

KATERINA HADZI NAUMOVA-MIHAILOVSKA\*

## OPPORTUNITIES FOR TQM TRAINING IN ASSOCIATIONS OF ORGANIC PRODUCERS IN REPUBLIC OF MACEDONIA

### Abstract

Organic agricultural production offers safe, healthy and high quality food for all. It's being produced by certain standards and approved by certificates that are issued by third party (certification body), which assures that organic standards are respected. It's an approach in which quality addresses all factors that participate in the production of organic food. The organic farming is a way of breeding and processing plants and livestock. The operation is follows one principle which is to create quality in all aspects. This triggered the research on the possibility of applying a managerial method on the creation of the idea that the quality is a liability and responsibility to everyone which is achieved with full commitment and a constant improvement in all aspects of the operation (TQM).

The implementation of TQM in the organization of work in associations of producers of organic products will improve the organization in general will achieve higher level of development and maintain itself on the market. The implementation of TQM in the operation of associations of producers of organic products should start by educating their presidency and then pass it on to all members and to change. The purpose of the paper is to explore the possibilities of implementing the training under the principles of TQM in the associations of producers of organic products in the country. Therefore, members of the associations of producers of organic products in Republic of Macedonia were surveyed on a previously prepared questionnaire.

**Key words:** organic production, TQM, training, associations, Republic of Macedonia

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## **JEL classification: Q13; Q19**

### **Introduction**

It is doubtless that TQM is an important approach anchored in the belief that long-term success depends on unique commitment to quality in all departments of an organization. Quality has a special importance in agriculture because it is the only and main economic activity that produces and provides food for people, and providing quality food is a responsibility, and a challenge for every national economy. Production of quality food requires management that will continuously monitor the developments through adjusting to changes and improve their knowledge and skills with a full commitment to quality in all aspects of operations. A total improvement and enhancement of the quality of food contributes to the overall improvement of the quality of people's lives, which means: improvement of the living standards, environmental protection, health and safety.

Organic agriculture is an important segment in agriculture whose base is commitment to quality in each phase of working and production, therefore it's clear that TQM and organic production are linked by a very important factor – quality in all spheres/fields of life and work. Actually, TQM is present in each phase of growing plants and livestock products and their processing. It is doubtless that the Republic of Macedonia follows the world trends in organic production and it is a significant part of Macedonian agriculture, however, the producers of organic products and their association as highest form of organization in the Republic of Macedonia are facing problems, such as poor market organization and insufficient quantity of products for sale, therefore it's necessary that the concept of TQM is implanted in overall organization and work. The implementation of TQM in the organization of work will provide improvement for the organization and with that it will win and maintain on the market, thus achieving a recognizable brand, and a higher level of development. The implementation must begin in education and therefore a system of training is required that will enable associations to continuously learn and acquire new knowledge and skills, to be able to adjust to changes, and to develop and maintain on the market.

The main objective of the paper is to explore the trainings that are provided in the associations and based on it to see the possibility of designing

and implementing the training under the principles of TQM in the associations of producers of organic products in the country. For that purpose, the 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.

## **1. DIMENSION, OBJECTIVES AND PRINCIPLES OF TQM IN AGRIBUSINESS**

In agribusiness as business with many activities related to food production, quality has special meaning. Besides producing quality food, agribusiness constantly have to follow the requirements of customers or clients that are constantly increasing in terms of quality. These requirements restructure agribusiness so that it is more focused on continuous improvement of quality in the production process. This will entail greater cooperation of employees and creating teamwork, and thus employee satisfaction. This shows that the total quality management system should be present in agribusiness from several aspects:<sup>1</sup>

- Continuous improvement of product quality.
- Continuous improvement of quality of work.
- Greater knowledge of the requirements of customers/consumers.
- Creating teamwork.
- Highlighting individual employees regarding their ideas and suggestions and thus creating a leadership.
- Creating employee satisfaction.

Those are the principles of TQM maintained in agribusiness. Based on them, the following tasks of TQM can be allocated<sup>3</sup>:

- Defining the objectives and strategy of the company or organization.
- Creating a model or structure to carry out activities.
- Choice of methods and techniques of TQM.

