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Original scientific paper

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**SWOT ANALYZES FOR IMPLEMENTING THE CONCEPT OF
TQM AS WAY OF WORKING IN ASSOCIATION'S
PRODUCERS OF ORGANIC PRODUCTS IN REPUBLIC OF
MACEDONIA**

Abstract

The relationship between total quality management (TQM) and organic production is clear and easy understood because the both are concepts in which basis lies multidimensional of quality. Practice show that association's producers of organic production in Republic of Macedonia are face serious problems in performance and continues present on the market because of poor organization of associations. So, the attempt of the paper is to explore the possibility of implementing the concept of TQM as way of working in association's producers of organic production of Republic of Macedonia.

Key word: TQM, organic production, association, Republic of Macedonia

JEL classification: Q12; Q13

Introduction

The modernization and industrialization of agriculture after World War II in order to meet the needs of the growing population and improve the living standards, led to intensive degradation, soil pollution

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and disruption of natural ecosystems. This condition stimulated interest in the development of concept that provides an environmental protection and aims towards greater social justice – sustainable development. One important approach to sustainable development, which at the same time gives a good quality and safe product and has seen intense growth in the country, is organic farming. Organic agricultural production is a way of life that some people practice their enduring quality of life and the continuation of the existence of nature and hence can be said that organic production and consumption of organic food is a choice. Among them awareness and knowledge about organic production is very high and they produce an organic life philosophy - quality in all aspects of life.

TQM have proven very valuable to companies and organizations as an integrative approach anchored in the belief that long-term success depends on unique commitment to quality in all departments of an organization. It is a complex and multidimensional management system aimed at agribusiness is mass, proportion and continuous quality improvement in all areas of production and economic (business) and social activity. Given that organic farming is a way of growing plants and livestock products and their processing principle to create quality in all aspects, there was a logical exploration of the possibility of application of TQM as a way of organization and operation of associations of producers of organic products.

The main objective of the paper is to determine the development of the association in respect of the operation according to the principles of TQM. For that purpose research in the paper is based on analysis of data obtained through interviews with the members of associations of producers of organic products in Republic of Macedonia on a previously prepared questionnaire. On that ground is performed SWOT analysis in order to determine the capabilities and weaknesses of the associations of producers of organic products on the mode of operation according to the principles of TQM. The subject of research is the concept of TQM and the operation and organization of association's producers of organic products in Republic of Macedonia.

1. The relationship between TQM and organic production

Organic agriculture is best known as a farming method aims to produce healthy and quality food products to the population without adverse effects in the environment that may jeopardize the balance in

nature. It relies on the ethical principles of the protection and improvement of the environment and an economically viable production with distinctive organoleptic quality. The organic production use methods and techniques that are consistent with the principles of nature and thus leads to sustainable development. What makes it different are the procedures of production and the way of certification. The procedures of organic production arising from the characteristics and specificities of way this production, and it is the way of fertilizing the soil, the method of dealing with weeds, the way of dealing with diseases and pests, how to care for animals that are cultivated in the breeding, nutrition and treatment. The certification of organic production says that during the production there is applying exactly certain standards, which provide a special product quality. The first international standards for certification of organic production introduces International Federation of Organic Agriculture Movements (IFOAM) and they are intended to assist national certification organizations around the world to establish their own standards, taking into account the specific national conditions. Certification of organic products is a formal and documented procedure by which a third party (certification body) assures that organic standards are respected. The certification process is based on the control of major documentation of farm i.e. each input and output of the manufacturing system. Only in special cases, perform additional chemical analysis. Also, manufacturers wishing to obtain a certificate must provide accurate records for each production stage and every business transaction. So, farmers and the other participants in the production, processing and marketing creates precise database or accurate information system.

