shapoval M.I. Quality Management. Kyiv, 2007, 471 p.