

UDC 005.642.1:631.147(497.7)
Original scientific paper

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**BENCHMARKING IN ORGANIZING PRODUCERS'
ASSOCIATIONS OF ORGANIC PRODUCTION IN THE
REPUBLIC OF MACEDONIA**

Abstract

The producers' associations of organic production are facing serious problems in performance and continuous presence on the market. Total quality management (TQM) has proven very valuable to companies and organizations as a way to improve the organization of the work. This paper attempts to answer the question how TQM can help in organizing and working of producers' associations of organic production. Specifically, the paper analyzes how the benchmarking method contributes to smooth applicability of TQM in the organization and working of producers' associations of organic production.

Keywords: benchmarking, TQM, producers associations of organic production, Republic of Macedonia

JEL classification: Q12; Q13

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Introduction

One important approach to sustainable development, which at the same time gives us good quality and safe products, and has seen intense growth in the country, is organic farming. The Republic of Macedonia has excellent conditions for the development of organic farming due to the extensive farming mainly in the highlands, as well as the adoption of the Law on Organic Farming accompanied by appropriately defined agrarian policy. In the Republic of Macedonia there is a formal legal framework upon which several associations of producers of organic food have been formed. Nevertheless, associations are characterized with poor market organization and fragmentation, i.e. in one region there are several associations for the same product.² This emerges the need for a new approach to management with its base is multidimensionality of quality, because organic products are result of production with standard procedure, certification and high quality of the products.

The concept of total quality management (TQM) is an integrative approach which works on the principle that long-term success only depends on the commitment to quality in all the departments of an organization. It is the process of creating through quality care and accountability of all that is achieved by total commitment, continuous improvement and advancement in all aspects of operations. The TQM organization develops a wide range of indicators and methods to measure and improve its performance regarding human resources management, leadership, policy and strategy formation, management of processes, material resources management, employees, consumers and society. A method which allows improved performance and continuous measurement process is benchmarking. Benchmarking is a process of continuous measuring and comparing an organization's business processes leaders anywhere in the world to gain information which will help the organization take action to improve its performance. It is a useful management tool with the task to learn, apply and use other positive experiences by achievable standards (benchmarks). The goal is to reduce errors, reduce costs and increase the customer satisfaction which will consequently increase profits and maintain and strengthen market positions.

²Annual report on agriculture and rural development 2012, MZSV, http://www.mzsv.gov.mk/files/GIZRR_2012.pdf, [30.12.2013]

The purpose of the paper is to show how benchmarking can affect the improvement of the work and organization of associations of producers of organic products. The subject of research is benchmarking, types of benchmarking, manner of work of association of producers of organic products regarding the possibility of applying TQM and demonstrating steps in the application of benchmarking in organizing associations of producers of organic products. The research in the paper is based on the analysis of the data obtained through interviews with the members of the associations of producers of organic products in Republic of Macedonia, using a previously prepared questionnaire with qualitative and quantitative data as well as their published information.

1. Definition and types of benchmarking

During the goal setting, the rules and the business plan of a company or organization should answer the questions "Where are we?", "Where do we want to be?" and "How do we get there?" These questions can be answered using a benchmarking method that involves a continuous process of checking of abilities, rivals and continued implementation of improvement or development. Benchmarking is a useful management tool aimed at learning, applying and using other positive experiences by achievable standards (benchmarks). The goal is to reduce errors, reduce costs and increase customer satisfaction which will in return increase profits and maintain and strengthen market positions.

Benchmarking is a systematic and continuous measurement and comparing an organization's business processes against the business process leaders anywhere in the world to gain information which will help the organization take action to improve its performance.³

Benchmarking may form the basis of a renewed development in a company as this tool helps identify the processes in which the best possibilities of improvements lie. The solutions used in other companies, however, can only very seldom be transferred directly to the company in question. Adjustments in some form will be made but the understanding of the "theory" behind the solutions should always form the basis of the current improvements.

