

The Quality Management System Improvement for the Enhancement of Production Competitiveness

El mejoramiento del sistema de gestión de la calidad para mejorar la competitividad de la producción

Salima MIZANBEKOVA [1](#); Nurdaulet UMBETALIEV [2](#); Aigul AITZHANOVA [3](#); Anton BOGOMOLOV [4](#)

Recibido: 14/07/2017 • Aprobado: 30/07/2017

Contents

[1. Introduction](#)

[2. Method and Results](#)

[3. Conclusion](#)

[References](#)

ABSTRACT:

The purpose of this article is to solve the problem of agricultural enterprises related to food quality control in countries with economies in transition, as well as to develop recommendations to improve the quality management system in the context of transition to market economy, to improve the competitiveness of food products on internal and international markets. In developing recommendations for an effective strategy to improve the competitiveness of agricultural products in countries with economies in transition (the case of the Republic of Kazakhstan), we have used strategic analysis to develop and implement the instruments of strategic management, forecasting, optimization and improving the resource use of agricultural enterprises. We have also selected the most effective available elements of quality management system by comparing the quality management elements in terms of their effectiveness to form a quality management system for agricultural food production in countries with economies in transition. We have studied the experience of production enterprises in Central Asia, in particular, livestock enterprises in the Republic of Kazakhstan, peasant farm enterprise "Amangeldy" (Zhambyl region) and group of companies "Agroprodukt" (Almaty)). We

RESUMEN:

El objetivo de este artículo es resolver el problema de las empresas agrícolas relacionadas con el control de la calidad de los alimentos en los países con economías en transición, así como formular recomendaciones para mejorar el sistema de gestión de la calidad en el contexto de la transición a la economía de mercado, De productos alimenticios en los mercados internos e internacionales. Al elaborar recomendaciones para una estrategia eficaz para mejorar la competitividad de los productos agrícolas en los países con economías en transición (el caso de la República de Kazajstán), hemos utilizado el análisis estratégico para desarrollar e implementar los instrumentos de gestión estratégica, previsión, optimización y mejora El uso de recursos de las empresas agrícolas. También hemos seleccionado los elementos disponibles más efectivos del sistema de gestión de la calidad comparando los elementos de gestión de la calidad en su efectividad para formar un sistema de gestión de calidad para la producción de alimentos agrícolas en países con economías en transición. Hemos estudiado la experiencia de las empresas de producción en Asia Central, en particular, las empresas ganaderas de la República de Kazajstán, la empresa campesina "Amangeldy" (región de

have found what causes the low organization level of production, labor, product quality control and interaction between enterprises producing, processing and transporting products. We have developed methodological and practical provisions on the quality management system structuring and on the choice of areas to improve management of enterprise's competitiveness, based on the implementation efficiency analysis of quality management system at the enterprises of the Republic of Kazakhstan.

Keywords: quality management, quality control, improving competitiveness, enterprise management, emerging economy.

Zhambyl) y el grupo de empresas "Agroprodukt" (Almaty). Hemos encontrado qué causa el bajo nivel de organización de la producción, la mano de obra, el control de la calidad del producto y la interacción entre las empresas de producción, procesamiento y transporte de productos. Hemos desarrollado disposiciones metodológicas y prácticas sobre la estructuración del sistema de gestión de la calidad y sobre la elección de áreas para mejorar la gestión de la competitividad de la empresa, sobre la base de la aplicación del análisis de eficiencia del sistema de gestión de calidad en las empresas de la República de Kazajstán.

Palabras clave: gestión de la calidad, control de calidad, mejora de la competitividad, gestión empresarial, economía emergente.

1. Introduction

Production quality improvement is one of the most important efficiency factors. Effective management in both product campaign (quality improvement at the enterprise) and in socio-economic environment (improving the quality of logistical systems, access to the customer – namely, management of competitiveness) is the most attractive way to improve the quality of products and to ensure an adequate level of competitiveness. Quality management and management of competitiveness are the most important areas of general enterprise management, defining policy, objectives and responsibilities in these areas.

Quality management system providing high quality and competitiveness of products are successful in many companies of industrialized countries. In most cases, these systems are similar to ones in the countries with economies in transition (CEIT) like the Republic of Kazakhstan, but unlike them, they are much more effective (Kolz, & Ul, 2000; Basaev et al., 2016, pp. 12680-12689).

Composition and nature of a quality management system (QMS) are subject to a number of international and national quality management standards of production (Smigić et al., 2015, pp. 94-108; Zimon, 2015, pp. 551-564; Escanciano, & Santos-Vijande, 2014, pp. 50-57).

