## IMPORTANCE OF INTEREST LINKAGE FOR DEVELOPMENT OF VEGETABLE PRODUCTION IN THE REPUBLIC OF SERBIA: POSSI-BILITIES FOR INCREASING COMPETITIVENESS<sup>1</sup>

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#### **Abstract**

The aim of research is overview of importance of interest linkage for development of vegetable production in Republic of Serbia and possibilities for increasing collaboration of participants in this sector of agriculture. In paper are analysed individual concepts which define relations of interest linkage, which can be implemented depending from economic conditions in specific surrounding. Problems that occur in possible interaction of interested participants is a consequence of distrust in long-term of good relations with other participants, unknowing of benefits which can be made by linkage, as well cultural pattern which do not allow insight in all advantages and development possibilities that linkage brings. In paper are analysed examples of good practice which indicate on possibilities of overcoming listed problems which follow and influence on the quality of relations of participants and importance which interest linkage have on vegetable production as one of the most intense plant production. Especially is emphasizing the importance of interest linkage for increasing of competitiveness of this sector, as on domestic market, as well on international market.

Key words: linkage, vegetable production, competitiveness, Serbia.

### Introduction

Vegetable production represents highly intensive and propulsive branch of agriculture. Final vegetable products are being marketed directly on markets or as raw materials to other branches of food industry. With other branches of agriculture (field farming, fruit farming, viticulture) and group of extractive

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food industry (industry for production of sugar, flour, vegetable oils, vegetable fat, etc.), vegetable industry belongs to the basic branches of food industry and has the status of inevitable segment of the overall food economy. Production of vegetables requires full attention, first and foremost, from institution of a highest level of state systems.

In a first place, state help is necessary primarily for procure fixed assets for labour. First of all, it is intended to subsidize the procurement of facilities for the production of vegetables in a protected area (greenhouses, greenhouses), equipment (watering and air-conditioning systems), as well as the purchase of machinery for processing and harvesting vegetables. In addition, agricultural producers are expected from state providing vegetable growers with easier access to development funds and provide more favourable conditions for securing products during production and production facilities against natural disasters.

The production unit, average performance, within the registered farm cannot be expected to support the country in all aspects of manufacturing problems and problems of product placement. An exception are cases where the production capacities of the production unit are quantitatively at an enviable level and fully justify the status of a legal entity, which is enabled by positive legislation. In all other cases, the assistance of the state can reasonably be expected by the associated vegetable producers, whether it is the production or marketing of vegetable products. Accordingly, interest linkage represents interest of producers with goal of development of vegetable production, as well from the point of individual as well from the point of total production on certain territory. No matter which modality of linkage is applied (cooperatives, specialized cooperatives, complex cooperatives, clusters and similar forms of association), the benefits for participants can be expected.

Association, in addition of satisfying the basic criteria of responsibility of society to individual (care for business security), is in possibility to provide existence to individual with different profiles, professions and level of education in the way of providing employment for those people. Their engagement represents social resource, which, with the use of natural resources, is able to contribute to satisfying the other criteria of a responsible society, which is, above all, economic stability, sustainability of the tendency for the development of vegetable production in the long run and strengthening the standards of producers.

Main goal of this research is making the overview of linkage between participants in sector of agriculture, with special emphasize on vegetable production. This paper analysed examples of good practice which indicate on possibilities

of overcoming listed problems which follow and influence on the quality of relations of participants. Research relies on using the data from Official sources, Laws and data collected on field in Republic of Serbia.

# Interest linkage and possibility of exploitation of process concentration of capital on certain market

Trend of multination companies to make concentration of capital on international market is possibility for development of small and medium enterprises (Anghel et al., 2007), as well and agricultural producers in countries in which such companies invest. Function of small and medium enterprises, with involvement of agricultural producers is support to large production systems. This kind of attitude is based on fact that these enterprises, with their elasticity are in possibility that their innovative solutions which are reflected in flexible production programs, supply to large production systems. Practice shows that corporate systems precisely define the parameters of process operations in full respect and strictly adhere to the projected program in the realization of the set production goals. For this reason, customized SME production programs are in dire need of them.

