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Original scientific paper

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**ORGANIZATIONAL IMPROVEMENT OF PRODUCER'S
ASSOCIATION OF ORGANIC PRODUCTION IN REPUBLIC OF
MACEDONIA**

Abstract

Total quality management (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. One important approach in agriculture whose base is the commitment to quality in all phase of working and production is organic agriculture. Republic of Macedonia is not lagging behind in development of organic agriculture, but the producers are facing problems such as poor market organization and insufficient quantity of products for sale. The paper attempts to show that TQM can improve the organization of producer's associations of organic products with "continuous improvements" as a strategy for the competitive position and improvement in organizing.

Key words: *TQM, continuous improvement, associations, organic production, Republic of Macedonia.*

JEL classification: *Q12; Q13*

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Introduction

Organic production in Republic of Macedonia provides producers to appear on the same market with quality products which in turn is related to the possibility of achieving higher profits compared to when they could produce products in a conventional way, and large subsidies granted by the state. They, unlike other types of associations of agricultural producers, are united by a very important denominator that certifies the method and procedure of producing organic products, so that the quality of the product is indisputable. However, research shows that producers consistently comply with the rules for organic production, but that they also face serious problems in performance and continuous presence on the market. In terms of managing these issues, the need for a new approach to management emerges, with the base of multidimensionality of the quality, its operation and function in all spheres of social life. The concept of Total Quality Management - TQM is a way of organizing and innovative management tool by which the producers' associations of organic products have the potential to improve the organization and thus winning and maintaining the market, and achieving a recognizable brand, and a higher level of development in terms of quality assurance.

The main objective of this paper is to investigate the possibilities of applying TQM as way of organizing the association of organic producers in the country in order to ensure improvement and progress in the work of associations of organic producers. The emphasis will be put on "continuous improvements" as principle of TQM and an approach to quality as strategy for the competitive position improvement in organizing. Research subject of the paper is principle "continuous improvements" and principles of work that are used to organize and based on the difference between them to see how and how TQM can integrate in organization of the association of producers of organic production. 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 with qualitative and quantitative data as well as their published information.

1. The meaning of continuous improvement in the concept of Total Quality Management

TQM integrates various initiatives in the field of quality to allow for the needs and requirements of customers and employees with the highest efficiency in the company in every aspect such as low cost, high income, respectively employed and satisfied customers. It is the process of creating the quality care and responsibility through total commitment and continuous improvement in all aspects of operations. This concept gives importance to quality and performance in the organization of work not only in the adequate sector, but in all sectors. Thus quality extends across all sectors and in all functions and takes on a new role - the quality of the work and organization of work.

In Masaaki Imai's book "Kaizen" an interesting connection between quality and the continuous improvement² is presented. They consider that quality can be achieved through internal and external improvements. Internal improvement means to prevent defects and problems in internal processes which leads to lower costs, and external improvement means to increase customer satisfaction and thereby achieve a bigger market share. Both types of improvements are closely connected to the quality improvement process. It means that quality in working can be achieved through continuous and consistent identifying, investigating, analyzing and solving work-related problems.

The TQM philosophy provides the overall concept that fosters continuous improvement in an organization. Continuous improvement is essential for successful TQM, it gears the organization toward attainment of the vision. The improvement system must not only be continuously applied, but also consistently, throughout the organization. This requires a disciplined continuous improvement based on trust, with everyone in the organization striving to improve the system.³