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<sup>1</sup> Mitreva E., Chepjunoska V., Prodanovska V., "TQM strategy in the design of a quality system in the agribusiness", Научно-практическа конференция с международно участие, Свишов, 2009

- Optimizing the content, process and activities.
- Adoption and harmonization of relevant decisions and solutions activities.

According to Krieger and Schiffer, good agricultural practice (good agricultural practice - GAP), good hygienic practices (good hygienic practice - GHP), good manufacturing practice (good manufacturing practice - GMP) and good commercial practice (good trade practice - GTP) are a base for total quality management in agribusiness.<sup>2</sup> Together with HAC-CAP (Hazard Analysis Critical Control Point Systems) enable continuous improvement of product quality and quality of work.

Hence, the implementation of TQM in agribusiness is a systematic and complex process which primarily requires the application of the above practices and the use of standardized procedures in all processes, implementation of methods and techniques for better performance, optimizing the process and setting of good planned information system. To this, other activities should be added such as: creating business policy and culture, creating a dynamic structure of the company or organization, establishing a system of education and motivation of employees, optimizing the cost of quality, establishment of logistical support system and production of programs and projects for quality. TQM in agribusiness should be understood as a system of quality improvement in all areas of operation, starting with the idea or vision to produce high quality product which is expanding in all areas of operation and activity.

## **2. CHARACTERISTIC OF TRAINING UNDER THE PRINCIPLES OF TQM**

The first and most significant step in the implementation of TQM is the education because it provides the necessary knowledge about the quality and the overall idea of TQM. Thereby, it is necessary to study all elements of quality, all the specifics of every function (department, sector) in the company or organization and all aspect of the problem (technological, economic, social, psychological, etc.). During the initial ap-

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<sup>2</sup> Krieger S., Schiefer G., "Quality Management in Europe and Beyond", AFITA/WCCA JOINTCONGRESS ON IT IN AGRICULTURE, 2004, <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.200.1930&rep=rep1&type=pdf>, 2.10.2013

plication of the knowledge, they acquire new knowledge of the practice and further incorporated into education programs to employees. Once the system for quality is being introduced, a testing is done in order to determine whether the model is suitable. The testing is focused on the way the system applies the standard procedures for executing the tasks, the way it has applied the techniques and methods in the control checks, the expenses and other additional matters. In order for it to be carried out successfully, another research and additional education is required. At the end, when the system for quality is approved, during its application it is being developed and upgraded according to the increase in the knowledge that comes from the various activities of the system in every function of the operation of the organization or company. This shows that in fact, the education in the system of quality is demonstrated through PDCA circle (Plan-Do-Act-Check).

The purpose of education under the principles of TQM is to build knowledge and awareness among employees or members, to better and efficiently accomplish the tasks of quality, i.e. the activity of the company or organization. Top management has the task to take care of the education and training of employees, i.e. planning of the educational process for quality assurance. The plan is developed according to the needs of staff and in accordance with their qualifications and the tasks they perform in the company. The program should be based on humanitarian principles and its realization to be on the basis of clearly defined desire and interest of participants in the process of quality assurance, not under pressure and force. Therefore it should start to develop from the company and organization in collaboration with scientific experts - specialists and experts in various fields. Teaching should implement TQM experts of the highest scientific, professional and educational institutions on the one hand and the economy on the other.

Education and training of employees are conducted through various forms, such as:<sup>3</sup>

- Participation of individuals in seminars, conferences, symposia and conferences.