In order for multinational companies and SMEs to cooperate at all, it is necessary to develop cooperative relationships with the aim of satisfying common interests. The interest of multinational companies, as investors, is a positive calculation of the production costs that encourages faster capital accumulation as well as the ability to export from the country where the production takes place. The interest of small and medium-sized enterprises is satisfaction of production capacities intended for the production system of large companies and the security in the placement of their products with adequate profit effects (Lazarević Moravčević et al., 2014).

It should have in mind that corporate entities direct their flow of capital, flow of goods and services and on that way make control markets. They also concentrate their financial resources and marketing solutions in organizational, technical and technological terms solely in the countries where they come from and from where they operate. One contract is bound to be a number of years to maintain its production in the country in which they have invested their capital and then decide for themselves about their future business. For this reason, SMEs are in a position to bear the risk itself is the incorporation of innovative solutions in adapting its production to the needs of these companies. There are various reasons why a foreign company decides to part of its generation capacity installed in a particular country. Stable political situation, legal certainty, favourable ambient and business climate, the possibility of targeting markets of other countries and unions of countries with

which the investing country has attractive bilateral and multilateral agreements on foreign trade cooperation, etc. can be cited as the reason.

However, if cheap labour and government subsidies are the sole motivation of foreign companies to invest in a country without intending to stay there, improve production and thus influence the development of domestic production capacities, such practices should be minimized and should only be implemented at any given time. An alternative to such a practice is strategic partnership, subsidizing domestic production and investing in the development of centres for technical, technological and marketing training.

The sector of production and processing of vegetable can initiate interest of foreign investors only in case that there are satisfied following criteria:

- Political stability of state in which vegetable production is happening.
- Legal security of potential investors.
- Economic environment of the production destination accessibility of the destination, i.e. existence of an acceptable road infrastructure.
- Technical and technological environment besides access to modern means
  of communication, it also implies adequate space in which the basic means
  of work will be housed as well as storage space for finished products.
- Organizational and technical capacity.
- Financial accounting skills, as well as a culture of relationship with the target environment and the public.

Business environment and business culture determine the level and performance of the production destination in general, which directly contributes to the positive customer experience and influences the perception of potential investors. The interest of potential investors is directly dependent on the results of their analysis regarding the fulfilment of elementary criteria at the micromarketing level.

## Interest linkage in vegetable production and agriculture in general

Interest is factor that profiling norms of social behaviour in the way of creating values of ethics and moral, spiritual and business, as well and emotional designation of personality in frame of their own social and natural environment.

Social and sociological aspect of interest, no matter if is individual, group, public, population or in synergy, they are subject of constant review by institutions. De-

fined legislative is one of the mechanisms of protection of interests or contestation of the right to satisfaction of interests.

According to research of Zarić et al. (2008) commercial farmers which have perspective of existence in in business, they have a positive attitude to interest association, often cite examples from abroad; they are aware of the benefits of association and believe that farmers' association in the Republic of Serbia can work. The same study states that despite the positive attitude of the connections established there is no will for associating with other farmers. For the most part, farmers believe that future contracts would not be respected and that there would be no mechanism for real compensation for damages, and one of the reasons why they did not want to associate would be that good farmers would be tricked by negligent ones. Zarić et al. (2005) conclude that the memories of former state cooperatives and the way they functioned have a negative impact on the interest connection.

Fragmented social entirety, in side of segments of business activity made rules and obligations of all interests connected and related parts by intern legislative. When is about agriculture in general, which is by definition common expression for terms which include relations, reforms and laws related to land and agriculture, as an industry branch from national importance by question of satisfying needs for food, it is institutionally pressured by a range of diverse and often conflicting interests.

