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REENGINEERING IN ORGANIZATION OF ORGANIC AGRICULTURAL SECTOR IN REPUBLIC OF MACEDONIA

Abstract

Organic agricultural production in Republic of Macedonia is recognize as an approach to sustainable development with excellent conditions for development in the country because agricultural production in the country is traditionally family business which met local knowledge and traditions and also the adoption of the Law on Organic Farming followed by appropriately defined agrarian policy. Although, organic agricultural production is faced with problems in organizing of business process in the organic sector as uncertain sale of the production, export disorganized followed by inadequate organization of producers of organic products or associations. Regarding the manner of organizing the paper is shown in reengineering as an opportunity to reorganize the existing organic sector especially associations as main carries to make radical changes in its operations and to improve their way of working to achieve their goals.

Key words: reengineering, organic sector, organic production, Republic of Macedonia

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Introduction

Main characteristic of Macedonian agriculture is traditional extensive agriculture proceed in mountain areas, which is main precondition for development of organic production. Also, state support for organic agriculture is high, except subventions main role has legislation which establishes the rules for organic production in Republic of Macedonia. 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.

Practice show that the method of production in the country is not an issue because all participants are united by certifying the method and procedure of producing organic products. Certification of organic products is a formal and documented procedure by which a third party (certification body) assures that organic standards are respected. The process involves hiring a certification body that will make the inspection and issue a certificate, which is a cost for the manufacturer, but on the other hand leads to consumer confidence in organic production systems and products. Certification of organic production gives a distinct identity and credibility and makes it easier market access.

Nevertheless, Macedonian organic sector are facing problems such as insufficient quantity for sale and poor market organization. Additionally, there is fragmentation among the associations i.e. the existence of several associations of producers of organic products for the same products in the same region. It is a vicious circle, on the one hand the current offer of organic products is low, and on the other hand there is inadequate internal organization of producers and associations of producers of organic products.

Therefore, the paper shows the new management concepts developed in the USA - reengineering with the emphasis on its application in the organic sector in the Republic of Macedonia. Although initially reengineering is

defined as a method of restructuring of business activities in order to innovate the production process, today considered a modern management concept that convenient ground for its development is in transition countries. Namely, products that come from this countries can't compete in quality our price to the European and world market. Therefore in the paper is show some indications of disorganization of the organic sector in the country and possible reengineering model developed with positive implications of its use.

1. DEFINITION OF REENGINEERING

Reengineering represents a process of changing thoughts to perform certain activities in business processes to achieve dramatic improvements in terms of quality, cost, service and speed. The introduction of reengineering in the company or organization starts without assumptions, initially determined that the company must make, and then how to do it. So, it's ignored the current situation and created new ways of doing work or etc. radical redesign.

Reengineering used for an innovation of business and assumes making a big step. It involves great knowledge, proper motivation, decision-making organized teamwork and consistently focusing on client needs. Management who wants to achieve reengineering must take account team approach because reengineering is fundamental rethinking and radical redesign of business processes to achieve dramatic improvements in the performance of the highest production trinity - quality, price / cost and time of manufacture / delivery.

Hammer and Chempo explored reengineering approach and proposed nine principles:

- Identification of all business processes in the company and prioritized according to their urgency redesign.
- Organization focus on outputs, not tasks. When is possible, one person performs all the stages in a process. Planning of work and people to be about a subject or output, rather than a single purpose.
- The one who applies the output of the process, need to realize.
- The transfer of information should take place in the real work, as part of it. One who acts in the process also creates information. Information technology shortens the time required for a handover information and

automate data transfer. With the technology based on computer process is continuously controlled.

- Geographically widespread sources should be treated as centralized.
- People who work the work should be allowed to make decisions.
- Databases, telecommunications networks and standardized processes allow employees who are physically remote achieve economic activities and to maintain flexibility and service.
- Parallel activities should be linked and managed so that they should be carried out with more satisfaction than be treated as sequential objectives (that follow one after the other).
- The information should be retained at source. By integrating and collecting data in computer systems, the company eliminates the problematic data correction of errors.

The principles of reengineering suggested by Hammer and Chenmo, create features, such as:

Focus on the customer - the main goal of reengineering is meeting the needs of the client. It is a starting point for change - identifying client needs, creating infrastructure for supporting their expectations and process design in line with company objectives.

Combining a few things - basic and most common work process reengineering is integrating and concentration of many different activities and tasks. The results are striking in terms of elimination of errors, delays and re-work generated thereby.