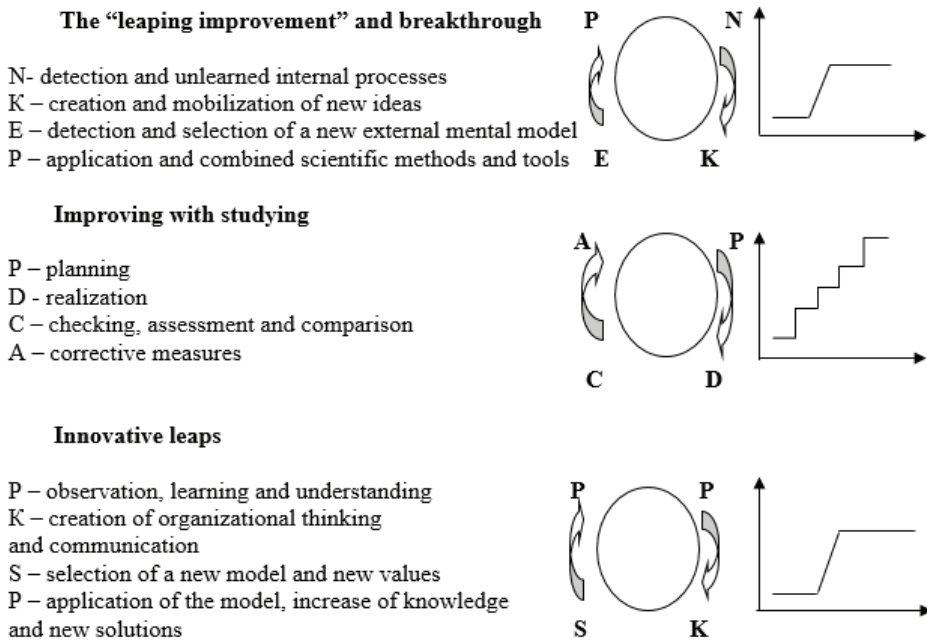
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<sup>3</sup> Badungodage V., Mendis M., Mudannayake M., & others, "TQM in HRM", University of Kelaniya, 2007

- School of quality at different levels (quality management, quality control, etc.).
- Seminars in the enterprise for various problems related to quality.
- Creative workshops of individual employees to perform tasks in order to improve performance and to improve quality.

According to Juran, “leaping improving” can radically improve performance with a visible lack of continuity with the existing situation and a breakthrough is a radical change, dynamic and resolutely move towards a higher level and better performance.<sup>4</sup> (Figure 1)

**Figure 1 Learning with approach of TQM**



Source: Heleta M., “Menadžment kvaliteta”, Univerzitet Singudum, Beograd, 2008, p. 115

“Leaping improvement” and a breakthrough in associations aim to bring in a “learning organization” on short notice, which means a systematic ap-

<sup>4</sup> Honapour A., Jusoh A., Nor K., “Knowledge management, TQM and Innovation: A New Look, <http://www.cielo.cl/pdf/jotmi/v7n3/art03.pdf> (16.04.2013)

proach to learning. A systematic approach to learning means the process of acquiring and understanding of knowledge and experiences can lead to improvements, changes and innovations involving more stakeholders and relevant parties such as advisory bodies, consultancy companies, institutions for education and research, Internet, producers individually and/or in the form of different associations.

Also, motivation and communication play a major role in the implementation of TQM because they include all stakeholders. It is an attraction for certain work resulting from factors such as: performing work to which there is affinity, vision and personal qualities of management, opportunity for advancement, the possibility of self-improvement and improvement in general, compactness and expertise of the team with highly developed work ethics and interpersonal relations, and more. In order to gain quality of work, it is necessary to motivate the staff which is not a simple task, as the factors for that vary from one person to another, between different periods of time and other conditions (environment) such the position they hold etc. Generally, the factors can be material and psychological. The important aim of motivational activities is for everyone to be familiar with the idea that quality is the goal for everyone. Motivation is essential to reach all the knowledge, the will to endure and overcome all the resistances that occur for everything that is unfamiliar, and new energy to overcome it. Communication encourages motivation, change of attitudes and allows people to gain deeper thoughts on various issues.

### **3. ANALYSES OF SITUATION REGARDING THE TRAINING AND EDUCATION IN ASSOCIATIONS OF ORGANIC PRODUCERS IN REPUBLIC OF MACEDONIA**

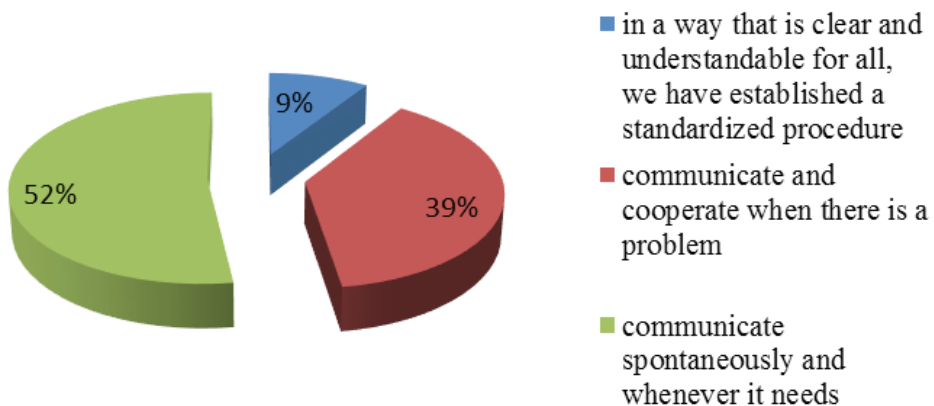
Because the purpose of the paper is to explore training that is provided and to see the possibility of designing and implementing the training under the principles of TQM in the associations of producers of organic products in the country, the survey was raised among the associations members of Federation of Producers of organic products as highest form of organized associations in the country.<sup>5</sup>