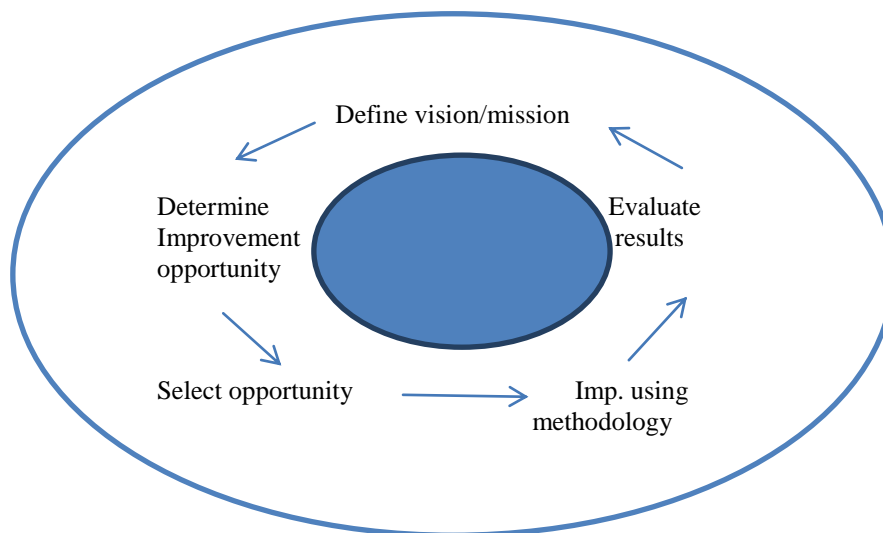
Continuous improvement can be shown as cycle that includes five stages. (Figure 1) The cycle starts by defining the vision or mission of the organization. The leaders determine the vision, with input from everyone. Then everyone in the organization ascertains their specific mission to accomplish the overall vision. In doing so this, the focus and priorities of the vision are determined, established, understood and supported by all.

² Ibid, p.32.

³ Eriksson H., "Benefits from TQM for Organizational Performance", Lulea University of Technology, Porson, Sweden, 2002.

After defining their vision, the next phase includes listing all improvement opportunities. It is important to obtain an understanding process of determining improvement opportunity at this stage. Customers are identified and their needs and expectations understood. Suppliers also are matched with requirements. Any potential problems are identified during this process. For the third stage of selecting improvement opportunity, specific improvement opportunities are selected based on the critical processes that have the greatest impact on customer satisfaction. These problems are solved using a disciplined methodology such as statistical process control, quality function deployment and process analysis. They should be used consistently to complete a mission, improve a process and solve problems throughout the organization. Finally, similar to PDCA cycle, the results for the impact of improvements are evaluated against the overall mission. In this case, a sixth stage is stage of accepting or repeating the process. The cycle is never ending in a continuous improvement system.

Figure 1: Continuous improvement cycle

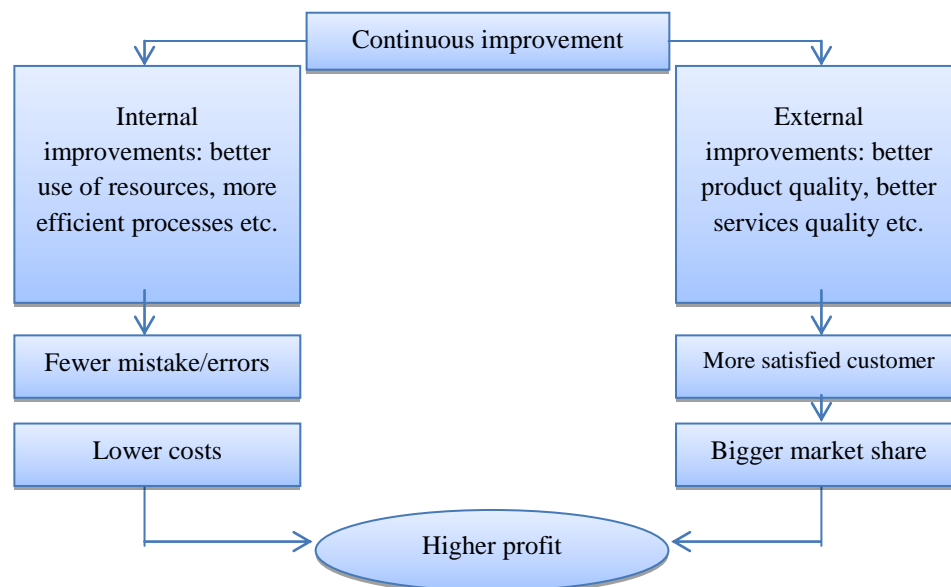


Source: Saylor J., “Continuously improving achieves excellence”,
<http://www.thebusinesscoach.org/continuous%20improvement.pdf>, 25.09.2014

Continuous improvement can be achieved through internal and external quality improvements. (Figure 2) Internal improvements refer to the utilization of resources and preventing defects and problems in the

process. Gradually, this result in the effectiveness of controlling and minimizing production costs which in turn yield to higher profits. Similarly, external quality improvements put more emphasis on designing quality into the product, which aims to earn higher profits by remaining competitive with a bigger market share. This can be done through the ability of companies to respond quickly to the demands of their customer and offering them with a better value added services. As the figure shows, both types of quality improvements – which should be seen independently of each other – result in higher profits.

