

THE ROLE AND IMPACT OF QUALITY ASSURANCE SYSTEM IN OBTAINING COMPETITIVE FOOD PRODUCTS

Aurelia LITVIN, Ludmila DOBROVOLSCHI, Corneliu COȘER

State Agrarian University of Moldova, 42 Mircești Str., 2049, Chișinău, Republic of Moldova,
Phone: +37322432432, Mobile: +37379923554, Emails: a.litvin@uasm.md,
l.dobrovolschi@uasm.md, cornel.coser@yahoo.com

Corresponding author: a.litvin@uasm.md

Abstract

Quality food products require efforts across the whole sector, whether it is fruit, dairy or bakery. Policies addressed are the more prominent with every actor in the sector, as for food products, recognizes that the quality is more important factor in entrepreneurial decisions. In this context, the paper aimed to analyze the role and the effects of the quality assurance system in obtaining competitive food products using monographic method, analysis, synthesis, induction, deduction, comparison method. As a conclusion, in our opinion, taking over best European practices in policies to increase the role of quality systems is the best choice, because: they are performing, we benefit from EU funds in programs that fit these measures and in addition, we can borrow the experience of the states which had similar deficiencies, such as Romania or Lithuania, for example.

Key words: agro food products, competitiveness, export, quality management system

INTRODUCTION

Getting competitive food products in terms of quality assurance system and in the framework of defining actions is a very current study which is an important issue of study, both at academic level and at the level of the governing bodies of the state. At the same time, we consider that the quality of food products requires efforts along the entire chain, whether it is fruit, dairy or bakery. The addressed policies are the more prominent the more each actor in the sector recognizes that for certain food products quality and not other criteria determines the characteristics of the product at the level of corporate decision and the choice of a particular product by the consumer.

The importance of quality resulting in at least following reasons:

-Firstly, for an enterprise, obtaining and maintaining the quality, required by the customer, is a business necessity.

Realization this goal is conditioned by planned and efficient use of human, material and financial enterprises resource;

-Secondly, the customer wants to have the certainty, that the enterprise in future also will

deliver the same level of quality of production. To win the trust of customers and increase competitiveness, the enterprise must demonstrate that it has implemented an effective quality system.

Besides the two issues mentioned, the enterprise must take into consideration the increasingly demands of society on regulations and restrictions aimed at protecting the individual's health and environmental protection [6].

The regulation of the activities related to quality assurance of food products in the Republic of Moldova is shown into a series of laws and government decisions. Legislative infrastructure provides, in great part, addressing many aspects related to specific hygiene rules, for food safety, technical regulations, etc. Here refers the normative basis underlying the institutions tangent to the subject (National Agency for Food Safety - NAFS), and the concept of quality infrastructure. Besides these, recently a number of projects are being proliferated aimed at reinforcing the institutional elements on quality management.

MATERIALS AND METHODS

The study was conducted basing on national and international normative acts, manuals, monographs and other publications specific to the theme, which helped us to understand, explain and argue the role and impact of the system of quality assurance in obtaining competitive food products and to identify measures to increase their competitiveness through the improvement of the quality system. To carry out the study the following methods of scientific research were applied: monographic method, analysis, synthesis, induction, deduction, comparison method.

RESULTS AND DISCUSSIONS

The need for a common policy concerning quality food products derived from the unitary character of the EU internal market [5]. We must understand that, as part of the Common Agricultural Policy (CAP) it targets

businesses, primarily by targeting the quality and quality management systems; it targets consumers by ensuring food safety and better information on quality standards; it addresses public institutions of national and European level through the support required by regulations which determine high quality.

European policy performance derives from the approach that it has on the quality of food products, based on the following components:

- technical qualities approach ensures the hygiene and safety of the food;
- organoleptic approach generated by the reaction of consumers with regard to product quality;
- "good manufacturing practice" approach, rules on regulating products with names of origin (geographical indications) [2].