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<sup>5</sup> 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

On the question, “How is the cooperation and communication among members?”, thirty-four (34) respondents said they communicate spontaneously and whenever necessary, twenty-five (25) communicate and cooperate only when there is a problem and six (6) respondents answered that it is a way that is clear and understandable to all and have established a standardized procedure (Graph 1). This shows that the cooperation and communication among members takes place only if a need arises, i.e. if there is a problem pointing to the absence of clear and comprehensive cooperation with standardized procedure that is of great importance for successful implementation of TQM.

**Graph 1 The cooperation and communication among members**



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Source: Own research

On the question, “How is the situation with the training of members of the association?”, thirty-four (34) respondents said that they applied only where necessary, (30) that there were several unplanned trainings and one (1) replied that trainings regularly take place and are well organized (Graph 2). The responses showed that training courses are an important segment

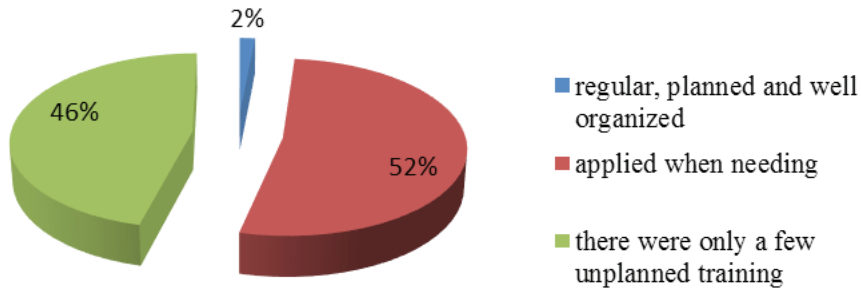
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which four (4) Associations ("Organik kaki" – Valandovo, "Aronia" - Gevgelija, "Ovcepoliski eko-proizvodi" - Sveti Nikole and "Eko-Sar" - Gostivar) and sixty-five (65) members - manufacturers responded to the questions in the period November 2012- March 2013



in the introduction of changes and new ways of working are implemented disorganized and in need, which in turn suggests that the willingness of associations for the introduction of TQM as a new way of work and organization is small and you need to examine the need for the introduction of continuous training to improve the work of associations.

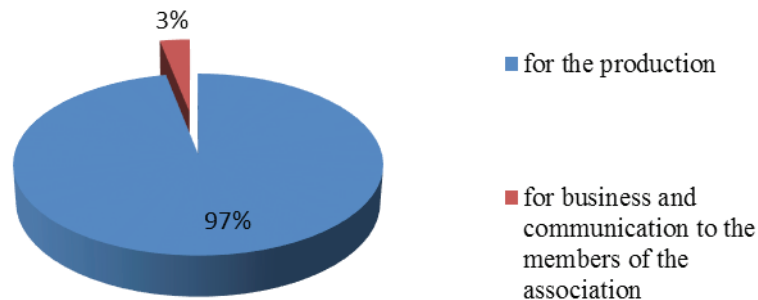
**Graph 2 Condition with the training of members of the association**



Source: Own research

To the question, “For what purpose are training usually organized?”, sixty-three (63) answered for production and two (2) for business operation association (Graph 3). It shows that the associations aim to improve production and less to work and communicate which also represents an important part in achieving quality production.