Figure 2: Continuous improvement and their consequences



Source: Dahlgaard J., Kristensen K., Kanji G., “Fundamentals of Total Quality Management”, Taylor & Francis, London, 2002.

According to International Standard Association – ISO key benefits of continuous improvement are performance advantage through improved organizational capabilities, alignment of improvement activities at all levels to an organization’s strategic intent and flexibility to react quickly to opportunities. Applying the principle of continual improvement typically leads to:⁴

⁴ Quality Management principles, www.iso.org/iso/qmp_2012.pdf 15.11.2013

- Employing a consistent organization – wide approach to continual improvement of the organization's performance.
- Providing people with training in the methods and tools of continual improvement.
- Making continual improvement of products, processes and systems an objective for every individual in the organization.
- Establishing goals to guide and measures to tack, continual improvement.
- Recognizing and acknowledging improvements.

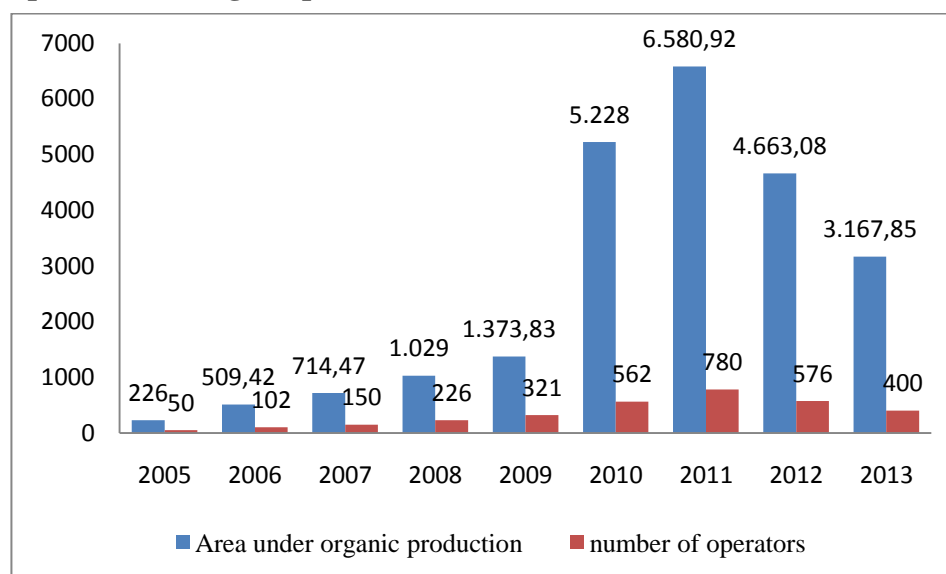
The management's job is to provide the leadership for continual improvement and innovation in process and systems, products and services. Achieving the highest levels of performance requires a well – defined and well – executed approach to continuous improvement and learning. Improvement and learning need to be embedded in the way an organization operates. This means they should be a regular part of the daily work, seeking to eliminate problems and their source, and being driven by opportunities to do better as well as by problems that need to be corrected.

2. Status of the organic sector in Republic of Macedonia

Organic production is recognized as one of the ways that lead to sustainable development, meeting social expectations when it comes to environmental and sustainable management of natural conditions and development of rural areas. Republic of Macedonia has excellent conditions for the development of organic agriculture because agricultural production in the country is traditionally a family business which involves local knowledge and traditions. Macedonian agriculture has undergone diverse methods and ways of functioning in social and economic development, but always remained an activity that takes place within the family. Also, taking into account the 2002 Census, according to which 43% of the population, 36% of the workforce and 44% of the poor live in rural areas, the adoption of the concept of organic farming by appropriate agriculture policy can contribute to increase employment and improve the living standards of the population.