Agricultural enterprises of CEIT require QMS that ensure the competitiveness of saleable food products in relation to companies from developed countries. Thus, quality management depends on the success of competitive products on the market, as the price policy and quality policy are the main factors of competitiveness.

Although the specialists have paid a considerable attention to the issues of quality and competitiveness, particularly relevant they are in the context of modern deepening integration, characterized by fierce business struggle that requires the search for areas to increase production competitiveness of agricultural producers in CEIT. The competitiveness is based on the quality level, defines perspective areas of enterprise development, benefits over the competitors and determines the prospects of entering the European and world markets.

The relevance of this article is determined by the necessity to improve the product quality management in agricultural enterprises of CEIT for improving competitiveness of food products on internal and international markets. Wherein, the search for ways to build an ensuring strategy for competitiveness of agricultural products in relation to producers from developed countries with due account for enterprise operation peculiarities in certain CEIT (the case of the Republic of Kazakhstan) is an important area of research.

In developed countries (in particular, the USA, EU countries, especially Japan), scientists and experts pay great attention to the problems of quality and reliability, product quality control, statistical quality control and quality promotion, as they are important for internal food market development (Varakuta, 2001).

In general, we consider the focus on potential product buyer's requirements as the most

relevant conceptual area in the field quality and competitiveness (Grønholdt et al., 2015, pp. 90-106). In line with this concept, product quality is determined by how well the consumer requirements were met in operating of the purchased goods. In this connection, many modern studies (Prasad et al., 2015, pp. 270-287) explain the product quality concept somewhat differently than it was until recently (Mastrangelo, 2010). Quality management, focused mainly on the control, is the old type of quality management. Quality should be introduced in each project and each process of creating new products; it cannot be achieved by controlling the released products (Grønholdt et al., 2015, pp. 90-106; Prasad et al., 2015, pp. 270-287; Kadłubek, & Grabara, 2015, pp. 265-278).

Standards have a significant role as a regulatory framework of QMS in modern research on product quality improvement. Currently, international standards ISO 9000 that contain quality management experience of different countries are generally recognized (Thatte et al., 2013, pp. 499-530; Fonseca, 2015, pp. 85-102), in particular, in the food industry (Masood, 2013). They are accepted as national in many of them, including the Republic of Kazakhstan.

At present, many countries apply the concept of quality management based on TQM (Total Quality Management) in their struggle for competitive advantage (Fonseca, 2015, pp. 85-102). The methodological basis of this concept involves the theory of company's adaptation to customer requirements. In this case, management processes should be based on the requirements of international standards ISO 9000: 2000.

The "new paradigm" of quality management considers the company as an "open" system, the success of which is related to its adaptation capability. The problem is that the developed QMS are not always adapted to the type of market in which the company operates; in particular, it is typical for CEIT. At the same time, global and local markets are appropriate to consider in relation to a particular product and a region, in which the product is sold. Thus, agri-food local market is sensitive to local traditions and has to take into account national, climatic and demographic features of the region.

The purpose and objectives of this research are determined by the necessity to address quality management issues of agricultural food products at the stage of their production and promotion along with the necessity to ensure the competitiveness of these products on the internal and international markets in the market economy environment of CEIT.

Thus, the purpose of the article is to solve the problem of agricultural enterprises related to food quality control in CEIT, as well as to develop to improve the QMS in the context of transition to a market economy, to improve the competitiveness of food products on internal and international markets.

This goal is related to the following objectives:

- to analyze the implementation efficiency of quality management system at the enterprises of the Republic of Kazakhstan;
- to select the most effective available elements of quality management system to form a quality management system for agricultural food production in the countries with economies in transition;
- to develop methodological and practical provisions on the quality management system structuring and on the choice of areas to improve management of enterprise's competitiveness;
- to develop recommendations for an effective strategy to improve the competitiveness of agricultural products in countries with economies in transition (the case of the Republic of Kazakhstan).

The results are for solving problems of product quality management and promotion on the markets of the CEIT, as they have not been solved yet. This is especially the case of the Central Asian countries (the Republic of Kazakhstan etc.) and the former-Soviet republics with agricultural industry and production different from accepted standards in market-economy countries.

2. Method and Results

In developing recommendations for an effective strategy to improve the competitiveness of

agricultural products in CEIT (the case of the Republic of Kazakhstan), we have used strategic analysis that revealed that the introduction of resource-saving technologies and forecasting instrument development is required to optimize and improve resource use conditions at the agricultural enterprises.

We have also selected the most effective available elements of quality management system by comparing the quality management elements in terms of their effectiveness to form a quality management system for agricultural food production in CEIT.

This article provides a generalization of scientific developments and publications of domestic and foreign scholars on improving enterprise's competitiveness based on quality management, current legislative and regulatory documents.