It can be concluded that organic farming is a production system is based on respect for and implementation of quality standards, but at the same time the production of quality food requires management to continuously monitor the developments and changes and adapting and improving their knowledge and skills, with full commitment to quality in all aspects of operations. This approach represents the overall quality management (TQM). Full quality management emerged as a result of the realization that quality is created in the working process in all organizational units of the company. With this concept the quality out of the proceedings and is expanding in all departments and acquires a new dimension, not only quality products but also the quality of work and working arrangements. Activities for exercise, providing, maintaining and developing the quality rise to the level of the most important goal and task of the overall operation and development of the company as a

whole, and in every part separately. TQM should provide: product quality, including quality of project preparation and implementation; quality of service they assumed accurate delivery; quality relationships associated with care for the product and the man; quality management, which refers to the ability to make the right decisions and to ensure their effective enforcement and a new "culture" in the company oriented towards quality.

TQM is result from the idea that the management is organized with an orientation towards quality, based on the approach plan-perform-check-correct, improve the participation of all stakeholders. In TQM quality is achieved by the application of established principles of leadership, customer satisfaction and employee participation at all, focus on facts and continuous improvement. Based on the principles of TQM, and using the experience of QMS process model and the model of excellence ISO / CD 9004, the quality gets a new dimension and meaning - quality of life and sustainable development. Quality is moving towards the concept of sustainable development that establishes a balance between technological development necessary for economic prosperity and survival of the environment and society as a whole. The overall quality of society or Total Quality Society - TQS increasingly insist on increasing social responsibility in order to improve the environmental sustainability of society. BEST model is the new dimension of quality and is based on new principles of sustainability:³

- **Biophysics** and environment
- **Economy**
- **Society**
- **Technology**

Access to quality in this model is developed to integrate the various standardized management systems aimed at redefining and promoting harmonized sustainable development of society and the environment.

2. Characteristics or organic agriculture in Republic of Macedonia

The agriculture is very significant for the national economy of the Republic of Macedonia. Besides the many policies and economic

³ Heleta M., "Menadžment kvaliteta", Univerzitet Singudum, Beograd, 2008, стр. 82

problems, that were previously stated, this sector has indicated an important flexibility, and for this period it has contributed significantly to the social and economic stability. The total share of the agri-food sector, coupled with the food industry, accounts for approximately 8.9% of the GDP.⁴

Biological diversity in agriculture is especial important for persistence of people, primarily because of gratification of basic needs for food. With civilization development has create new type with better quality. But, in time, many of types and breed were destroy as genetic resource. Types, sorts and races who are domestic for Macedonia should be save above all for economic, science, cultural, socio-economic and ecological arouse. Republic of Macedonia characterize with traditional agriculture especial in mountain areas. Organic agriculture is close to traditional agriculture, so it has a potential for development.