Decisions are made by those who do the work - companies introduce reengineering, not only have horizontal compaction process (thereby reducing the number of people working different things) but have vertical density, i.e. employees working in a specific task in the event of a problem, the decision adopted. Thus decisions become part of his work and the employees are given the right to be responsible for them as the central idea of reengineering. Additional benefits of lower costs, better response to customer and employee empowerment.

The processes are performed in a natural way - in the reengineering work flows in the planned direction or succession. Thus work is performed more quickly and can obtain results.

Work is performed where it has most sense - many of the works carried out in a company include integrated parts that are performed in other

organizations. Relocation of work across the boundaries of the company eliminates the need for integration.

Represented hybrid centralized / decentralization operations - companies that have introduced reengineering are able to combine the advantages of centralization and decentralization in the same process. Information technology enables companies to have individual units are completely self-contained, representing decentralization, while centralized using the data and the company's strategy.

Processes have multiple versions - to meet the demands of the modern business world need multiple versions of the same process, so that each would meet the requirements of different markets, situations or inputs. Moreover, these processes must be economically equivalent and optimized. First, the classification of these processes to determine which version is the best of the situation.

The checks and controls are reduced - reengineering used control only to see that they have economic sense. Control and checking is built into the process and are part of the job.

Minimize compliance - reengineering reduces the need for compliance with reducing the external contact that has the process, thereby reducing the chance of inconsistent data that will be necessary alignment.

Operators in service sales are fully informed - in reengineering operators in service sales are supplied with all the necessary information at any time can give an appropriate response to the customer. This reduces waiting time and customer dissatisfaction.

With the introduction of reengineering changing operating units - from functional departments to process teams, the role of the staff - from controllers to authorized persons, changing the preparation for work - training in education, changing the criteria for the assessment - the assessment of the activities to evaluating results, changing value - from protective to productive, changing organizational structure - from a flat hierarchy structure and changing top management - from collectors of points leaders. Reengineering is a dramatic change in all activities.

2. THE ROLE AND MEANING OF ORGANIC AGRICULTURE IN REPUBLIC OF MACEDONIA

Republic of Macedonia is situated in the southern part of the moderate zone and is bordered by the subtropical zone where almost all the crops can be successfully produced according to their requirements. The agriculture has been very significant for the national economy of the Republic of Macedonia. Besides the many policies and economic 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 agriculture has a share of about 8,9% in the GDP in 2013, two thirds of which are covered by crop production and the remainder by livestock production.

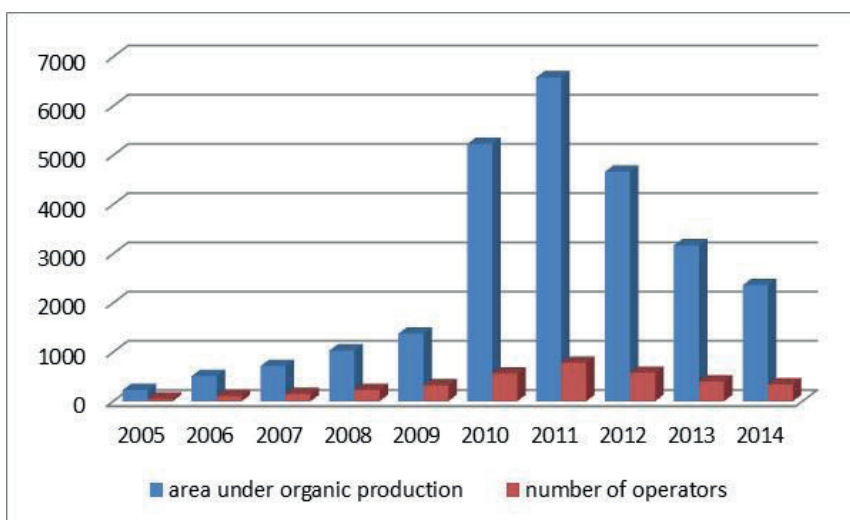
Biological diversity in agriculture is especial important for persistence of people, primarily because of gratification of basic needs for food. With civilization development has create new type with better quality. But, in time, many of types and breed were destroy as genetic resource. Types, sorts 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.

In the Republic of Macedonia organic agriculture is regarded as important to the development of the national agriculture and food production, which at the same time is environmentally sustainable and can generate many positive impacts to rural areas and the society in general. Also, it has excellent conditions for the development of organic agriculture because agricultural production in the country is traditionally a family business which meets local knowledge and traditions.

The mountainous areas in the country are characterized by particularly suitable environmental conditions for development of organic farming. Products originating from those areas already enjoy a good reputation among consumers who say they are “environmentally friendly” or products produced in the traditional way.