We have studied the experience of production enterprises in Central Asia, in particular, livestock enterprises in the Republic of Kazakhstan ("RubiKOM" LLP (Pavlodar city), peasant farm enterprise "Amangeldy" (Zhambyl region) and group of companies "Agroprodukt" (Almaty)). The first company is located in dry-farming and cattle-breeding zone with developed meat-and-dairy cattle farming and sheep farming (Northeast of the Republic of Kazakhstan); the rest – in the Tien Shan mountain and submontane zone of irrigated agriculture with developed livestock farming (Southeast of the Republic of Kazakhstan).

Many years of experience of the leading agricultural companies in developed countries show the feasibility of improving the competitiveness of food products on the market by improving the QMS (Kolz, & Ul, 2000; Masood, 2013). According to the International Organization for Standardization (ISO), quality is a combination of product features and characteristics that give it a capability to meet certain requirements (Zimon, 2015, pp. 551-564; Escanciano, & Santos-Vijande, 2014, pp. 50-57).

In terms of quality impact, product competitiveness is assessed mainly by three groups of indicators (Smigić, 2015, pp. 94-108):

- product utility (quality, effect from use);
- consumer's costs in satisfying own requirements (price for goods at the time of purchase, cost of use, repair and disposal);
- suitability for market offer (ways of promotion, payment terms, distribution channels, after-sales service).

The current stage of the world economy development is characterized by the expansion of interstate relations and independent access to the global market of business entities.

In the context of globalization, one of the key objectives for further development of Kazakhstan's economy is the choice of priority areas to ensure the country's competitiveness and tools such as the build-up of capital and increase the value of brands. Brand is a tool for improving the strategic competitiveness of enterprises by maximizing the competitive advantages and maximum adaptation to the expectations of consumers.

On the one hand, modern integration conditions of the CEIT determine the activity of agricultural enterprises planning to export their products abroad, on the other – require the improving of product competitiveness of internal market-oriented enterprises that compete with international producers (Mizanbekova, 2012). This requires production in accordance with international quality standards.

Imperfect state regulation of the Republic of Kazakhstan and other CEIT has resulted in an increased role of raw material, energy-intensive and technological industries and in weakening capacity of top-end production. At the same time, competitiveness is a very dynamic economic category, affected by a number of dynamic factors that are dynamic in terms of influence.

In particular, the intensity and the number of factors may vary at different stages of the product life cycle. The main internal factors affecting the food quality of agricultural enterprises are:

- production and technological (equipment and process upgrades, use of new materials, the quality of agricultural raw material use etc.);
- socio-psychological (labor conditions, favorable climate in the collective, moral incentives and encouraging employees etc.);
- economic (cost of high-quality food product producing and marketing, pricing policies, economic incentives for workers etc.);
- organizational (organization level of labor and production process at the plant, efficiency of product quality management system, product certification, personnel qualification etc.).

The main external factors affecting the food quality involve the level of competition in the market, customer requirements, desire to have a certain position in the market and a positive image of the enterprise, standardization and certification of certain types of products etc.

In the context of the current state, a business capitalization of companies is largely determined by the presence of a strong brand, which in turn requires a constant work on its improvement and strengthening of its market position. Increasing competition and diversity of identical products in the same price segment send companies on a search for new ways to create competitive advantage aimed at winning customer loyalty (Mizanbekova, 2012).

Markets in transition impose new higher requirements to product quality that require registration of changes and trends in the economic space. Scientific-technological progress development and the increased role of knowledge require innovative solutions in industrial, organizational, managerial and distribution processes at the enterprise. Innovations allow enterprises to improve product quality, increase worker productivity, reduce his or her costs, thereby improving own competitiveness in the markets.

Product standardization and certification is important in ensuring product quality, as it is an important regulatory component of product quality management and management of competitiveness. In developed countries, the rise in the level of production, product quality improvement and economic development are related to the widespread use of standardization; it is regarded as one of the methods for competitive struggle (Smigić, 2015, pp. 94-108; Mastrangelo, 2010, pp. 230-231; Fonseca, 2015, pp. 85-102). System efficiency is an important factor in ensuring product quality; technical quality control is an effective instrument of the QMS in ensuring that the targets will match the actual results.

The success of economic science in studying quality has contributed to a captured definition of quality in ISO standards (International Organization for Standardization based on the UN). ISO 9000 provide a single, recognized in the world approach to the contract terms on quality system assessment, and regulate the relationship between producers and consumers. The main purpose of the quality system that are based on ISO 9000 is to ensure product quality, customer requirements and to provide him or her with evidence that the company is capable to do so (Masood, 2013).