³ Dahlgaard J.J., Kristensen K., Kanji G.K., *Fundamentals of Total Quality Management*, Taylor & Francis, London and New York, 2002, p.197.

Depending on the object of analysis, benchmarking is normally divided into the following four types:⁴

- Internal benchmarking, which means comparing departments and divisions in the same organization or company i.e. the object of analysis are departments, divisions, or sister companies in order to identify the best performances of a given activity within the company. This form of benchmarking opens up the possibility of a deep understanding of how benchmarking can be implemented. The procedure can so-to-speak be practiced internally. Furthermore, experience shows that internal benchmarking improves the internal level of performance and the internal customer satisfaction through reduction of the various quality and productivity and at the same time it improves the ability to communicate and co-operate in the company. This is normally the simplest form of benchmarking because data will always be available for comparison.
- Competitor-based benchmarking is the most difficult form of benchmarking, where the company compares itself with its direct present or potential competitors within the same range of products (e.g. competitors on foreign markets) in order to gather information on the competitor's products, processes and results to be able to compare this information with the company's own results and to learn from the differences. In this case, data can be difficult to come by and must often be acquired by indirect means. The advantages of competitive benchmarking, beside the fact that the company puts itself in a certain position in comparison with its competitors, is that at a very early stage the company's attention is drawn to the expectations which the customers may rightly have. Furthermore, the results have a high degree of comparability as the product and thus the basis production structures are identical.
- Functional benchmarking is based on the functions which the company is especially noticed for, the idea being that the company compares itself with the leading company in these functions. These companies can be direct competitors of the company, but often this does not have to be the case.
- Generic benchmarking includes producers which are common on all types of companies, such as order-taking, payment of wages,

⁴ Ibid, p.21.

word processing and the like. In this type of benchmarking, the potential comparative partner is any company which has obtained a reputation of being excellent within the area which is benchmarked. The advantage of this form of benchmarking is that the probability of finding world class practice grows as the number of potential benchmarking partners is expanded. On the other hand, it is obvious that the possibility of transferring the found practice directly to one's own company is smaller than the possibility of transfer found with the other types of benchmarking. Another advantage is that collection of data in this case is considerably easier than by competitive benchmarking as it is much easier to have co-operation with companies from other lines of business than your own line.

Benchmarking is not just a question of comparing with the competitors, it is a process of understanding and cognition to know one's own strengths and weaknesses, the competitors and the best in the field, learn from the best and achieve leadership.

2. Areas of benchmarking

Research has shown that there are three main areas which can be benchmarked and that all of these can be combined with one or more of the three types of benchmarking. Those three areas are:⁵

1. Quality
2. Productivity
3. Time

However, it can be argued that only two main areas can be benchmarked – quality and productivity – as time will always be a part of either quality or productivity. If we refer to time, despite this fact, as a special area which can be benchmarked, the reasons will be the following:⁶

- The time concept is simple and easy to understand and is thus easily accepted by all employees.

⁵ Karloff B., Ostblom S., "Benchmarking – a signpost to excellence in quality and productivity", John Wiley & sons, New York, 1994, p.35.

⁶ Dahlggaard J.J., Kristensen K., Kanji G.K., *Fundamentals of Total Quality Management*, Taylor & Francis, London and New York, 2002, p.201.

- The time concept is by definition related to processes and will thus automatically force the participants to focus on processes and process relation. Consequently, it will, by definition, invite a better co-operation between processes and departments.
- Reduction of times (e.g. times of delivery) means increased productivity and increased quality perception by customers.

The benchmarking productivity means identifying potential benchmarking partners. A common productivity measure in this respect is:⁷

$$\text{Ordinary net profit per employee} = \frac{\text{Turnover} - (\text{purchase} + \text{expenses} + \text{depreciations} + \text{interests})}{\text{Average number of full-time employees}}$$

The application of this productivity measure in connection with benchmarking is often applied by analyzing the results of the following three steps:

1. The potential benchmarking partners can be identified by calculating the ordinary net profit per employee.
2. By comparing the key figures: turnover, purchase, costs, interest and depreciations per employee, it will be possible to minimize the number of potential partners and create the possibility of identifying the processes which will be valuable for benchmarking.
3. A further breakdown of the key figures increases the possibility of identifying the relevant processes for benchmarking.