The annual report for agriculture and rural development showed that 2,74% form all agricultural cultivated land is an organic production. The interest for production of organic food is to a significant level, but there are many limiting factors. Namely, the graph 1 show that the number

of certificated producers of organic food in Republic of Macedonia notes continual intensive increase alongside the surface in organic production, but the last three years are decreased. Beside the climate change particularly affected the Macedonian agriculture, main reasons for decreased interest are the reduction of the population in rural areas and lack adequate logistical support to the overall organic agricultural sector. Graph 1 Area under organic production and the number of operators during the period 2005-2014

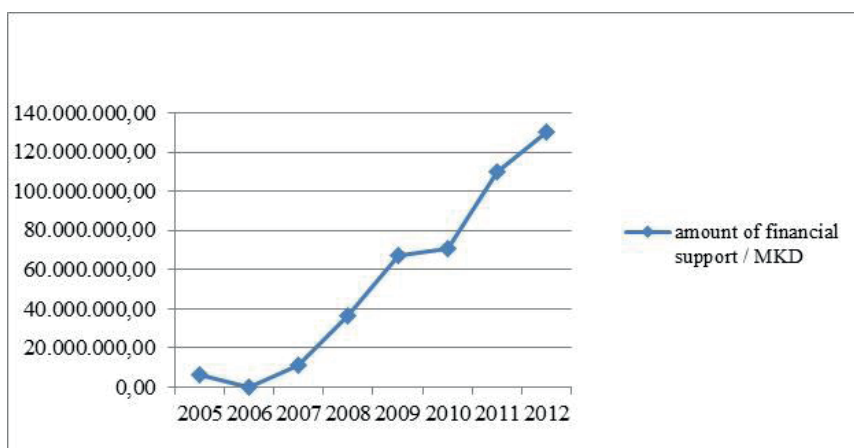


Source: Ministry of Agriculture, Forestry and Water Management of Republic of Macedonia, http://www.mzsv.gov.mk/organsko_zemjodelsko_proizvodstvo2013.pdf, 19.12.2015

According to last data from the Ministry of Agriculture, Forestry and Water Management of Republic of Macedonia, 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.

In the increasing of number of operators and area under organic production partial contribution has the increase in subsidies from the state. The Graph 2 presents the financial support (subsidies) for the period 2005-2012 for organic production which can be seen intense growth.

Graph 2 State support for organic agriculture in Republic of Macedonia



Source: Ministry of Agriculture, Forestry and Water Management of Republic of Macedonia, http://www.mzsv.gov.mk/organsko_zemjodelsko_proizvodstvo2013.pdf, 19.12.2015

The market of organic products in Republic of Macedonia is on low level, offer by quantity and assortment doesn't enable some significant export, and on the other side low domestic demand is limiting organic production. Deficiency of domestic organic processing products additional is limiting organic market development.

Organic agriculture is regarded as one important to agriculture and food production that is environmentally sustainable and can generate several positive impacts to rural society in Republic of Macedonia. Defining the main feature of organic agriculture and its importance is the starting point for conceptual establishment of organic agriculture.

3. ORGANIZATION OF ORGANIC SECTOR IN REPUBLIC OF MACEDONIA

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, included environmental, social, health and economic structures. What makes organic production different from other ways of ecological production is the way of certification of products,

hence the participants in the process of certification of organic production, field production and marketing makes way of organizing specific and unique. 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.

The main drivers of the organic sector in the country are *the farmers* of organic production. They are mostly found in the form of an individual farmer and family farm (farm which the family constitutes the basic workforce). Individual producers of organic products in the country, organic production can be organized as organic vegetable and livestock production. Family farms are mainly producers of primary production and the main objective is the production intended for the market, and a small part for household.

Cooperatives of producers of organic products in the country are relatively new way of association. In fact, the term “co-operative” is still equated with cooperatives from the previous system of social order where the association was not voluntary and not based on a system of cooperative values. The formation of cooperatives of producers of organic products in the country is regulated by the Law on Cooperatives and aiming economic association of producers on a voluntary basis, to promote organic production and joint market.

Given the mentality, lack of confidence in the system that result in negative experiences Cooperatives from the previous system, cooperatives in the Republic of Macedonia are very few in number. They began to form with the adoption of the Programme of Financial Support to Rural Development through which financially supports the establishment and operation of agricultural cooperatives.

The associations are often common form of jointly organizing the organic sector in the country. The main purpose of pooling individual producers of organic produce is a joint purchase of raw materials in order to be cheaper and timely obtaining loans, purchase of equipment and other fixed assets, planning distribution channels and their common use in order to make production more competitive, exercising the rights to influence relevant government institutions when making important legal and sub-legal acts in the interest of both producers and end what matters most, successful research and approach to the market and identification of new markets and new market segments.