At the same time, we believe that the target setting of ISO 9000 on cost-effectiveness is poor or just missing in terms of timely delivery, the quality of brand presentation and promotion. However, despite the fact that the system does not solve all the tasks necessary to ensure the competitiveness of the system, its popularity is growing. Currently, it hold a firm place in the market mechanism.

In the context of market relations, when the enterprises and organizations of the Republic of Kazakhstan have the right of independent access to foreign markets, they, as in all the CEIT, face with the problem of assessing the quality and reliability of own products.

Modern quality management with a systematic approach is based not only on ISO 9000, but also, on the use of statistical methods, which are the most important component of integrated Total Quality Management system (TQM) (Rokke, 2015). This helps to solve traditional engineering, economic and production challenges, simplifies information processing, analysis and use that is the basis for management decision-making.

The basis for all existing definitions of "quality" is a combination of physical, chemical, and

other properties of products as an objective definition of the object—the quality level of which is estimated. It is obvious that the list of quality characteristics can be wider and vary by product and evolve to the same type of product, depending on the level of consumer preferences and society as a whole.

Ensuring the timely and non-stop acceptance of agricultural products, especially perishable, the transition to direct links is of great economic importance, with procuring farms, traders, and processors (Agricultural Policies in Non-OECD Countries, 2007). An important stage in the development of direct links is a gradual transition to the acceptance of agricultural products in the field of production and delivery of specialized transport purveyors. This method of procurement is profitable for farms and processing enterprises. It reduces the losses, improves product quality, and decreases labor, transportation, and, ultimately, the final product cost. Calculations show that the introduction of export center for milk and other products by specialized transport purveyors provides savings in their realization, transportation, and other expenses.

The factual cost of milk transport to dairies is 2-3 times higher than on a single tariff for trucking, thus the closer the radius of the product delivery, the greater the unrecovered costs. At the organization export center by specialized transport of suppliers, the need for milk tankers is reduced by 2.7-4 times depending on the radius of milk delivery and quality of roads. The introduction of products export center has a number of advantages: the representative of meat processing plant receives full-fledged and well-fed cattle; the farms are exempt from transporting cattle and content of special vehicles; labor and machines are released; injuries and stress phenomena of animals are reduced, which improve the quality of the meat and leather raw materials; transport downtime is reduced; utilization of vehicles is increased; and transport costs are reduced (World Tariff Profiles, 2008).

However, the introduction of export center is constrained by a number of factors: lack of equipment for cooling milk on farms, poor organization of its use, the lack of access roads with hard surface, the lack (or absence) of specialized transport refiners, and a number of other reasons (World Agricultural Outlook, 2016). Butter and cheese plants should rent the vehicles in the farms; develop a position on wages and material incentives for the driver, freight forwarder, and a laboratory worker for the implementation of performance and compliance of schedules receiving products; teach them the rules of milk acceptance and registration of accompanying documents on the farms and to conduct certification; develop clear routes and schedules receiving milk on farms to ensure reception of milk in place of its production by weight and quality to the necessary documents for the calculation of the received products; conduct studies with zoologist/veterinarian specialists and heads of households.

For the precise operation of mechanization and electrification at the export center, it is necessary to organize a preventive and technological service of refrigerators and electrical milking on dairy farms according to a schedule through the establishment of exit links (European Union, 2015). Compensation of employees, leading maintenance of milking machines, refrigerators, and electrical equipment on farms, should depend on compliance with contractual terms and conditions to ensure the continuity of their operation.

The quality control of agricultural products is to establish, provide, and maintain the required level of quality in the creation and cultivation of new breeds of animals, the production process and its cleaning, commodity processing, preparation, transportation, storage, and distribution. It is necessary systematically and purposefully to influence the conditions and factors affecting the quality. A unified system of quality management of agricultural products can be created on the basis of standardization. Comprehensive standardization of all types of agricultural products, agricultural machinery and equipment, fertilizers, pesticides, container, fuel and lubricants, and other processes in the crop and livestock sectors, methods of commodity processing, packaging, transportation and storage of agricultural products and control methods will improve the quality of products and its efficiency.

It is necessary to have instrumental methods for determining the parameters of technological

advantages of production related to the size of the payment. Existing methods of quality assessment based on organoleptic sometimes contribute biased assessment. Existing methods for evaluating the quality of milk are labor-intensive and low in productivity, while giving a high consumption of milk yield. Currently, there is a mass production of new high-speed devices in the country (up to 100 tests per hour) that control the quality of milk, particularly fat (TSZHM-1) and protein (BMC-1). Requirements of technical standards for the quality of purchased milk in our country in comparison with the world level are lower. Many farms sell a significant part of the milk as the second grade and off-grade.