In total cultivated land, organic production is 2,74%.⁵ Graph 1 clearly shows that the interest for the conversion of this production was in intensive growth especially in the period 2005-2011, however, last two years the interest has been decreasing. Research shows that producers of organic products consistently comply with the rules and procedures or standards for organic production, but that they also face serious problems in performance and continuous market presence and fragmentation i.e. in one region there are several association for the same product.⁶ The inadequate internal organization of associations of producers of organic products and insufficient quantity ranking is forcing manufacturers to sell their products as conventional, for lower price, which leads to the fact that after selling organic products as conventional, there is a reduced interest in this way of production.

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
22.09.2014

⁵ Annual report for agriculture and rural development 2012, MZSV,
http://www.mzsv.gov.mk/files/GIZRR_2012.pdf 30.12.2013

⁶ Ibidem.

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, environmental, social, health and economic structures are included. 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.

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 the products are "ecological, quality and ours". Hence, the next challenge is directing the attention away from the production of quality products (such as organic products) to promote full management of all aspects of working in associations.

3. Analyzes and research findings in current situations in producer's associations of organic production

Because the purpose of the paper is to investigate the possibilities of applying TQM as a way of organizing the association of organic producers with emphasis on "continuous improvements" as principle of TQM, a survey were launched on the use of certain principles in the operation of associations and in relation to continuous improvement.

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.⁷ 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, "Ovcepolski eko-proizvodi" - Sveti Nikole and "Eko-Sar" - Gostivar) and sixty-five (65) members - manufacturers responded to the questions.

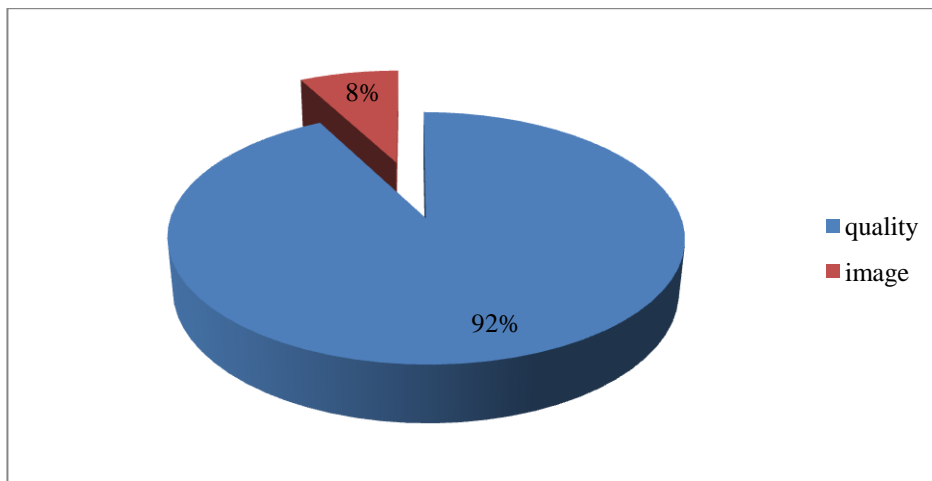
The question, "How do you see the benefits of organic production?" All sixty-five (65) respondents said 'total quality in

⁷ Official Gazette No.52, 16.4.2010.

production and operation, reduction of total cost and customer satisfaction". This shows that manufacturers know organic production as production for its high quality products with lower costs in order to meet the needs and demands of consumers. The same applies to the principles of TQM. TQM is a way of working and organizing the work with full dedication to quality, reducing costs and meeting the needs and requirements of customers. Hence, we can say that there is a possibility of applying the principles of TQM in the organization and operation of associations because manufacturers create quality during the production of organic products, but the same principles need to be transferred in the way of organization and operation of associations to reorganize and improve operational and organizational capabilities, knowledge and skills of the producer associations of producers of organic products.

When asked, "According to you, what is the key to competitiveness of organic products?" sixty (60) manufacturers responded that the quality and five (5) that is the image (Graph 2). The most important feature of organic products is quality, hence manufacturers to compete in the market with organic products, leading idea should be that it is a product of exceptional quality. The results of this question confirmed it.