Activities and initiatives focused on agriculture are linked almost exclusively to rural areas and peripheral zone of suburban areas. The stability of relations in agriculture is highly dependent on economic stability and overall economic development of the country (Papić et al., 2015). Interest connect in agriculture cannot be viewed in its entirety if it is the basis of the elaboration of production only in the context of primary production of agricultural and food products ready for consumption or production of raw materials for the food industry (Malagie et al., 1998), but in addition the connection needs to be viewed from the standpoint of complete industrial finalization of foodstuffs and placements finished products to the final consumer.

It should also be borne in mind that, unlike land that is not a renewable resource, agriculture is a renewable resource, not only for food production, but also for the pharmaceutical and chemical industries, construction, energy, etc. For agriculture, and hence the rural areas, of interest and binds to a number of service activities in the field of craftsmanship of all types and the mode of operation, the field of tourism, medicine and similar activities.

However, the analysis of interest integration in the agricultural sector, irrespective of the context of the analysis, makes sense only if the environmental factors, in economic and political terms, on the development of the agricultural sector in the Republic of Serbia are considered first.

City of agriculture in the strategy of economic development, demographic characteristics of agriculture and rural areas, quality of personnel-related issues of agriculture and rural areas, cooperation between research institutions, opportunities for development and incorporation of new technologies in agriculture and its compatible storage, transport and processing capacities, are just part of the fragmented field of solutions for your problem of trying to find in agricultural policy. The problems of these areas, as well as the situation in the sphere of interests and interests of institutionally defined priorities in the agricultural sector, presupposes the synergy of interests awaiting systemic solutions.

# Science in function of interest linkage in vegetable production and agriculture in general

The economy of food which is not based on the values demanded by open markets don't have a developmental perspective. The elementary criteria of value which is necessary to satisfy are ecological and health safety standards in production. Bearing in mind certain technological limitations in the production of agricultural and food products, as a result of, among other things, the lack of cooperation research institutions and institutes with agricultural producers, manufacturers in Serbia rely increasingly on the traditional values, and their use in agricultural production and processing of product. The need for cooperation and an interesting link between farmers and science, in the minds of agricultural actors, has not yet emerged as a necessity at full capacity.

Profession needs to interact with the practice, whether it supports or corrects the operation. The essence of progress is to respect the elementary principled attitude to science and to the theoretically grounded postulates and established criteria of existing, traditionally accepted practice. However, the traditional experience should be viewed from the aspect of predispositions of success only in entrepreneurial activities which are judged by the profession to be credible. In any case, the compatibility of these two parameters, profession and tradition, determine business success. Performance criteria correlate with market conditions and alignment of intentions and capabilities.

Improvement and rationalization of agricultural production is possible if scientific institutes are allowed to finance projects aimed at developing biotech-

nical innovative solutions aimed at the modern development of agricultural production, which will contribute to increasing international competitiveness. The solution of environmental problems must be the subject of strategically regulated systemic knowledge-based solutions, because these problems are not only about preserving the ecological balance of biotopes and biodiversity, but reflect the culture of living and business activities, which directly affects the quality of the business environment and its willingness to accept investment.

# Interest as category of prerogative (category of primary) in vegetable production and agriculture in general

Correct relation and compatibility of attitude between primary agricultural producers, buyers, storekeepers and processors contribute to the coherence (coherence) of their interests and promote cooperation in business.

According to this statement, it is necessary to insist that all stakeholders in the process of interest integration accept the principle of transparency when it comes to business. The implementation of a transparency policy presupposes the conditions that allow the verification of the capacity of potential business partners. An open access policy on data related to purchase prices, warehousing prices, logistics support costs, product sales prices, and the like is of paramount importance for deciding on a partnership and business collaboration. The practice of the so-called "Open Ticket" will contribute to greater mutual trust which improves the quality of business. Cooperation in terms of trust contributes to quality, stability and business expansion.