The harmonization of the principles of European policy on the quality of food products [9] at the national level can be implemented, in our view, through the following measures:

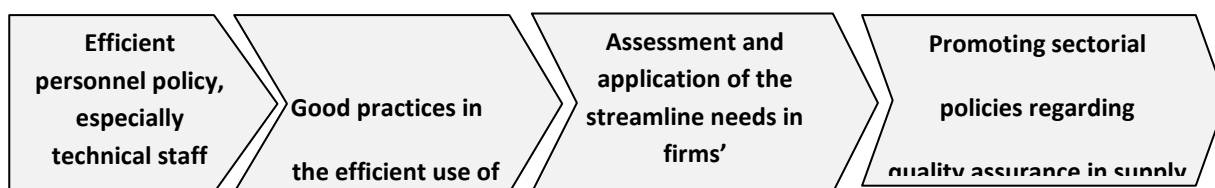


Fig.1. Strategic measures in the implementation of best practices on quality assurance of food products.

Source: elaborated by the author

It is estimated that currently agri-food quality policy is based and transposed into reality by the Ministry of Agriculture and Food Industry, which acts through standards, resolutions and ordinances [5]. We can see such intervention through the work with all entities involved in quality infrastructure according to some definite policies that would take into account: finishing the harmonization of national standards based on the European and international ones, institutional strengthening of public entities pursue inspection and agri-food certification, technical staff stimulation, creator of regulations and standards, the dissemination in the society of a consumption culture and the appreciation of the products qualities. To ensure national quality infrastructure there

must be operational the following entities: a national body for standardization, accreditation body and national metrology institute.

Moreover, these directions may crystallize into a unified strategy of quality that would succeed the current concept of quality infrastructure adopted in 2006; it would solve in the short term, the weakness which in producers and exporters' opinion are the most stringent. They refer primarily to the lack of technical means in laboratories issuing test reports and poor preparation of specialists in the field. Entrepreneurs also mention considerable difficulties in implementing the HACCP system (mandatory for the processing industry) that guarantees food safety. In addition, certification and standardization system is complicated, cumbersome and does

not always meet the immediate needs of the economic agent.

In terms of policy, it is important to understand the working mechanism of the national quality infrastructure, which in our opinion is as follows (figure 2). The

interaction of these entities is justified by the relations arising from the need of common approach to quality infrastructure. The management of each element from figure 2 provides an effective public intervention if the following conditions are met:

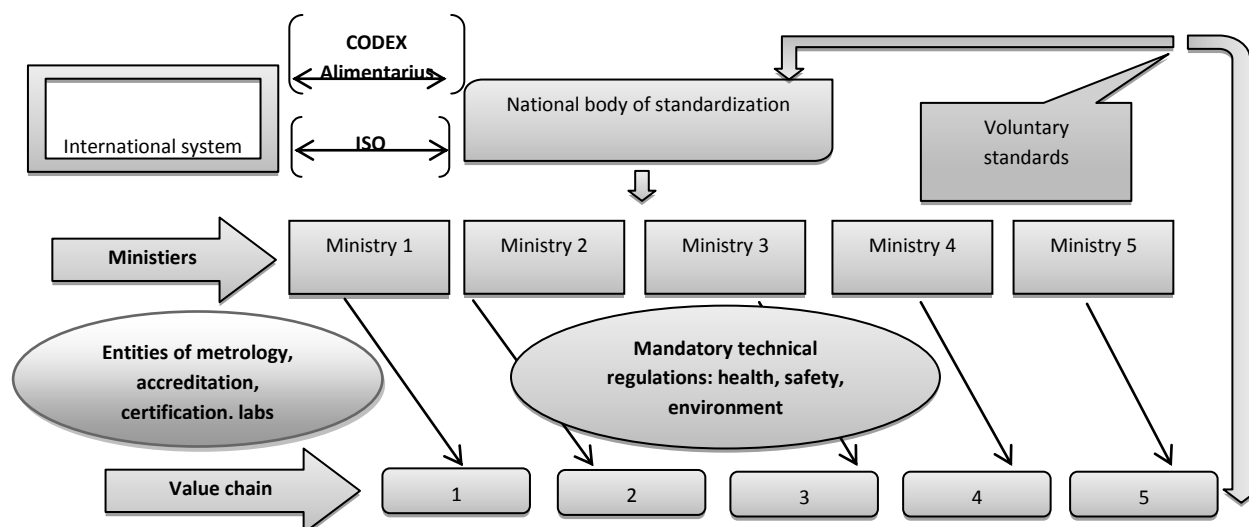


Fig. 2. The algorithm of work of fundamental institutions and the composition of the national quality infrastructure
 Source: elaborated by the author

- ✓ adopting lucrative legislation acts with advice from local or international experts in the field;
- ✓ establishing a viable mechanism for the verification and certification of food products;
- ✓ strengthening the institutions related to the field by acquiring European experience, of countries with similar environment, such as, for example, Lithuania and stimulating private actors in certification;
- ✓ more effective coordination of donor funds based on strategy;
- ✓ help from development partners on risk, costs and benefits analysis.

In relations with international organizations in the field (International Standardization Organization - ISO) it is important approaching a broader base of standards that would provide significant changes in the agro-food sector.

However, progress in the field has been registered lately (2014) some of them are [8]:

- 2.658 standards were adopted, including 601 national standards identical to those international (ISO / IEC) and 2.057 national standards identical to those of the European Union (EN); in total, by 2014, they were

adopted 10.500 European standards;

- Moldova joined, as affiliate member, the European Committee for Electrotechnical Standardization (CENELEC);
- National Institute of Standardization became an observer member of the European Telecommunications Standards Institute (ETSI).

It is important to recognize that the tools currently offered to the Republic of Moldova to make the quality of food products t meet international requirements represents a favorable regulatory, technical and organizational change. In this context, the Free Trade Agreement between the EU and the Republic of Moldova (DCFTA) by Title IV (Chapter 12 Agriculture and rural development) addresses the approximation of the standards of crops and livestock branch, as well as quality policy [10]. This substantiates some perspectives favorable to the domain: EU standards are stringent - if we meet them, we can meet the requirements of many other regions / partners; we will be able to get current, operational, sector development assistance; we will have the technical assistance of foreign experts.

However, the process of taking over of the European standards (estimated to be about 18 thousand) will require a transition period and consultations with business environment on the implementation of EN standards [1].

At the enterprise level, to implement a quality management system (ISO 9001, ISO 22000 / HACCP, Global GAP, etc.) depends on its ability to provide accurate information and to

accept changes. Food producers have stated, first of all, informative and technical difficulties in implementing these systems; from this fact arises the need for trainings and information sessions on those procedures. Until now, very few projects have addressed these needs. Figure 3 shows the "strengths" in the implementation of such systems in the agri-food businesses.

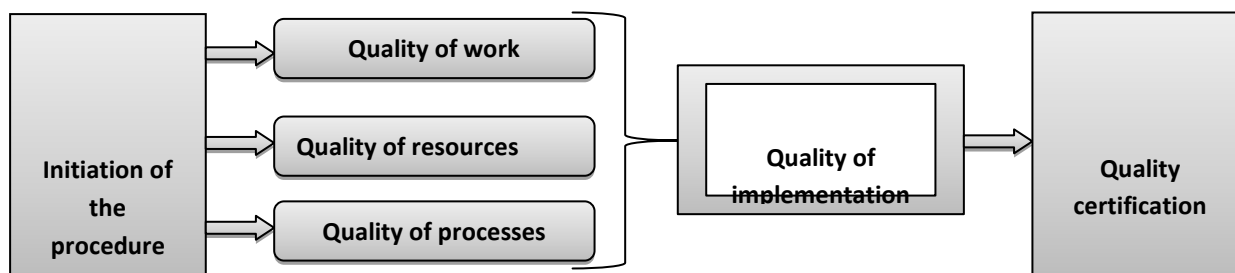


Fig. 3. "Pillars" of the implementation of quality management systems in enterprises
 Source: elaborated by the authors