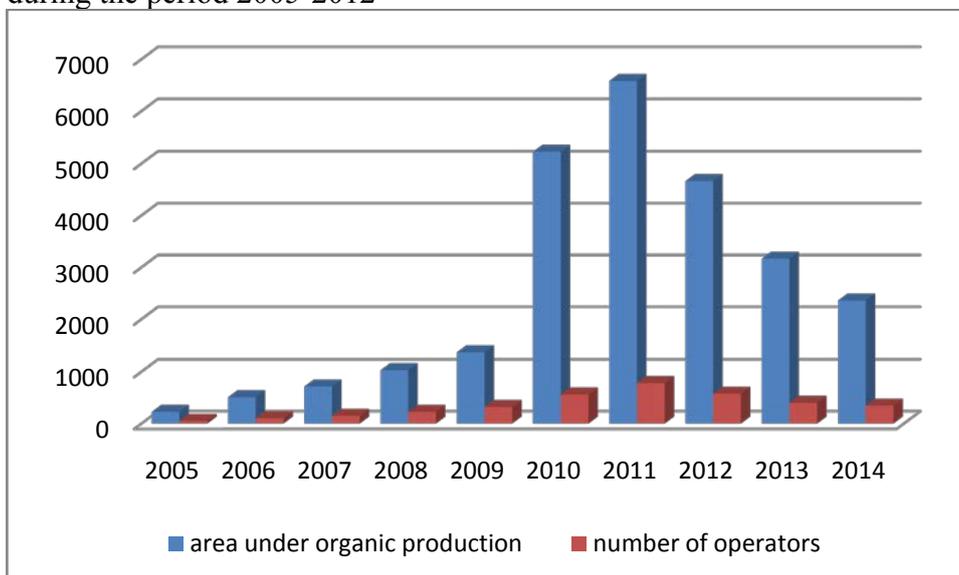
The first farmers began dealing with organic production according to the principles of the previously known buyers in the country are observed in 1998 in Ohrid, Strumica and Kumanovo. After that, provides expertise to create a draft legal basis for organic production as part of the support of environmental NGO's launched the project "Local initiatives to organic farming."⁵ Following the development of the EU Regulation, Ministry of Agriculture, Forestry and Water Management in 2008 began drafting a new law on organic agricultural production, fully harmonized with the EU Regulation 834/2007. Law on Organic Agriculture came into force in 2010 and it regulates the production, preparation, processing, finishing, storage, transportation, distribution, marketing, sale, labeling and control of organic products that are used in the methods of organic production.

In total cultivated land, organic production is 2,74%. The graph 1 clearly shows that the interest for the conversion of this production is intensive growth especially in the period 2005-2011, last three years the interest is decreases.

⁴ Statistical Office, http://www.stat.gov.mk/Publikacii/MakBrojki2014_mk.pdf, 19.3.2014

⁵ National Strategy and Action Plan for Organic Agriculture of the Republic of Macedonia (2008-2011), MZSV 2007

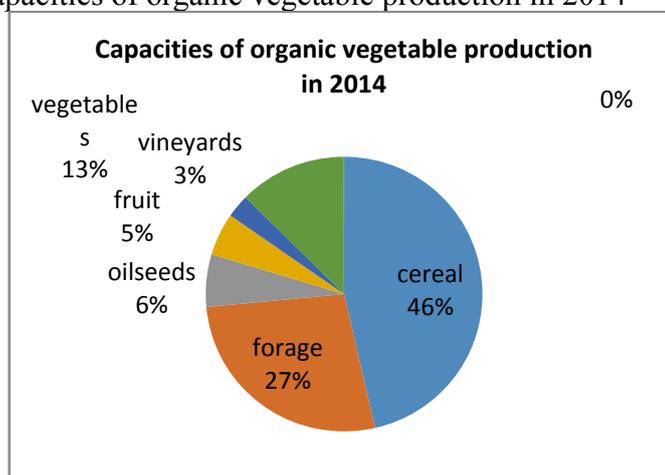
Graph 1 Area under organic production and the number of operators during the period 2005-2012



Source: Ministry of Agriculture, Forestry and Water Management of Republic of Macedonia,

http://www.mzsv.gov.mk/organsko_zemjodelsko_proizvodstvo2013.pdf,
19.03.2015

Graph 2 Capacities of organic vegetable production in 2014



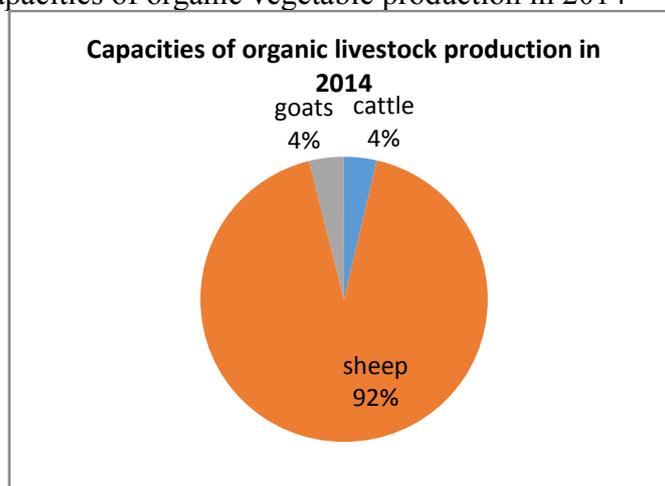
Source: Ministry of Agriculture, Forestry and Water Management of Republic of Macedonia