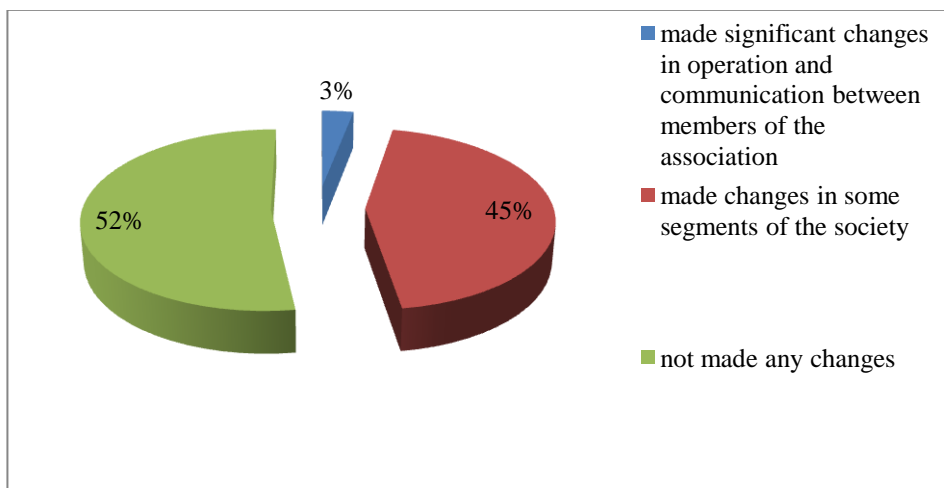
Graph 2: According to you, what is the key to competitiveness of organic products?



Source: Own research

The question, "What changes have you made in the work of the association in recent years?" thirty-four (34) respondents answered that they have not made any changes, twenty-nine (29) have made changes in some segments of the work of the association and two (2) said they have made significant changes in the operation (Graph 3). The issue is set to find out whether the associations are subject to change at work and it showed that the associations in recent years there is a significant and major change. In terms of the principles of TQM, this means that a systematic approach to change is required, as well as understanding of TQM and experience in the operation and organization of associations of producers of organic products.

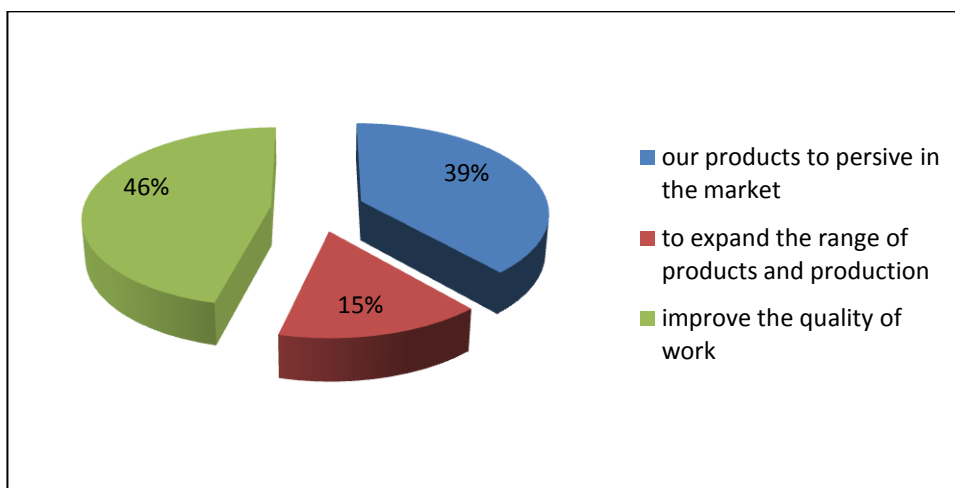
Graph 3: What changes have you made in the work of the association in recent years?



Source: Own research

The question, "What is your vision of the association in the next five years?" Thirty (30) respondents answered "improve the quality of work," twenty-five (25) members responded "our products to survive on the market" and ten (10) responded "to expand the range of products and increase production". (Graph 4) This indicates that the association is a desire to improve the quality of work that relates to the possibility of change and new ways of organizing and running of the association or the possibility of applying the principles of TQM.