A comprehensive sanitary process control system is required, which should be based on the material and technical equipment and the economic interest of each employee. The existing practice of submission of laboratories for quality processing enterprises directly or procurement organizations does not provide an objective assessment of quality. That is why agricultural enterprises organize their own laboratories. As a result of the different indicators, some disputes are appearing. Therefore, the laboratory should be withdrawn from the subordination of producers and agricultural products.

The price system also stimulates the growth of production and improves the quality of animal products. Price and product quality are interrelated and interdependent. Quality products at pricing is taken into account in order to fully determine the level of socially necessary costs of production; ensure equivalence of goods according to the degree of satisfaction of the specific needs of society; stimulate the production and sales of higher quality products to meet consumer demand.

Recently, a number of products of higher quality are sold at higher prices. Quality parameters of agricultural products should also be used in assessing the economic activity of agricultural enterprises. A household, realizing (selling) products of high quality produce more added value to society, although the number of products sold may be less per unit of labor input. Including the quality indicators in the production and financial plans, financial incentives should be provided for workers and enterprises for the production and timely delivery of quality products. It should also be financially interested in procurement and sales organizations in the acceptance, preservation, and marketing of products of high quality. This will reduce losses and improve the realization of product quality during manufacturing.

Currently, agricultural production does not meet the demand of processing enterprises of certain types and amounts of raw materials. In turn, processing plants, at a fairly low level of functioning, are experiencing financial and commodity failure, and unable to introduce progressive forms of organization and management (Mizanbekova, 2012).

However, the low level of organization of production, labor, and in fact the complete bankruptcy of many agricultural producers limits the ability of independent decision problems of competitiveness. Business Cooperations on the principles of cooperation in the form of integrated structures create real conditions for rational consolidation of the productive forces and equipment manufacturers, the potential of which can be used for the development of competitive production.

The process of unification (cooperation) is required to carry out on a voluntary basis, with equal economic opportunity for the development of each integrable link. The form of relationships in integrated units should not lead to the absorption of agricultural producers, reduction of their economic independence, and they should create conditions for equal cooperation. As a leading integrable enterprise it is advisable to choose larger processing plants, as they are more prepared and can be achieved by processing yields the expanded reproduction of the entire association.

To become an effective operation, capable of providing a stable rhythm and manufacturing highly competitive products, a particular attention in its creation should be paid to the distribution of functions and the organization of mutually beneficial economic relations among all levels, for the implementation of which, in our opinion, is necessary: raw material suppliers

should implement production and supply high-quality products that meet international standards; product competitiveness is directly related to productivity growth, productivity, cost reduction and improved product quality. In this context, the priorities are: reconstruction and technical renovation of production, innovation and development of energy-saving technologies.

Dedicated directions of state regulation allow to ensure a unified mechanism of formation and the production of highly competitive products to cover all levels of management and to provide a concentration of financial, material, labor and organized system of marketing.

Currently, marketing as the basis for efficient management to achieve their competitive advantage becomes increasingly important in the activities of agricultural enterprises. It is necessary to develop the range of products, implement pricing policies, to carry out the promotion of products taking into account customer's needs and interests of producers with the help of marketing management. Therefore, the problem of marketing management in agricultural is relevant both from theoretical and practical points of view.

Organization of marketing activities in the agricultural sector is intended to accomplish the following tasks: restoring a scale of agricultural production; meet the population demand in vital food (in quantity, quality and consumer properties) and enterprises in the feedstock for the production of consumer goods; implementation of interregional exchange; output the internal and external food markets (Omarova, 2000).

In this regard, the development of a marketing management system should cover the basic levels of production and sales of agricultural products, providing interconnection of territorial and sectoral principles of the functioning of its market.

Primary level of marketing organization in the agricultural sector of the region can be represented by enterprises. This is the main link of marketing activities covering a large group of companies, which differ both in areas of specialization, production volume, the degree of independence, ownership and by the opportunities of sales. The organization scheme and operation of the marketing service should be formed depending on these features. In our opinion, in the formation of marketing services of enterprises, the following steps can be distinguished: to assign of the relevant functions of marketing on the specialists and develop specific marketing objectives; to create functional groups, profess to engage in the implementation of marketing functions; to activate a valuable function in the enterprise and strengthening of marketing orientation; to converse functional departments into independent marketing departments.

Marketing activity at the level of the administrative area is the second level of marketing management. Marketing specificity at this level of agricultural management is that the administrative district is closest to agricultural producers, for some companies - basic, but for others - not the main market for its products (raw materials, food products), which should be put in basis for the organization of marketing activities in the region.

The purpose of the marketing organization in the area is to ensure the effective development of agriculture (agro-industrial) production based on the study and prediction of current and potential demand and market conditions.