Benchmarking of quality will either be a natural extension of time or productivity applied first in connection with benchmarking or it can be the area on which for some reason has been focused at first. Benchmarking of quality can be divided into the same main areas which are normally used in connection with the division of the concept of quality:⁸

- a) External quality: customer satisfaction and technical quality of products
- b) Internal quality: employee satisfaction and process quality.

⁷ Ibidem.

⁸ Ibid, p.202.

Benchmarking of process quality can be divided up into a string of key processes, which in relation to a production company may consist of the following: research and development, production and distribution and administrative support processes.

3. Analysis of the work and organization of associations of producers of organic production in Republic of Macedonia

In order to explore the possibility of implementing TQM as a way of successful working and organization of associations of producers of organic products, this survey is conducted on two bases:

- By determining the development of the association by applying the principles of TQM and
- By determining the difference between the principles of operation used by associations, and the principles of TQM

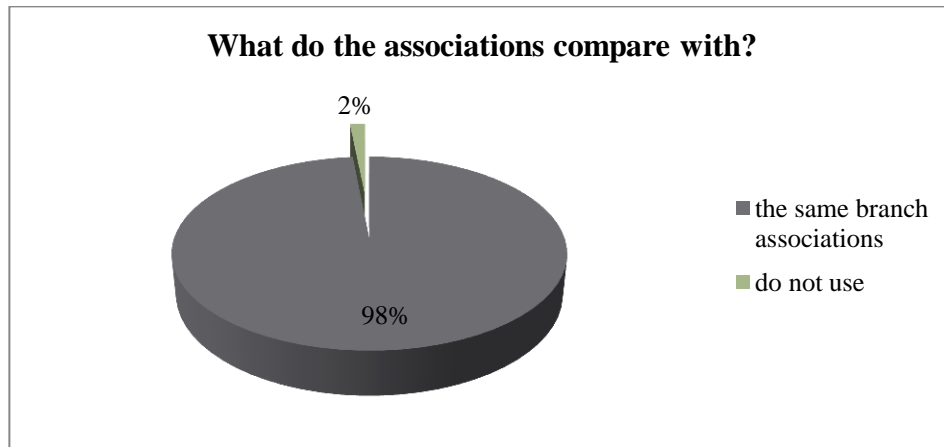
Because the purpose of the paper is to show how benchmarking can contribute to the smooth applicability of TQM in the organization and work of the association of producers of organic production, questions were raised concerning the use of certain principles in the operation of associations and questions in relation to benchmarking of external and internal quality.

According to the Central Registry of the Republic of Macedonia, as the only institution that keeps 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, and belong to organizations and the non-profit sector, where the data of associations are protected in accordance with the regulations on protection of personal data and classified information.⁹ The questionnaire was sent to the highest form of organized associations in the country – the 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.

⁹ Sluzben vesnik na RM, no.52, 16.4.2010.

To the question, "Do the associations compare among themselves?", sixty-four (64) respondents said that they compare to the same branch associations, and one (1) answered that they did not (Graph 1). The question was asked in order to find out whether the associations used benchmarking as a way to improve performance through comparison with other societies, precisely because benchmarking means comparing with the best. The answers indicate that the comparison as a method for improving the operations exists in alliances, but benchmarking which means comparing with the best is absent.