The highest form of association in the country's Federation of Organic Producers (FPOP) aimed at ensuring the coordination

and leadership of the organic movement in the country. FPOP aims to protect economic, social and cultural interests of manufacturers of organic products and working to improve the conditions of market production.

Organic farming is a relatively new concept in the country, hence the interest in research despite There is interest in providing useful information and advice on the application of this concept. Advisory entities in the Republic of Macedonia for organic production is an important element in achieving successfully organized organic production. Besides advice on the organization of production, offering assistance in developing business plans, development plans and feasibility studies, as well as filling in all necessary documents in the control and certification of organic production. The biggest producers receive support from the very certification / control bodies besides them through the administrative procedure for certification educate them about the process of organic production. Within FPOP there is an advisory service that provides support to producers of organic products.

The certification is an important key element of organic production which assumes defining the principles that must be met to allow the proceedings to be declared as “organic.” The process involves engaging certification body that will make inspection and issue a certificate.

Under the organic farming control and certification of organic production performs authorized domestic or foreign legal entity - control / certification body. In Republic of Macedonia there are two certification bodies accredited by the Accreditation Institute and authorized by the Ministry of Agriculture, Forestry and Water Management: Balkans Biocert and Pro-CERT. These certification bodies provide expert control in organic production in accordance with standard EN 45011 and ISO / IEC Guide 65 (General requirements for bodies operating products certification system).

In the implementation of organic agricultural policy, directly or indirectly participate in the following national institutions:

- Ministry of Agriculture, Forestry and Water Management. For the promotion, development, promotion and coordination of organic farming, the Minister of Agriculture, Forestry and Water Management formed Committee of organic farming which gives its opinion in the field of organic farming, especially for the annual program to encourage the development of organic farming proposed significant regulations and individual projects, and other issues related to organic farming.

Then the responsibility of the Ministry is published in the Official Gazette and on the website of the Ministry a list of fertilizers and improve soil, list of products for plant protection, a list of ingredients They were not produced according to the principles of organic farming and a list of cleaners and disinfectants that can be used in the country. Ministry based on the annual reports of the control / certification bodies publishes an annual list of reproductive material from species that are found in regular production and which may be used in organic crop production. The Ministry shall establish and maintain records and databases and are published on the website of the Ministry. Minister of Agriculture, Forestry and Water Management empowers the control / certification body for performing expert control in organic farming. It also mandates all rules and regulations for production of organic agricultural products in accordance with the organic farming

- Ministry of Environment and Physical Planning. Within the implementation of organic agricultural policies responsible for nature protection and biodiversity, the sustainable use of natural resources, for issuing export permits for wild collected herbs, berries and mushrooms, to develop a network of protected areas (strict nature reserves , national parks, natural monuments, etc.).
- Ministry of Economy. Organ that is part of this ministry and has jurisdiction in controlling trade in organic products and is responsible for the regulation of domestic and foreign trade and consumer protection is the State Market Inspectorate.
- Ministry of Finance. Within the implementation of organic agricultural policy it is responsible for approving the budget and medium-financial support in agriculture, the customs system and customs enforcement provisions. Ministry in accordance with these functions directly involved in the payment of subsidies for organic farming and the funds for other programs to support organic farming. Also, this Ministry is involved in the import / export of organic products of the customs provisions relating to this type of products.
- Institute for Accreditation of Macedonia (IARM). The institute is responsible for accreditation of the bodies for inspection and certification of organic agricultural production and organic products.
- Standardization Institute of the Republic of Macedonia (ISRM).
- National Institute of Industrial Property (SIPO). The institute is

responsible for the technical proposition for certain areas (national or private standards), and standards on which he relies organic farming.

- Higher education and scientific research institutions. Within the implementation of organic agricultural policy, the Office is responsible for registering the sign for organic products. Within these institutions there are departments for Ecological Agriculture responsible for providing technical advisory assistance for the organization of the organic farming. Also performed some laboratory and pedological analyzes at the request of private parties or an institution for the organic production.
- Agency for Promotion of Agricultural Development (NEA). Counselors employed in NEA have a role to help farmers with advice on organizing organic production economical aspect.
- Agency for Financial Supports Agriculture and Rural Development (AFSARD). AFSARD role is to implement measures to support and encourage organic agriculture with manufacturing, receipt, processing and payment of claims on the use of state aid (subsidies).