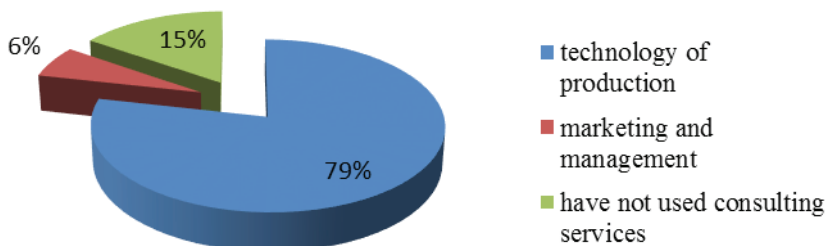
**Graph 3 The purpose of training**



Source: Own research

On the question, “Which areas you have used consulting services for?” Fifty-nine (51) respondents said that they have used consulting services for technology production, four for(4) marketing and management, and ten haven’t used any services (Graph 4). The responses show that the use of consulting services for improving the production, is reduced.

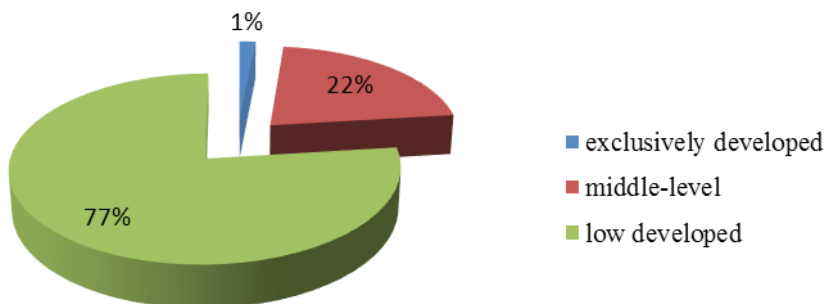
**Graph 4 Areas of consulting services**



Source: Own research

On the question, “What kind of cooperation do you have with scientific research, university and other educational institutions?”, fifty (50) said that it was developed at a low level, ten (10) don’t have any kind of cooperation, four (4) respondents said that they have developed an average level of cooperation, and one (1) replied that the cooperation was highly developed (Graph 5). Responses show that cooperation with foreign specialists, experts and trainers is not developed and that the associations are very concerned regarding communication with external associates.

**Graph 5 Cooperation with scientific research, university and other educational institutions**



Source: Own research

It can be concluded that the associations of producers of organic products use no or very little advice and consultation for production and for the operation of the organization. Also, the trainings take place unplanned and apply to one activity - production. Little attention is paid to permanent cooperation and communication among producers, hence it is logical that the main problem that the producers face is placement and market shares.

#### **4. THE TRAINING UNDER THE PRINCIPLES OF TQM IN ASSOCIATIONS OF ORGANIC PRODUCERS IN REPUBLIC OF MACEDONIA**

The implementation of TQM must start from training and therefore it is necessary to make a system that associations will constantly learn and acquire new knowledge and skills from, to be able to adjust to change, in order to develop and maintain on the market. Associations wishing to apply the system of TQM should use the approach of continuous improvement which consists of a combination of “leaping improvement” or a breakthrough to a new performance, application of learning - training learning (i.e. learning how to learn), improve the learning from their own experiences and use the knowledge of others and innovative jumps (Figure 1). The model of learning with associations of producers of organic products should be in a cycle of four stages: observation and understanding of knowledge and experience, specifically examining the formation of concept and enhance knowledge in the form of change and innovation.

Complex knowledge of TQM should start from the presidency of the association, the first task of the associations wishing to apply TQM is to ensure conditions for successful implementation of education primarily to the Presidency, and then to all members. It requires detailed elaboration, using the method of herringbone - to answer the questions, who, when, where and how the association should acquire the necessary knowledge for successful implementation of TQM through the application of quality circles. The process of education should take place in the form of cycle whose end result is to promote education and opportunity for promotion of all functions in the operation of the association (Figure 2). It should include the following steps:<sup>6</sup>

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<sup>6</sup> Ibid

1. Planning and determining the need for education - the presidency of the association determines the need for education, thus prepares a plan for the process of education members.

2. Preparation of educational program and selection of trainers (teachers, specialists, experts) - the stage which selects the method for training and trainers. Training can be carried out through work - external and internal. Internal methods for training can be: tutoring, shift between different work positions, a method of apprenticeship and planned active workers. The associations should use the method of tutoring because it implies a training under the supervision of a mentor who should be a properly qualified person who handles the problems in the organization, a member who has the knowledge and education for the area that requires training, an area where the causes of problems are identified alongside with the faults and defects. The external method of training is based on theory (lectures and tutorials) simulations and research on behalf of the universities and institutes. The lectures are held by specialists, experts and teachers, thus increasing the communication between the members, employees from different departments, universities and organizations is increased, and knowledge and experience is exchanged.