In cases where different interests are involved and boil down to the same expected benefit, a culture of compromise is very important. Business culture has its own form of action and methods of influence. The causal effects are directly reflected in the security and effects of the business.

## Situation in agriculture with special emphasis on vegetable production

Rural environment is a fragmentary whole in geographical sense only. In economic terms, the rural environment is a cornerstone of overall economic development. Development of the entire economic system is not possible without the involvement of rural resources, and only certain segments of economic activities are not interactively dependent on rural potentials.

The agricultural situation cannot be assessed as satisfactory. Despite the efforts, the potential in the agricultural sector is underutilized. Crisis is evident in almost all

regional units, which frame rural areas and the agro-industrial complex. The agrarian crisis is of a systemic, agro-political nature. It is known that most of the land (60%) and a small percentage of agricultural production capacity are in the hands of registered agricultural holdings and rural households. The second, smaller part, when it comes to land and an incomparably larger part of production capacity, is in the hands of a small number of persons who, during the transition period, privatized large agro-industrial systems within agro-complexes.

The transition by ad hoc model, without the implementation of a long-term strategy, could not have produced better results than those present in the agrarian sector today. Inaccurate legislation, discretionary powers of local authorities in individual cases and inability to review transitional procedures, with markedly bad effects, in a reasonable time, destroys agro-industrial plants and devastates agro-systems, as well as the entire agro-economy of the Republic of Serbia. Transition, privatization, the prematurely signed Stabilization and Association Agreement with the European Union, and a number of other inter and proactive turbulent political and economic developments (the world economic crisis of 2008) have put agriculture and the agrarian Republic of Serbia in a very difficult position.

Agrarian policy defines strategies that could be assumed to have no favourable conditions for implementation. The agrarian policy strategist's vision defines the possibilities of interest interconnection and elaborates the necessity of forming cooperatives and even clusters. However, strategies that do not contribute to the development of agriculture and farmers' business activities and are not in favour of favouring the principle of equal opportunity for all, cannot meet the expectations, nor the assumption that they will come to fruition in practice.

Main problems related to development strategy presents the absence of assumed competition of their contents and reduced possibilities of implementation of established principals in sense of maintaining the development process, as well their control. In other words, the strategies do not provide mechanisms that can govern the processes it regulates. There is simply no clear correlation or coherence between the strategic outline and the implementation in practice. There is no responsibility for not meeting the strategic goals, and even in the legislation this kind of responsibility is not defined.

In the period to 2008 cooperatives are often established by individuals, usually advanced agricultural producers, and nine fictitious cooperative memorandums with symbolic role. The business of such cooperatives was reminiscent of manufacturer's cooperatives operating at the end of the twentieth century, which cer-

tainly had a negative connotation. The only difference between them was that these newly formed cooperatives had a strictly defined ownership structure.

In such a situation, vegetable growers were forced to rely on their own strengths and resources. They adjusted their production to the needs of only those markets that were available to them, most often local markets and possibly small saw-mills. Only farms with, conditionally, higher production were able to market their products in the quantum markets of major city centres. There were very few buying centres, but even where there were, there were build-ups between manufacturers and purchasers, which significantly influenced the development of the "grey" economy.

After 2008 there was a slight improvement of business conditions and some improvement in the interaction between institutions systematically farmers. However, the results that would satisfy both sides were missing. It is increasingly recognized that radical reforms are needed at all levels of decision-making structures.

In the structural reform cycle, which began in 2014, the process of fiscal consolidation has led to changes in fiscal and monetary policy, but also to the definition of a new Strategy for Agriculture and Rural Development. The next cycle must have two priorities. One is the good dynamics of economic growth and development. The second priority is institutional development that will guarantee a more reliable rule of law. Bearing in mind that structural reforms have not yet been fully implemented, the emphasis in the reform process should be on institutional development, i.e. opening up space for the development, strengthening and affirmation of the authority of institutions. It is important to emphasize that developed institutions are the foundation of democracy in society, as well as the basis of political and economic stability.