It has been observed that the more outsourced is the company's activity, the more it tends to implement a more efficient and less "traditional" quality management system for the local market, for example Global Gap [4]. The best companies understand that the implementation of quality management systems (ISO 9001) simplifies the management of enterprise; it streamlines management and reduces the risk on product having a significant lasting impact on reputation. At the same time, standards helps manufacturers and exporters have a trading system without barriers (mainly technical) and better adapt products to market requirements, gaining a higher level of competitiveness, especially because these systems provide greater efficiency, which is a determinant of competitiveness.

Specific features of developing states, the creation of an infrastructure of quality food products present significant challenges at the institutional and legislative level [3]. In this sense, we consider appropriate the establishment of a *Quality Council*, with broad representation from the entities involved in this infrastructure. It will be the "voice" of the parties for authorities to show the current needs in terms of quality and how

they should be treated by national approach. An example of it could be Costa Rica.

Of the challenges that constrain this project, we highlight the large number of participants in quality assurance infrastructure (associations, businesses, ministries), and their availability to generate such a project. However, we consider it a viable measure, especially as the activities concerning the deepening of food quality assurance system are not at the initial stage - regulatory framework has been created, skilled institution has been founded - it is National Agency for Food Safety (NAFS). So, the Council will address current challenges, the consolidation of the system and identifying challenges in its implementation.

A further step in strengthening the quality infrastructure is the sustainability of such projects. Although initially being financed by the public budget, consolidation measures have to be transferred to the private sector through the payments they receive. At the same time, winning international certification of testing entities, and establishing regional networks will increase technical capacity and personnel, including through training.

Furthermore, the convergence of the membership of the WTO and the development

of partnership relations (and associated member) with international standards organizations is becoming a "must-have" for the sustainability of relationships in foreign markets, not just an option.

A number of programs to develop the capacity of agro-alimentary infrastructure food is available through the European Union, the United Nations Industrial Development Organization (UNIDO), USAID, the Government of Japan etc. These programs require an adequate structure and efficient institutions but if there appears a specific issue of bilateral importance with trading partners, there are real opportunities to receive assistance [7].

In defining an effective infrastructure of agro-alimentary products quality, in our view, we must start from the following steps :

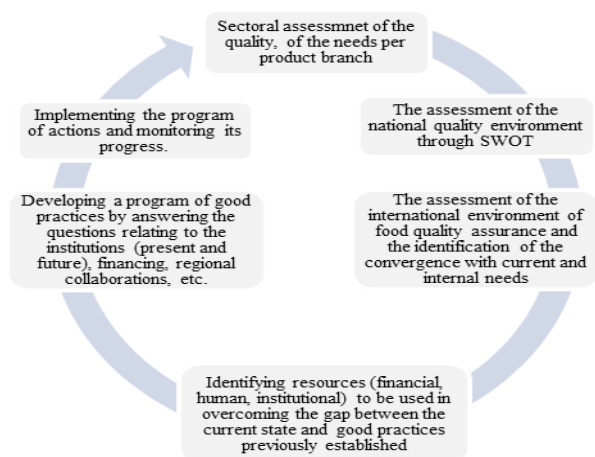


Fig. 4. Stages of defining efficient infrastructure of the quality of food products

Source: elaborated by the authors

When we talk about the assessment of the international environment of food products quality assurance, it is important to identify the examples of strategies applied by the states whose economic systems are similar to that of the Republic of Moldova (you can choose a historical aspect - former USSR, regional aspect - Central and East Europe or the economic magnitude - Estonia, for example).