http://www.mzsv.gov.mk/organsko_zemjodelsko_proizvodstvo2013.pdf,
19.03.2015

The reason for that is the inadequate internal organization of producers of organic products and insufficient quantity ranking. That forces the manufacturers their products sold as conventional, for lower price in terms when it would have sold as organic products leads to reduced interest in this way of production.

Leading crop in organic vegetable production are cereals with 896.4 ha production area, and in organic livestock production are sheep breeding with 53484 numbers of sheep. (Graph 2 and 3)

Graph 3 Capacities of organic vegetable production in 2014



Source: Ministry of Agriculture, Forestry and Water Management of Republic of Macedonia,
http://www.mzsv.gov.mk/organsko_zemjodelsko_proizvodstvo2013.pdf,
19.03.2015

Organic production in the Republic of Macedonia is recognized because of traditional mode of production in some regions where they are produced. Macedonian consumers often say they are "ecologically, quality and our". The organic sector in the country is by no means a homogeneous economic area. As part of agriculture is characterized by a heterogeneous structure in which besides agriculture, are included environmental, social, health and economic structures. The organic sector in Republic of Macedonia is composed by producers, cooperatives, associations, counseling stakeholders, control and certification bodies and government institutions involved in the implementation of organic farming policy.

3. Condition and circumstances of association's producers of organic products in Republic of Macedonia

The main holder in organic sector in Republic of Macedonia are the individual producers of organic production usually in form of family farm i.e. farm in which family members are the main labor force. Family farms are mainly manufacturers of primary production and the main objective is the production destined for the market, and a small part of their own household. The size of family farms is different, but it is a small integrated farms or farms which also has vegetable and organic livestock production because organic farming is characterized by a circular system of cultivation. Despite this, the main purpose for affiliation of producers of organic products is development and promotion of organic production and education and join market of producers. One of the simpler and acceptable strategies are strategy of integration and coordination. Basically, this strategy is aimed at encouraging collaboration and developing a marketing approach to production. The strategy of integration and coordination combine two or more parts of the production process - processing - marketing and are determined common management approach. The success of this depends primarily on the manager or president of the association. He plays a key role because within a society at the same time effectively and efficiently operates two types of activities - production and marketing and to work in coordination with the members of the association and to have the support of them. Integration may be horizontal and vertical.⁶

Horizontal integrated association is generated on the market with similar products, where the layers of each marketing level combine to increase market power. This integration strategy is formed on the basis of voluntary membership usually in small groups of farmers related manufacturers for its activity (e.g., fruit producers, breeders of cattle, etc.). This strategy is the best way for manufacturers to choose the product that best sold within strictly specialized groups of agricultural products (e.g., apples, milk, etc.). In this way of integration, individual farmers and agribusiness managers can independently or jointly manage the procurement of inputs and implementation of production and processing, but always together either in marketing and sales of products.

⁶ Sekovska B., Anakiev B., „Zgolemuvanje na konkurentnosta na zemjodelskite proizvodi preku zaednichki nastap na zemjodelskite zdruzenija“, Zdruzenie na agroekonomistite na Republika Makedonija, Skopje, 2004, str.8

The vertically integrated associations are form wherein within an association of producers combine ownership or control of the successive stages in the production and marketing of agricultural products. The success of vertically integrated agricultural societies depend on top management, he should have the experience, the support of members, to know the activities of the association or the production of agricultural products produced successfully integrate and coordinate numerous activities, successfully manages the marketing activities, and thus, successful placement market. Vertical integration may be directed to the initial stages of the production process, i.e. connectivity in primary production and procurement of materials for input or to the final stage of the production process - consumers, or processing of products, transport and marketing activities. Vertical integration enables coordinated production, efficiency between operations in order to achieve low cost. In the organization of agribusiness has great importance as it affects the ability of decision-making of farmers, and thus affects the control of resources and have the opportunity to be able to actively change the characteristics of the market.