Graph 1:



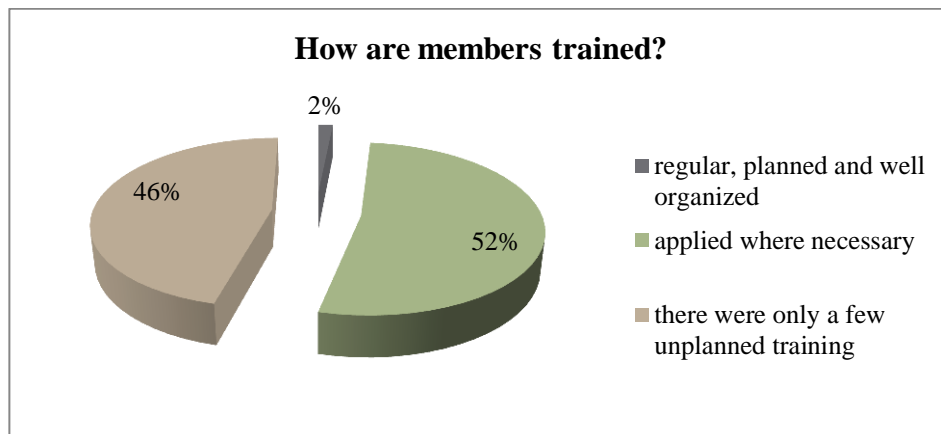
Source: Author's research.

On the question about how members express satisfaction for the work of the association, all sixty-five (65) respondents answered that they do it in meetings, and with discussions they 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 are members trained?", thirty-four (34) respondents said that they applied only when required, thirty (30) that there were several unplanned training sessions and one (1) replied that training sessions were regularly planned and well organized (Graph 2). The responses show that the training is an important segment in the introduction of changes and the new ways of working are conducted in an unstructured way, and, if necessary, which in turn suggests that the willingness of societies to introduce TQM as a new way of working and

organizing they will need to examine the need for the introduction of continuous training to improve the operation of associations.

Graph 2:



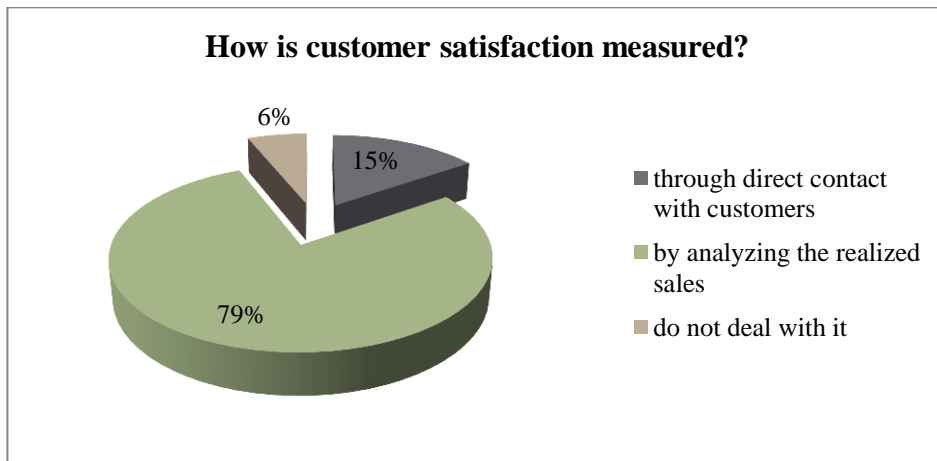
Source: Author's research.

On the question "How is customer satisfaction measured?", fifty-one (51) respondents answered that they did it by analyzing the realized sales, ten (10) of them had direct contact with the customers and four (4) of them did not deal with it (Graph 3). The results show that the association of producers of organic products apply quality measurement in accordance with the principles of TQM, and thus indirectly measuring quality.

Knowing that the customer needs are satisfied has critical importance in the successful implementation of TQM, so the contact with customers and consumers as a direct way of measuring the satisfaction should be more frequent.

Critical to the successful implementation of TQM is the knowledge of whether the requirements and customer needs are met, so that there is more direct contact with customers and consumers.

Graph 3:



Source: Author's research.

From the above mentioned, it can be concluded that in the association of producers of organic products there is an internal benchmarking between the associations in the same branch, but there is no competitor and functional, or more important, generic benchmarking. The positive side is that the members of associations can express the satisfaction of the work, but the organization of training is unplanned and it is not applied when necessary. This shows that there's benchmarking of internal quality, but benchmarking of external quality is absent because measuring of the customer satisfaction is almost absent.