At this level of territorial and sectoral management, organizing marketing activities should be carried out in the following areas: cooperation and coordination of efforts by local producers for the effective implementation of agricultural products; joint development of an efficient market system of commodity circulation of agricultural products in the framework of the regional structure; meet the needs of the district population in food, and processing plants in raw materials; providing qualified methodological and practical assistance to agricultural producers in the area of marketing.

The third (republican) level of marketing organization can be represented by the following positions: the organization of scientific and methodological center of marketing at the Ministry of Agriculture; establishment of republican scale formation on the production and sale of specialized products.

Organizational formation of the national scale of production and sale of specialized products is a system of enterprises of one branch united for the purpose to meet the needs of the region in certain types of products (eggs, meat of cattle, pigs, and poultry) in quantity, quality, and competitive advantages in the range accordance with the requirements of the regional and international markets.

An indispensable condition for the success of the marketing system in the country is the creation of a common information space, which will provide the exchange of operational information. Single Information Space is created on the basis of computer networks. The professional specialist of the district marketing service provides an initial collection of information needed to a single information space. Information collected on the farm, processing plants, bakery plants sub complex of the region, wholesale and retail trade, market, etc., is stored in a computer for processing by the software, is processed by experts, and then systematized information is transmitted to the national marketing center.

Food quality management is the process of improving the quality parameters, associated with the object of control, by bringing their characteristics to required level and by reducing the frequency and amplitude oscillation of targets. The objects of such control are the processes, affecting the quality of the final product.

They are carried out at the all stages of the life cycle, forming a product quality management system:

- at the level of the company producing food products: areas, goals, standards, officially defined and approved by the company's top management;
- at the level of company's units: objectives, resources, performance criteria related to quality assurance of certain products;
- at the level of people: responsibility, authority, relationships between performers at all levels (Lubimow, 2014, pp. 134-145).

In terms of main areas for product quality improvement thin CEIT for improving its competitiveness in current economic environment, we recommend to:

- design and implement the product quality and competitiveness management systems with important instruments like comprehensive and common quality control of the entire food cycle: from cultivation, processing and production to delivery and sales;
- permanently and systematically analyze the market and consumer requirements to timely response to new requirements; to meet new requirements of the food market;
- conduct flexible and active preventive policy to respond to changes in the competitive environment, allowing to develop and implement appropriate measures, to use positive market opportunities for further development;
- use the achievements of science and technology in production, organizational, marketing, managerial and other processes at the enterprise.

Comprehensive approach to improving the competitiveness of food enterprises in CEIT, in particular – in the Republic of Kazakhstan, is based on the regulation of its main components, namely: quality, price, consumption and additional product advantages. In this case, we can offer the following basic strategies to improve and maintain the competitive advantage of food products of these enterprises, depending on the requirements of each market segment:

- "wise quality" strategy, designed to correlate the price and product performance. This strategy can be implemented by assessing raw materials for food production, by selecting the best of them and by statistical checking. On the one hand, these measures can improve product quality, and on the other – to reduce dead expenses, significantly reducing the product price;
- improvement strategy for "additional competitive advantages", designed to improve company's services, customer services, brand development, positive image creation and its sustaining;
- combined strategy (synthesis of previously described strategies).

Product competitiveness of enterprises producing and selling food products in CEIT is a complex problem; the state and manufacturing enterprises determine its solution. Product

competitiveness requires enterprises to use the process that would allow using minimum resources, reducing costs and providing permanent reserves for the competitive struggle. However, we agree with the opinion of modern foreign researchers (Grønholdt et al., 2015, pp. 90-106; Czajkowska, & Kadłubek, 2015, pp. 28-38) and believe that such saving shall have no negative impact on the product quality, otherwise it will lead to a drop in demand.

Quality is not one of the activity areas of these enterprises, but a continuous process, related to all the functions of managerial apparatus; it does not interfere, but helps to reduce production costs, requiring new techniques and technologies. Quality has to be managed just as directly and efficiently as production, equipment and money is. Release of high-quality food products provides a triple benefit in the form of lower production costs, higher net revenues and greater market share.

In this regard, the issues of food product competitiveness of enterprises in CEIT, in particular – in the Republic of Kazakhstan, are correlated with the issues, raised in the framework of socially oriented economy formation, innovative society development. At the same time, foreign researchers believe that sustainable competitive advantages (at least equal to advantages, achieved by competitors) are the main factor in maintaining the necessary level of product competitiveness in ever-growing external environment changes (Olhager, 2013, pp. 6836-6843). Wherein, the end user (sales data) determines product competitiveness. Thus, production process is not the only important process here, but also the product perception by the consumer. In this case, brand management has a significant role.