Associations are often present form of jointly organizing the organic sector in the country. The main purpose of pooling individual producers of organic production is common procurement of raw materials in order to be cheaper and timely, obtaining loans, purchase of equipment and other fixed assets, planning of distribution channels and their common use in order to make production more competitive, exercising the rights to influence relevant government institutions when making important laws and regulations that are in the interests of producers and end what matters most, successful research and performance in the market and discovering new markets and new market segments.⁷

The highest form of association in the country's Federation of Producers of organic products (FPOP) aimed at providing coordination and leadership of the organic movement in the country. In its composition has nine regional associations and form the union of producers of organic products for the development of organic production in the country and to broaden their social interest. Members have equal participation in the work of the Federation by the authorities of the Federation: Assembly, Management Board, Supervisory Board, Expert Committee and club partners. Although producers are linked the mode of

⁷ Ibidem

production and certification, they are faced with several problems like insufficient quantity of production of certain sale, disorganized export of organic products and fragmentation-existence of several associations of producers of organic products of the same products in the same region. In order to solve the presented problem requires a new approach to management which is based on a set of multidimensional quality, and it can be observed in terms of products, but also in terms of operation and functioning in all spheres of social life. The application of the full quality management (TQM) as a means of organization and operation of associations of producers of organic products are getting a new dimension and the ability to win market, to achieve a recognizable brand and generally higher level of development in terms of quality assurance.

4. Analyzes of condition of association's producers of organic products in Republic of Macedonia

According to the Central Registry of the Republic of Macedonia as the only institution that maintains records of producers associations of organic food, there is no exact number of registered associations of producers of organic food because they are registered with the Law on Associations and Foundations based on Articles 5, 18 and 20 belong to organizations and non-profit sector in which data associations are protected in accordance with regulations to protect personal data and classified information. The questionnaire was sent to the highest form of organized associations in the country - Federation of Producers of organic products which includes nine regional associations, of which four (4) Associations ("Organik kaki" – Valandovo, "Aronia" - Gevgelija, "Ovcepolški eko-proizvodi" - Sveti Nikole and "Eko-Sar" - Gostivar) and sixty-five (65) members - manufacturers responded to the questions.

The research results show that in the associations of producers of organic products there's a basis for the implementation of TQM in operation primarily due to recognition of organic products under the concept of TQM - total quality in production and operation, cost reduction and customer satisfaction. The organic products are the result of a way of thinking for growing crops targeted quality in every way to achieve customer satisfaction and better market position and successful business. Quality in organic products does not imply only organoleptic quality of the product but also the concept of sustainable development that establishes a balance between technological development (which is

necessary for economic prosperity) and survival of the environment and society as a whole.⁸

All producers define organic production as the principles of TQM as an essential tool for competitiveness of organic products indicate exceptional product quality. Producers have space to express their opinions and ideas and participate in all final decisions regarding the operation of the association. Also, many respondents answered that associations aim and strategy, and are related to increasing the quality of work. Smaller development exists in the implementation of changes (in more than half of the respondents are not made any changes to the operation), teamwork - very little is represented hence cooperation and communication between members takes place only if there is a problem. Also, training is often unplanned and apply the technology of production, consulting and cooperation with scientific - research, universities and other educational institutions and they are producing, and very little about the operation and organization of the work of associations.