Benchmarking is a useful management tool. In addition, it reveals the internal and external practice and creates the need for change. Also, with benchmarking areas in need of change can be identified, and the understanding the "best practice" will give the idea of what the associations will look like after the change. Therefore, benchmarking is a continuous process of checking their own abilities, rivals and continued implementation of improvements, or development of their methods to comply with their own procedures.

4. Benchmarking as management tool in organization of producers' associations of organic products

Benchmarking is a method for improving the organization. It consists of observing and learning from the best in order to achieve successful operation and a better market position. It can be applied in many ways, but practices show that the best results are achieved with the models based on the Deming cycle or PDCA (Plan – Do – Check - Act) cycle (Figure 1). Firstly, benchmarking is considered to be an eternal process meaning that as soon as the benchmarking procedure is implemented and the improvements started, a new plan and search for improvements starts. Secondly, benchmarking is implemented in four stages:¹⁰

1. Plan. Planning stage comprises of the initial activities regarding benchmarking and consists of:
 - determination of what should be benchmarked;
 - determination of criteria for the selection of benchmarking partners;
 - determination of methods for data collection and
 - determination of the use of resources.
2. Do. The Do stage is searching and observing as per the criteria laid down in the Plan stage and it comprises two steps: the concentrated use of benchmarking partners and data collection. Concerning this phase it may be necessary to return to the Plan stage, as it may be impossible to collect the planned data with the chosen partner(s).
3. Check. The Check stages or the analysis phase consists of these following steps:
 - data correction;
 - identification and quantification of differences in the performances (gaps) and
 - identification of causes for the differences of performances.

Under the first item, the data are corrected because of the systematic errors which make the data not comparable at the same time. They may be corrected with regard to differences in the market condition, level of costs etc. under the second and third item, the differences of

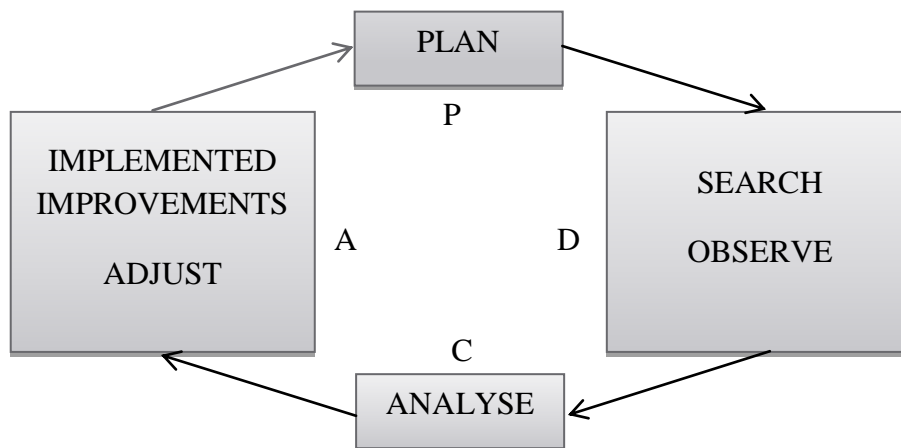
¹⁰ Dahlgaard J.J., Kristensen K., Kanji G.K., Fundamentals of Total Quality Management, Taylor & Francis, London and New York, 2002, p.203-205.

performances in quality and productivity are identified and the reasons for these differences need to be explained.

4. Act. During the Act stage, the results are adjusted to the individual situation and improvements are implemented. This stage consists of the following steps:

- Communication of the results found;
- Ensuring acceptance with the involved parties;
- Adjustment of the obtained results to each individual situation and the arrangement of functional aims;
- Making a plan of action;
- Implementation of the plan of action.