In an attempt to enhance the competitiveness of agricultural products, in our opinion, it is necessary to implement the strategic resource usage and innovation. The strategy assumes an increase in resource-saving technologies and the development of methods for analysis, forecasting, optimization and improvements in the use of resources, which will allow for more efficient utilization of all available opportunities for the enterprise.

Competitiveness development of domestic agricultural products must be based on an innovative approach and carry out, in our opinion, the following strategies:

- a) reduce the cost of production with the development of new technologies, organizational methods of production and labor management;
- b) reduce the price of products, while maintaining the immutability of the other strategies;
- c) increase in program production for the same market without altering the rest of the strategies;
- d) improve the quality of products;
- e) develop a new market and improve customers service quality for old or new products.

Use of innovation, in our opinion, may be aimed at increasing production volume by increasing soil fertility, yield growth, and productivity. It will also improve product quality, overcome the degradation and destruction of the natural environment and the greening of production. In turn, the use of innovation will lead to the reduction in energy consumption and savings in labor and material costs.

The following public events are required to stimulate innovation: tax benefits to producers, the opening of new technologies; implementation of an information system that provides information about new innovations, current results and the possibility of using the experience; creation of investment and innovation state fund that promotes development and innovation.

Thus, for the production of competitive products and sufficient level of protection, the following measures are required at the state level:

- 1) to bring into conformity with the WTO rules and the Eurasian Economic Union a legal framework on standardization, certification and implementation of standard and phytosanitary regulations;
- 2) to establish an effective customs tariff mechanism to protect the domestic market on the

basis of tariff increases, differentiated by product and maintenance of protective duties;

3) to increase a government funding industry mainly at the expense of the federal budget, taking into account its contribution to the formation of gross domestic product and increase the level of export subsidies;

4) to expand lending, to introduce tax breaks and restructure of debt.

Such reasons as increasing business struggle and diversity of identical products in the same price segment force the agricultural enterprises of the CEIT to search for ways to improve product quality, create additional competitive advantages to win customer loyalty. The current situation requires quality control at all stages of food production and promotion – from cultivation, processing, transportation and storage to sales.

In this context, the proposed strategies, designed to improve and maintain food product's competitive advantages, according to the requirements of each market segment, are of great interest. In particular, food products of the Republic of Kazakhstan is advisable to produce using a combined strategy, involving the combination of advantages of correlating price and product performance and of improving the company's services, customer services, brand development, positive image creation and its sustaining.

In analyzing the quality issue from the view of foreign and domestic scientists, we note that the following main points are important for high-quality food product release:

- quality assurance is not a technical function, controlled by product-control board or any other structural units, but a systematic process, inherent in products, divisions and managerial apparatus (Mastrangelo, 2010, pp. 230-231);
- quality is provided not only in the manufacturing cycle, but also in pre-production, marketing and after-sales service (Thatte et al., 2013, pp.499-530);
- focus on the satisfaction of consumer requirements (Grønholdt et al., 2015, pp. 90-106; Czajkowska, & Kadłubek, 2015, pp. 28-38).
- quality improvement requires the use of new production technologies, starting with the automated design process and ending with the quality control automation (Kadłubek, & Grabara, 2015, pp. 265-278; Thatte et al., 2031, pp. 499-530).

Recommendations, provided in the article, shall be carried out after developing certain instruments for forecasting and optimization, and after developing methodology to assess the quality improvement effect on product competitiveness.

3. Conclusion

Thus, the formation of a market economy has expanded the tasks of agricultural producers, who have to choose the most effective channels and forms of sales, to organize its promotion to consumers, to build their productive activities. We propose the ways to improve the competitiveness of agricultural products which allow producers not only to produce products, to meet the needs of the population, but also to build up reserves to expand production.

Measures to ensure the integrity of the production of highly competitive products should cover all levels of management and provide competitive financial, material, human resources and marketing system. The study of food quality control in agricultural enterprises of the CEIT has allowed generating recommendations on QMS improvement for improving the competitiveness of food products of agricultural enterprises on internal and international markets in the context of the transition to a market economy.

This article reveals the problems of low organization level of production, labor, product quality control and interaction between enterprises producing, processing and transporting products. We have developed methodological and practical provisions on the quality management system structuring and on the choice of areas to improve management of enterprise's competitiveness, based on the implementation efficiency analysis of quality management system at the enterprises of the Republic of Kazakhstan.

We highlight the necessity of introducing resource-saving technologies and of developing instruments for strategic management, forecasting, optimization and improving the resource use of agricultural enterprises. Such reasons as increasing business struggle and diversity of identical products in the same price segment force the agricultural enterprises to search for ways to improve product quality, create additional competitive advantages to win customer loyalty with focus on their requirements, not only while releasing food products, but also while planning and organizing production.