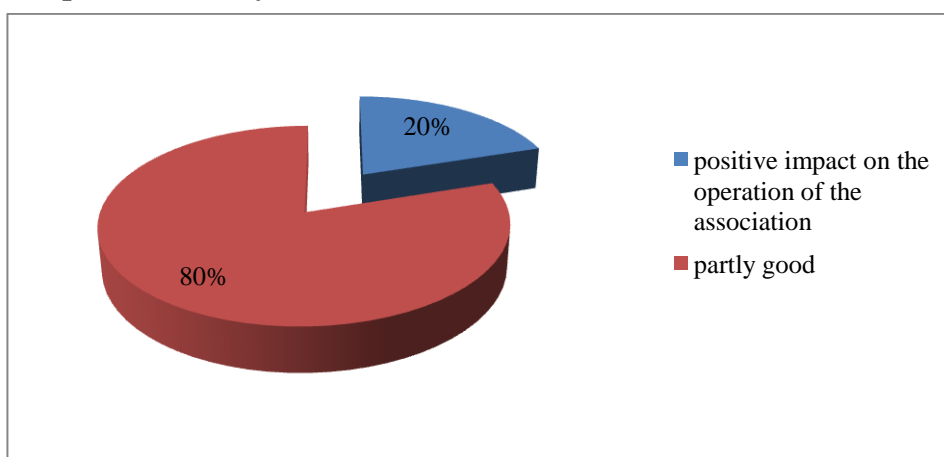
Graph 4: What is your vision of the association in the next 5 years?



Source: Own research

The question, "How do you evaluate teamwork in associations?" fifty-two (52) said that it is partly good, and thirteen (13) respondents answered that it positively affects the operation of the association (Graph 5). It shows that teamwork in associations exists, but is not satisfactory i.e. existence does not provide a positive atmosphere in the work, which means it is necessary to create teams that will be responsible for certain activities and tasks to achieve the given objectives of the association.

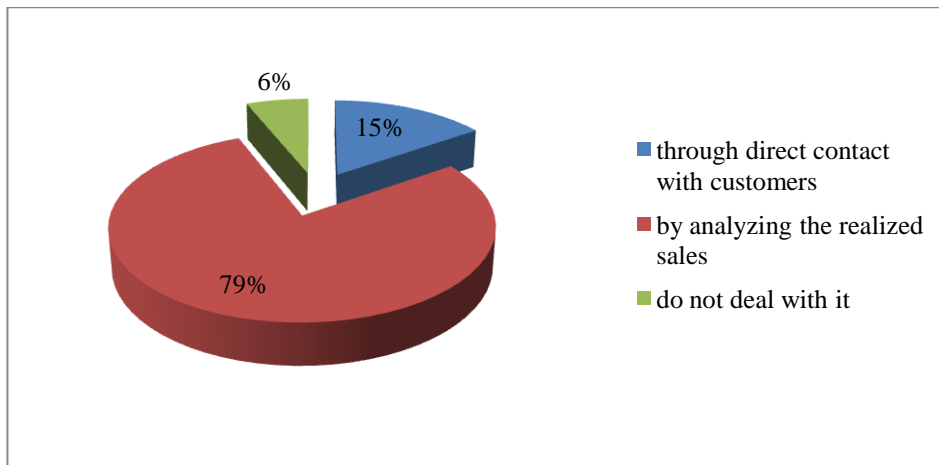
Graph 5: How do you evaluate teamwork in association?



Source: Own research

On the question "How do you measure customer satisfaction?" fifty-one (51) respondents answered that they do so by analyzing the realized sales, ten (10) by having direct contact with customers and four (4) not dealing with it at all (Graph 6). The results show that the associations of producers of organic products implementing quality measurement in accordance with the principles of TQM and indirectly measuring quality. Critical to the successful implementation of TQM is the knowledge of whether the requirements are met and customer needs, so more should be present direct measurement or contacts with customers and consumers.

Graph 6: How do you measure customer satisfaction?