Figure 1: The PDCA circle of benchmarking



Source: Early J. F., Colett O. J., "The Quality Planning Process",
http://hairball.bumba.net/~rwa2/school/ense627/TelecomQuality/4003X_03.pdf
30.12.2013

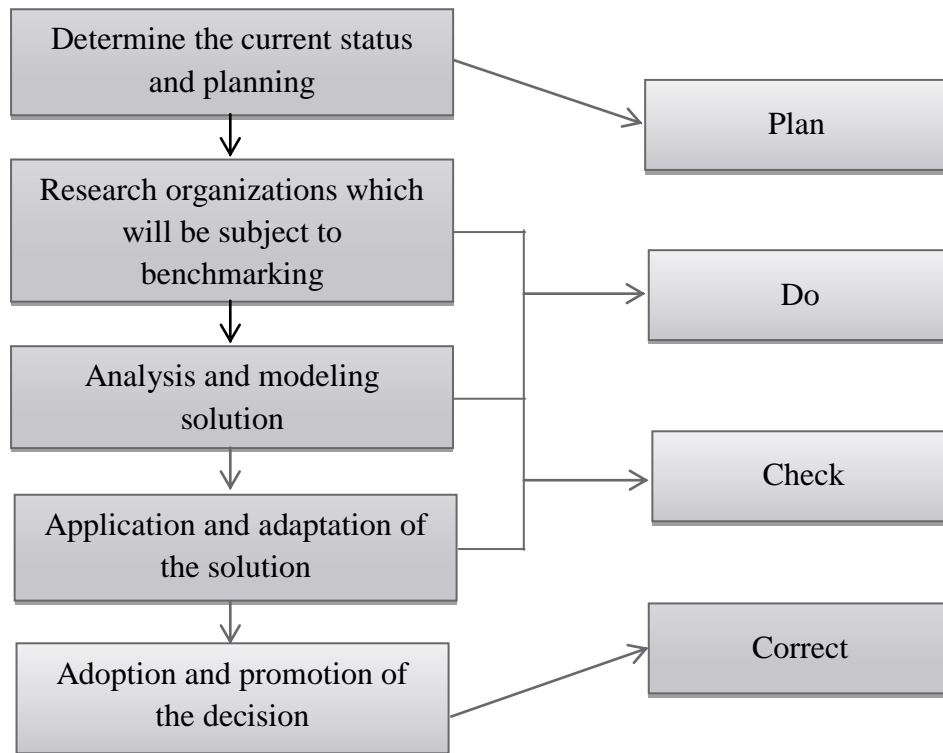
Benchmarking in association of producers of organic production in the Republic of Macedonia can be implemented in the following stages:

1. Initiative – the moment when a decision is made on the introduction of the method. In launching the initiative, attention should be given to identification of the issues that will be subject of benchmarking, forming a team that will introduce and enforce the identification benchmarking partner, i.e. identify the partner-organization for benchmarking.

2. Analysis – a stage in which the present situation is explored and the advantages of others are examined on the basis of comparison so as to decide what changes need to be implemented on the basis of Best Practice. At this stage, the methodology for performing the analysis is data collection, identification and analysis of the best (the subject of benchmarking) by determining and comparing the results.
3. Shaping new solution – is a stage of establishing and adequately preparing the best solution. First the pace of activities is presented or projected, then the decision on the subject of benchmarking is shaped (on the subject of benchmarking or a synthesis of multiple solutions on multiple items on benchmarking or completely new solution) and test solution.
4. Application – a phase in which the tested solution is implemented in practice. It is performed in the following order:
 - a) Developing a plan or setting priorities, defining the final review of plans and priorities;
 - b) Implementation of a decision on the application of best practice in the organization performed in two key phases:
 - Preparation of the implementation of the solution
 - Performance of the implementation or enforcement of the decision as soon as possible;
 - c) Supervision is done in order to timely detect unexpected delays and deviations in order to take corrective actions.

The role of the benchmarking method in organizing associations is visible in the continuous checking of the capabilities, competitive position and continuous improvement. By applying the method of benchmarking, associations of producers of organic products have the possibility of gaining a competitive advantage and successful realization on the market. The formation of benchmarking teams within associations brings potential for developing creativity and entrepreneurship, realizes the vision and objectives of the association and by comparing, the market it is directed towards the association to reach and surpass the best. Benchmarking means using the concept of Deming's quality circles i.e. PDCA circles, hence the associations of producers of organic products start with the application, what it would look like (Figure 2).