For exporters it is important to emphasize several critical points in assessing the

selection of the system of quality management:

1) determining the need for a generic system (like ISO 9001) or specific sectorial (like ISO 22000, Global GAP);

2) if we choose a generic one, then what will be the focus - quality system, environment or another

3) if we choose one specific system - which will be the system that best meets the challenges of quality and competitiveness of a company.

At the same time, we understand that quality assurance requires innovative solutions currently generated by private initiative. In this regard we propose two relevant solutions: one that of hazard management and micro-climatic approach and the second- referring to the implementation of ICT in monitoring agricultural production.

I. As we know, the quality of food products depends primarily on basic factors, involved in the production: soil, climate, varieties, breeds. The conditions of these factors determine the physical, biological, chemical and organoleptic characteristics of the products. Therefore, information on local natural factors is extremely necessary, even critical. At the same time, we note that meteorological forecasting infrastructure in Moldova has not developed additional services that would converge with the interests of farmers. Its essential functions are limited to providing general information on the country and its regions. Weather forecasts bear a synoptic nature and their operativity is often challenged by agricultural entities

Our initiative concerns the development of an entity or entities that would address the growing needs of farmers in the knowledge and the possibility of influencing agricultural hazard and micro-climate conditions. This unit (s) could be initiated under public patronage (Hydrometeorological Service, Institute of Soil Science, Agrochemistry and Soil Protection), in order to obtain later financial and operational autonomy on the account of the rendered services. However, the variant of a public-private partnership can also be analyzed.

In medium-long perspective, with the

DCFTA's benefits valorization, but also when exploring new markets, manufacturers and exporters of agri-food production will feel the need to provide such services, since the requirements on product quality will increase exponentially.

II. The implementation of informational solutions passed from the fields of high technology in other areas of economic life. Agriculture is not, in this respect, an exception. Monitoring food production in the European Union is a well-organized practice and the quality of agri-food exports is directly related to how good practices procedures, monitoring and information of production are applied.

CONCLUSIONS

From the analyzed items, we find out that the systematic improvement of the quality assurance system may contribute to a positive image and a well-deserved prestige in the competitiveness of products, particularly abroad.

Broadening geography of export of Moldovan agricultural production in foreign markets can produce in the way of ensuring adequate mechanisms to promote and enhance production quality.

The implementation and certification of Quality Management System is an important factor for improving competitiveness and enhancing consumer's confidence in the offered product quality, confirming the compliance of production with certain requirements, standards and technical conditions.

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REFERENCES

- [1]Burlacu, N., 2001, Managementul competitivității – problemele și modalitățile de asigurare a ei în activitatea de antreprenariat în Republica Moldova, Annals of the Academy of Economic Studies of Moldova, Vol.1, 140-144
- [2]Deming, W., 1982, Quality, productivity, and competitive position, Massachusetts Institute of Technology, Center for Advanced Engineering Study, Cambridge
- [3]International Trade Centre, 2015, <http://www.intracen.org/>
- [4]Kelada, J., 1990, La gestion integrale de la qualite: Pour une qualite totale, Editions Quafec, Dorval, 224-225
- [5]Litvin, A., 2011, Managementul calității – premisă a creșterii competitivității întreprinderilor, Editorial center of SAUM, Chisinau, 72-73
- [6]Litvin, A., 2015, Mecanismul managementului promovării exportului de produse agroalimentare al Republicii Moldova, Publishing House "Print-Caro", Chisinau, 200-201
- [7]Marculescu, A., 2011, Managementul calității produselor agro-alimentare, University Press "Transylvania", Brasov, 125-126
- [8]Ministry of Economy of the Republic of Moldova, 2015, <http://www.mec.gov.md/>
- [9]Olaru, M., 1999, Managementul calității, Second edition revised and added. Economic Publishing House, Bucharest, 359-361
- [10]Support for the implementation of the DCFTA in the Republic of Moldova, 2015, <http://dcfta.md/>