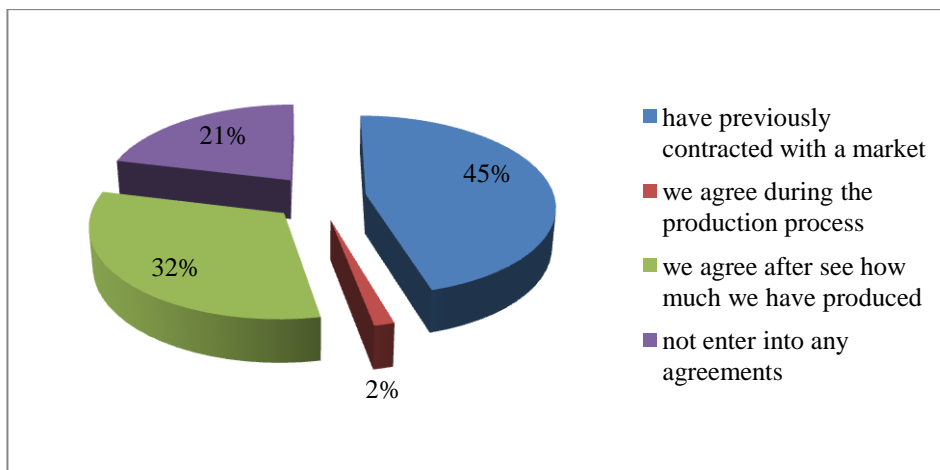
Source: Own research

On the question, "On what way members express the satisfaction for the work of the association?" all sixty-five (65) respondents answered that they do it in meetings, discussions with the opportunity to provide suggestions for improvement. It clearly shows that members express their opinions, views and ideas about the work of associations and influence the final decisions and the functioning of the work of the association.

On the question, "How the associations arrange the placement of production?" thirty (30) respondents said that they have previously signed contracts, twenty-one (21) answered that it is arranged once the production process, fourteen (14) manufacturers responded that they haven't concluded contracts and one (1) shall agree during the manufacturing process (Graph 7). The results show that the association is

mainly contract farming, but still high percentage of organizations who do not contract or agreeing on the spot - once the production process starts.

Graph 7: How the associations arrange the placement of production?



Source: Own research

From the above, it can be concluded that in terms of the principles of operation of the associations related to continuous improvement, most of the associations have not made any changes, but there is also a desire for change and it relates to improving the quality of work. The associations use indirect measuring of customer satisfaction and mainly have previously signed contracts, but still there is high percentage of associations which do not use contracts. Producers have the opportunities to express their opinions and ideas, but the team work does not provide positive atmosphere in the associations.

4. Continuous improvement – an opportunity for integrating TQM in producers' associations of organic products

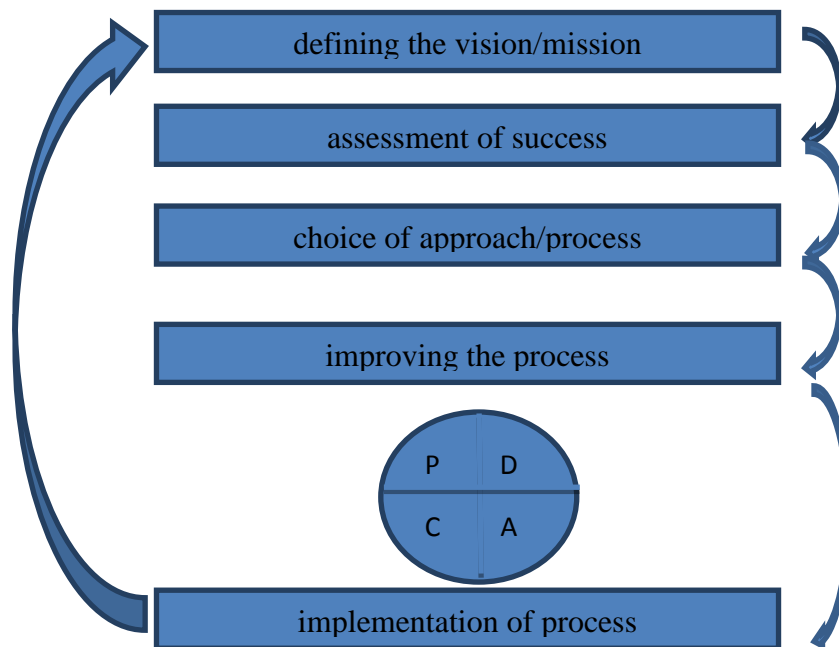
TQM is a vision of a company or organization that can be achieved with long-term planning, commitment and full responsibility of all stakeholders at all levels and sectors and continuous improvement in all aspects of operations. It requires full responsibility of everybody, the members and the presidencies of the associations. Continuous

improvement is an important process in the application of TQM, which starts from the presidency of the association and continues at all levels and stages of operation. The first step in the process is that 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, bringing in gradual improvements.