State institutions aim to learn about the potential benefits, opportunities and problems faced by all stakeholders involved in organic farming to be able to contribute to improving policies for organic farming in the country.

4. POSSIBILITIES FOR IMPLEMENTING REENGINEERING IN ORGANIZATION OF ORGANIC SECTOR IN REPUBLIC OF MACEDONIA

Reengineering is a process of changing thoughts to perform certain activities in business processes to achieve dramatic improvements in terms of quality, cost, service and speed. Reengineering the organic sector derivative aims to reorganize and redefine the activities associated with the maximum use of available resources (natural, human, organizational and technological) and thus to innovate the manufacturing process and meet the demands of market - food with high quality and low price. Proper application of reengineering involves application of principles already defined through several phases:

1. Defining the mission and vision of the association which involves informing the presidency process reengineering techniques, analysis of the current process of operation, defining the goals they want to achieve with reengineering and identification of key processes that will implement the goals and analysis of the consequences.
2. Analysis of the current state of the association when it is necessary to carefully analyze all processes, activities and resources of the association, and to identify and understand customer requirements.
3. Recognizing and planning new activities can reengineer a direct result of the analysis, and consists in understanding existing processes and detect deficiencies as poor communication among members, poor use of information technology and the like.
4. Project some processes involves designing new processes with a main emphasis on quality as a means of working, such as the use of the Internet as a means of communication between members and the presidency.
5. Simulation and testing of the new solution is an important step in detecting failures in introducing something completely new with a significant role information technologies.
6. Application and evaluation of the new solution involves evaluating new solution from all aspects - quality, quality, time, technical - technological, utilization of resources and capacity, motivation of members and communication is needed in applying TQM techniques or tools and methods of quality management: Pareto diagram, Ishikawa diagram, map, etc. trend.

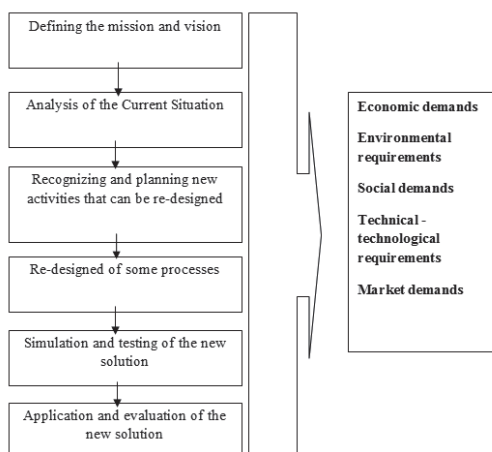
In applying reengineering it is necessary to carry out the planning process and fulfill more requirements that are critical for organic production as part of agricultural production (Figure 25). These are:

- Economic requirements - the cost of agricultural production, the price of inputs and purchasing power.
- Environmental requirements - protecting the environment, stimulating the development and use of alternative energy sources, production of healthy food.
- Technological requirements - innovation in production, following the latest scientific and technological achievements in agricultural production.
- Requirements on the market - competition analysis, prediction of

possible market and economic trends.

- Social requirements - improving the quality of life.

Figure 1 Reengineering in organizing of organic sector in Republic of Macedonia



Source: Custom with Heleta M., "Menadžment kvaliteta", Univerzitet Singudum, Beograd, 2008

Reengineering is special assignments can't be unified, that there is no standard solution that can efficiently be performed. Also due to the specifics of organic production as part of agricultural production, access to reengineering should be the creation and promotion of research - development teams within the association, cooperation with scientific institutions in the field and introduce a new concept of managing human resources - creating teams.

Conclusion

Main problem in organizing of business process in the organic sector in Republic of Macedonia are uncertain sale of the production, export

disorganized followed by inadequate organization of producers of organic products or associations. Therefore, it's necessary to reorganize and redefine the activities associated with the maximum use of available resources (natural, human, organizational and technological) and thus to innovate the manufacturing process and meet the demands of market - food with high quality and low price.

The reengineering as a modern management concept which is based on radical changes in its operations and improving way of working to achieve the goals can introduce teamwork means that all work on a common goal, everyone is responsible and everyone does its best. It can be said that its application is an opportunity and challenge that requires a gradual, systematic and continuous approach to achieve long-term development and progress of the work and successful market performance.

The concept of reengineering has future in the countries like Republic of Macedonia, since the products originate from there, neither in quality nor in price can compete on the markets of EU countries. The changes that need to be made should be directed to real-defined goals, according to the possibilities. Its purpose is to innovate existing production process by reorganizing and redefining business processes and respond to the stringent requirements of global and domestic market.

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