References

- Agricultural Policies in Non-OECD Countries. (2007). *Monitoring and Evaluation*. OECD.
- Basaev, B. B., Gryzunova, N. V., Kiseleva, I. A., & Tramova, A. M. (2016). The Role of Nonprofit Organizations in Alignment of Environmental Interests of Energy Companies and National Economic Security. *International Journal of Environmental and Science Education*, 11 (18), 12680-12689.
- Czajkowska, A., & Kadłubek, M. (2015). Management of factors affecting quality of processes in construction enterprises. *Polish Journal of Management Studies*, 11 (1), 28-38.
- Escanciano, C., & Santos-Vijande, M. L. (2014). Reasons and constraints to implementing an ISO 22000 food safety management system: Evidence from Spain. *Food Control*, 40, 50–57.
- European Union. (2015). *Agriculture in the European Union-Statistical and economic information*.
- World Agricultural Outlook. (2016). *FAPRI Food and Agricultural Policy Research Institute*. Available at: <http://www.fapri.iastate.edu/>.
- Fonseca, L. (2015). Relationship between ISO 9001 certification maturity and EFQM business excellence model results. *Quality, Innovation, Prosperity*, 19 (1), 85-102.
- Grønholdt, L., Martensen, A., Jørgensen, S., & Jensen, P. (2015). Customer experience management and business performance. *International Journal of Quality and Service Sciences*, 7 (1), 90-106.
- Kadłubek, M., & Grabara, J. (2015). Customers' expectations and experiences within chosen aspects of logistic customer service quality. *International Journal for Quality Research*, 9 (2), 265-278.
- Kolz, R. L., & Ul, D. N. (2000). *Marketing of Agricultural Products*. Moscow: Kolos.
- Lubimow, J. (2014). Manager's qualifications in municipal partnerships. *Polish Journal of Management Studies*, 9 (1), 134-145.
- Masood, A. (2013). *Geographic variation in global diffusion of private food standards: The case of GlobalGAP certification*. Available at: <http://www.freit.org/WorkingPapers/Papers/TradePatterns/FREIT649.pdf>.
- Mastrangelo, C. (2010). Quality Inspired Management: The Key to Sustainability. *Journal Of Quality Technology*, 42 (2), 230-231.
- Mizanbekova, S. K. (2012). *Economy and organization of agricultural production*. Almaty: Kazakh National Agrarian University.
- Olhager, J. (2013). Evolution of operations planning and control: from production to supply chains. *International Journal of Production Research*, 51 (23-24), 6836-6843.
- Omarova, S.K. (2000). *Marketing in agricultural production: a tutorial*. Almaty: Economy.
- Prasad, K. D., Kumar, S., & Prakash, J. A. (2015). Quality, productivity and business performance in home based brassware manufacturing units. *International Journal of Productivity and Performance Management*, 64 (2), 270 – 287.
- Rokke, C., Yadav, O.P., Singh, B.N. 2015. Impact of challenges and barriers on the success of

- TQM: an empirical study. *International Journal of Productivity and Quality Management* 15 (4).
- Smigić, N., Rajković, A., Đekić, I., & Tomić, N. (2015). Legislation, standards and diagnostics as a backbone of food safety assurance in Serbia. *British Food Journal*, 117 (1), 94 - 108.
- Thatte, A. A, Rao, S. S., & Ragu-Nathan, T. S. (2013). Impact of SCM Practices of a Firm on Supply Chain Responsiveness and Competitive Advantage of a firm. *Journal of Applied Business Research*, 29 (2), 499-530.
- Varakuta, A. (2001). *Quality Management*. Moscow: INFRA.
- World Tariff Profiles. (2008). *World Trade Organization and International Trade Centre UNCTAD/WTO*.
- Zimon, D. (2015). Impact of the implementation of quality management system on operating cost for small and medium-sized business organizations affiliated to a purchasing group. *International Journal for Quality Research*, 9 (4), 551-564.
-

1. Kazakh National Agrarian University, Almaty, Kazakhstan; E-mail: Salima-49@mail.ru
 2. Shymkent University, Shymkent, Kazakhstan; E-mail: rsaliev_beibut@mail.ru
 3. University of Foreign Languages and Business Career, Almaty, Kazakhstan; E-mail: a.aitzhanova@mail.ru
 4. Voronezh State Industrial-Humanitarian College; Voronezh, Russian Federation; E-mail: uopioe@yandex.ru
-

Revista ESPACIOS. ISSN 0798 1015
Vol. 38 (Nº 42) Año 2017
Indexada en Scopus, Google Scholar

[Índice]

[En caso de encontrar algún error en este website favor enviar email a webmaster]

©2017. revistaESPACIOS.com • Derechos Reservados