Continuous improvement is a process that generally takes place in five stages: planning, assessment of success, choice of approach/process that will be applied, advancing of the process, and establishing of the process. (Figure 3)

1. Planning or defining the vision or mission of the associations is stage when the presidency identifies customer requirements by researching them, as well as the expectations of the customer to establish guidelines by which the activities will be progressing. At this stage the inclusion of both is important, the presidency and the members of associations. In this way, the priorities of the vision or mission are defined, understood and supported by all.

Figure 3: Continuous improvement in organizing the producers' association of organic product under the principles of TQM



2. Assessment of success is stage in which the association should establish the ability to effectively use the resources it has. In this sense, the focus is on reduction or cost savings and time period. To achieve this, associations should:
 - shape the system to collect data on how to perform certain activity,
 - determine measures that represent appropriate indicators such as level of assets, degree of utilization etc.,
 - analysis of costs per activity which determines the cost of activities which create added value and those that do not,
 - analysis of weather cycles or periods of activity when it is required to perform a specific activity,
 - setting new goals for performance of comparison with the competition,
 - reporting to perform synthesis task and activities relating to the utilization of resources and the same to be used in future new targets.
3. Choice of approach/process that will be applied or analysis of the process is performed in order to study in detail the steps in the process to successfully be performed promotion. This step includes:
 - assessment of the resources – basic activity that should be done to start promoting,
 - identify opportunities for improvement,
 - determination of the child process as part of promotion. Namely, the child process is possible to be removed from some significant purpose so process of its expansion can improve an entire process,
 - choice of access improvement (continuous),
 - report or synthesis of all the facts relating to assessment of the current state of the process of continuous improvement priority.
4. Advancing of the process or improving the process aims to establish a process by which the best way will achieve the customer requirements, and implement the principle of Deming's cycle (PDCA). In this step it is necessary to determine the reasons for the occurrence of problems and their sources. In this sense the concept of PDCA directs attention to the source of the causes of existing problems and there is opportunity for improvement.

5. Establishing of the process or implementation of change is a step in the continuous improvement of organization in which decisions need to be implemented and enforced through three basic stages:
 - Pilot implementation, stage when are investigating whether the solution is adequate and the result gives the opportunity to make corrections.
 - Preparation of action plan, stage when the actions are detailing to be taken during implementation. They include: setting priorities, making a definite plan for implementation and revision of priorities.
 - Implementation of the plan.

The implementation of TQM as way of organizing in associations should include both approaches of continuous improvement:

- Internal improvement, perceived in the setting clear, unambiguous communication between members and thus networking, creating teamwork viewed in two ways:
 - Vertical – teamwork between presidency and all members of the association,
 - Horizontal – teamwork within work groups and across functional lines between two or more associations
- External improvement, can be seen in developing cooperation with other association, consulting firms and universities, promotion of knowledge and education, direct measurement of consumer satisfaction, thereby achieving customer satisfaction and community.

When continuous improvement and TQM will be accepted by all and at all levels of the association will lead to significant improvements and excellent results. These results are related with achieving higher quality of working, mutual satisfaction, improved organization which realizes higher profit, and ultimately a better market position.

Conclusion

Given that organic farming is a way of growing plants and livestock products and their processing by creating quality principle in all aspects, there is 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 research results in this paper showed that in the

associations of producers of organic products in Republic of Macedonia is possible to implement TQM as a way of organization and operation of associations of producers of organic products, primarily due to recognition of organic products under the concepts of TQM - total quality in manufacture and operation, cost reduction and customer satisfaction. For integration of TQM it is necessary to focus attention to organization of work with continuous improvement at all levels and stages of operation.

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