Figure 2: Steps in implementing of benchmarking in organizing of producers' associations of organic products



Source: Adapted by Certo S.C., Certo S.T., "Moderni menadzment", 10 izdanje, Mate, Zagreb, 2008, str.301.

Determining the current situation of the associations is the first step as well as the decision on the application of benchmarking as a method to improve the situation, The implementation plan defines targets where benchmarking would be applied: product, process, function etc. Then a selection of organizations that will be compared is made concerning the benchmarking subject. The process involves collecting data, visiting other organization etc. In the phase of analysis and modeling the solution, a systematization of the knowledge and its application is made, in the form of guidelines that should be applied, and thus differentiate the solution. Then the solution is implemented in practice and it should be adopted as a new knowledge and experience and the process on the principle of quality circles should be repeated.

Benchmarking is a useful method because it enables quality feedback early in the project, and is able to create new ideas and solutions.

Conclusion

On the presented data and findings, it can be concluded that benchmarking is useful “management tool” for successful implementation of the TQM as a way of organizing and working in associations of producers of organic production in Republic of Macedonia. It can be said that it is a method which allows improved performance and continuous measurement process by comparing and learning from other positive experiences i.e. from the best in the field.

There are many fields in which benchmarking can be applied. Producers’ associations of organic products use internal benchmarking of quality, but there is no competitor or functional or, more important, generic benchmarking. In this paper, the presented model (steps) for the implementation of benchmarking is based on the ideas of the Deming cycle or PDCA cycle. Successful passage through the PDCA cycle of benchmarking means continuous process of checking the abilities, the rivals and the continuous implementation of improvements or development and on that base achieving successful leadership and continuous improvement.

The use of benchmarking is one of the decision of the management of associations which depends to a large extent on the commitments of the management. Naturally, benchmarking leads to changes and it is the responsibility of the management to lead these changes. Understanding of the “best practice” has the virtue of identifying areas in need of change and gives an idea of what the association will look like after the change.

References:

1. Amanor-Boadu V., Martin L., Quality Management in a Changing Organizational Environment: Looking for New Conversation Tools,
<http://ageconsearch.umn.edu/bitstream/18091/1/mi99am02.pdf>
15.03.2013

2. Certo S.C., Certo S.T., “Moderni menadžment”, 10 izdanje, Mate, Zagreb, 2008
3. Dahlgaard J.J., Kristensen K., Kanji G.K., Fundamentals of Total Quality Management, Taylor & Francis, London and New York, 2002
4. Early J. F., Colett O. J., “The Quality Planning Process”, http://hairball.bumba.net/~rwa2/school/ense627/TelecomQuality/4003X_03.pdf 30.12.2013
5. Heleta M., “Menadžment kvaliteta”, Univerzitet Singidum, Beograd, 2008
6. Karloff B., Ostblom S., “Benchmarking – a signpost to excellence in quality and productivity”, John Wiley & sons, New York, 1994
7. Godisen izvestaj za zemjodelstvo i ruralen razvoj 2012, MZSV, http://www.mzsv.gov.mk/files/GIZRR_2012.pdf 30.12.2013
8. Nacionalna strategija za zemjodelstvo i ruralen razvoj za periodot 2013-2020, Ministerstvo za zemjodelstvo, sumarstvo i vodostopanstvo, 2013
9. Nacionalna strategija za održiv razvoj vo Republika Makedonija 2009-2030, Ministerstvo za zivotna sredina i prostorno planiranje, 2010
10. Nacionalna strategija so akcionen plan za organski zemjodelstvo vo Republika Makedonija 2008 – 2011
11. Sluzben vesnik na RM, no.52, 16.4.2010
<http://ffrm.org.mk/>
<http://tqmcasestudies.com/>