3. Selection of participants - associations select the participants for an activity based on the conducted survey and testing. In selecting participants they should make their development program for education and training as well as trainers.

4. Implementation of instruction - takes place in a specific place in certain conditions. The quality of training depends on several factors, primarily the interaction between trainers and participants arising from the knowledge and skills of trainers, the interest of the participants, literature, work conditions, responsibility and continuity.

5. Verification of knowledge - is testing the effectiveness of the lecturers, the capacity of the participants and the implementation of the program (training) through questions, discussions, tests and introducing the program into practice.

6. Correcting program and establishing a model of education - essentially an assessment of the success of the program is established on the

basis of evaluation of knowledge. Corrections can refer to the content of the program, the trainers, the interest for the course as well as working conditions. After the faults are identified, corrective measures are taken in order to eliminate them, or establish a model of education.

Thus realized, quality circles and associations are continuing their work toward continuous learning and improvement.

**Figure 2 The process of education in associations with TQM**



Source: Honapour A., Jusoh A., Nor K., “Knowledge management, TQM and Innovation: A New Look, <http://www.cielo.cl/pdf/jotmi/v7n3/art03.pdf> (16.04.2013)

The first and most important step in the implementation of the training is the identification and analysis of the training needs by:

- strategic point of view coupled with the knowledge, skills and experiences;

- functional aspect, identification of functional problems in the association;
- individual aspect, monitoring the role of the members (Figure 3).

No matter how well-identified training needs, mediation training will be effective only if selected and set appropriate conditions and training methods. Then, training is carried out and it's necessary that the members know and understand that every new or changed responsibilities are part of a continuous process, important not only during training. They also need a regular evaluation (assessment of the total value of the training program and in social and financial terms). Link the needs for training with their goals, in order to create an objective that is based on the outcome.

Training can only be effective with the support and consent of the association as a team and teamwork by practicing and supporting new skills and knowledge. Active participation is an essential part of the process and the only way we can provide improvement, successful training and placement practice to use and re-evaluate.

**Figure 3 Cycle of training according to TQM in the associations of producers of organic products**



Adjusted to Hafeez K., "TQM, Innovation, Organizational learning and Knowledge economy: Is there a connection?", <http://qc.hbmeu.ae/QC4Proceedings/PDF/TQMOrganisationalLearning.pdf>, (01.10.2012)

The application of this methodology may run into difficulties because of the mentality of the producers who usually oppose external (foreign) models of learning and changes caused by fear of losing traditional values and their own identity and others who gladly accept developments and changes without detailed analysis and application and instant dissociation of the tradition. The application of the successful model of education should also be a blend of traditional and trendy civilization values that govern the world.

## **Conclusion**

Quality in agribusiness is an important tool that enables successful placement of agricultural product because it expresses the extent of its durability, reliability, accuracy and visibility by the consumer. Besides producing quality food, agribusiness constantly have to follow consumer demands who needs constant increase in terms of quality. These requirements restructure agribusiness, so it's more focused on continuous improvement of quality in the production process. It entails greater cooperation of members and creating teamwork, and thus member satisfaction. This shows that the TQM as a way of organization and operation should be present in agribusiness because it leads to greater knowledge of the requirements of customers/consumers; improves the quality of work and as a result - product quality; highlights the ideas and suggestions of members and creates leadership thinking, employee satisfaction and teamwork.

The first step in the implementation of TQM is education, therefore the purpose of training under the principles of TQM should build knowledge and awareness among members to better and efficiently accomplish the tasks of quality, i.e. the activity of the company.

The educational process should take place in the form of cycle whose end result is to improve the knowledge and opportunity to promote

all functions in the operation of the association. This cycle represents the initial stage in the creation of associations as “learning organization.” It need not to occur only when necessary or in case of a problem, but as a habit and a routine. Consequently, existing knowledge is constantly utilized in the strategic objectives of the association and it is easily prepared to face the changes ahead.

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