Based on the results is made SWOT analysis on the application of TQM as a way of organization and operation of associations and it showed that there are strengths and opportunities for the application of TQM in the associations of producers of organic products, as well as weaknesses and threats. Recognition of organic products as a product of the concept of TQM is strength parallel to meet customer requirements and develop cooperation and communication. Hence, the resulting opportunities for the application of TQM as a way of organization and operation of associations of producers of organic food as a reorganization of the structure and operation of associations or leaving the managerial approach to work and go to work proactively with the leaders. As weakness occurs, the absence to changes will cause incomplete training of TQM or improper application of TQM.

⁸ Hadzi Naumova-Mihajlovska K., "Opportunities and prospects for application of TQM into association's producers of organic products in the Republic of Macedonia", Doctoral dissertation, Institute of economics – Skopje, 2014

Table 1

SWOT analyzes for implementing TQM as way of working in association's producers of organic products in Republic of Macedonia

Strengths	Weaknesses
<ul style="list-style-type: none">-Identify the organic product as a product of the concept of TQM-Participation of all members of the adoption of certain decisions-Existence of a comparison with the competition-Developing cooperation and communication-Satisfying customer requirements	<ul style="list-style-type: none">-Low developed cooperation with scientific research, academic and educational institutions-Absence of change-Low use of consulting services-Irregular, unplanned and unstructured training members-In decision the last word has the president of the association- The vision and objectives of the association are the short-term- Lack of contract farming
Opportunities	Threats
<ul style="list-style-type: none">-Abandonment of the management approach to work and transition to work proactively with leaders-Reorganizing the structure and operation of associations-Develop teams associations-Promotion of cooperation and communication-Improving education and training of members of the associations	<ul style="list-style-type: none">- Incomplete training for TQM- Inadequate application of TQM- Unclear defined goals;

Source: own researches

The SWOT analysis of the associations of producers of organic products have found their capabilities and weaknesses which helped in finding solutions that can help in the design and implementation of complete quality management. These are called critical points and relate to the quality policy, education and training and integrating quality in organizing through continuous improvement, benchmarking and reengineering.

Associations of producers of organic products should comply quality policy of economic, social and environmental character of organic production. Basically, the policy should be directed to the

leading idea of the organic movement - creating production in accordance with the principles of the cycle of nutrients, maximum use of natural resources, maintaining the natural balance, enabling people to live in accordance with human rights UN to meet their needs, making profit on production and satisfaction of this production that includes a secure environment.

The education process should take place in the form of the cycle where the final result is to improve the knowledge and ability to promote all the functions in the operation of the association. This cycle is the initial stage in the creation of associations "learning organization." It is necessary that it does not happen only when required or in case of a problem, but a habit and routine. Consequently, existing knowledge constantly exploiting the strategic goals of the association and it is easily prepared to face the changes that followed.

TQM in the organization is a way of managing people and business in order to achieve customer satisfaction and pleasure for members or employees. For this purpose it is necessary for effective leadership or leadership, teamwork and continuous improvement. The first step in the process is all members of the associations understand that their job is very important part in the operation and organization of associations and requires full commitment. It is a process that never stops and where it is happening gradual improvements. No matter how good the, always can be achieved better since the changes in the environment are permanent.

Conclusion

The organic products are the result of a way of thinking for growing crops targeted quality in every way to achieve customer satisfaction and better market position and successful business. Quality in organic products does not imply only organoleptic quality of the product but also the concept of sustainable development that establishes a balance between technological development (which is necessary for economic prosperity) and survival of the environment and society as a whole. In this regard TQM increasingly has or will have a role to increase the social responsibility of business and its practices in order to improve the environmental sustainability of society. The SWOT analysis shows that there are strengths and opportunities for the application of TQM in the associations of producers of organic products, as well as weaknesses and

threats. The implementation of TQM as a management technique in the associations of producers of organic products should be directed to complying quality policy of economic, social and environmental character of organic production, education and training of members of associations and integrating quality in organizing through continuous improvement, benchmarking and reengineering as guidance (prospects) to change the way of cooperation and communication among members of the associations and the associations between levels.

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