# The influence of the "grey" economy and corruption on situation in vegetable production and agriculture in general

It is necessary to analyse the causes that lead to the emergence of the grey economy and corruption, and not just the manifestations of the same. Manifestations of the "grey" economy and corruption are equally represented at the level of local government, territorial autonomy and Republic, regardless of the fact that the different levels of decentralized government.

The "grey" economy, as a matter of fact, should be brought under the legal norm. This means that efforts should be made to such operations translated into legal channels. If the determination and understanding for the needs, above all of the

primary manufacturers, is shown, such an option has a chance of success. It is important to note that farmers themselves are in some way encouraged by the "grey" economy. These are cases where they are forced to look for customers for their products, which have a limited shelf life, because they do not have the ability to secure the placement on their own in the short term. Then they are forced to turn to the buyers, who usually operate in the "grey" zone.

In solving this problem can significantly help interest connection or association of producers, and then the timely formation of a joint offer on the market.

It should have in sight that problem of grey economy or corruption is not solved in general not even in developed countries. Results, worth of respect is to reduce these manifestations of action to a reasonable extent.

### Measurement for improvement of concurrency

Bearing in mind that the final vegetable products assume a basic deal on the market is one of the priorities that the range of the range of products grown in greenhouses plans to complete a new, more attractive, more specific taste and aroma, assortment of products that today, with the more demanding customers seek and to mostly out of season basic vegetable offerings. That way, the full capacity vegetable grower and processing business would not only be seasonal in nature. Likewise, an improved assortment of vegetables would improve the competitiveness of vegetable converters. The occupancy of the installed production and processing facilities, in this case, would not depend on the weather and the season. Likewise, energy sources and labour would be used rationally. Cost-effectiveness at the disposal of both social and material resources significantly contributes to the profitability of the business and the competitiveness of the product.

Many existing processing capacities require a thorough reconstruction and modernization, while applying the above steps would be able to improve competitiveness and achieve a significantly better profit effect than the one that is quite modest today.

It is necessary to intensify research into the justification of investment activities and the work of the institutions of the system, not only on restructuring in the revitalization of existing processing capacities, but also in the analysis of project documentation for the construction of new vegetable processing capacities. New processing capacities are scarce and existing ones are spatially inadequate.

The aim of the research should be the analysis of the spatial distribution of production, storage, and purchase and production capacity in relation to the processing

capacity. The optimal concentration of these capacities contributes to the rationalization of costs in a series of process operations, from production to processing, and thus improves competitiveness.

### Perspective and modality of interest linkage and examples of good practice

Does it all production and export chances of vegetable production used in total? Perspective is large. Great climatic conditions, justified and high fertile varieties of exceptional qualitative and organoleptic characteristics; specific taste, attractive colours and smell, with possibility to be product of organic producing are qualitative and high respectable characteristics of vegetable product which did not bring high export or high profit effect (Subić et al., 2010). From the marketing point of view is not find way that emphasized characteristics of vegetable from Serbia made competitive advantage and arouse curiosity with customers in the international market (Jović, 2002).

Base of perspective are human and material resources. With them it goes technological, science and educational structure and trained staff.

In developed countries difference between perspective and time realization is usually small, and if there are conditions, there is practically no possibility that the predicted situation will not be fulfilled. In Republic of Serbia, the perspective and realization of opportunities are often on opposite sides.

Is it justified to invest a large amount of budgetary resources in companies, which regardless of ownership structure, do not guarantee the rehabilitation of their production capacities, nor do they seek to meet at least their elemental profit from their obligations arising out of business. There is a prospect for them, but how much money is needed to make a successful business happen at all and whether it is sufficient to invest without taking concrete strategic steps.

## Linkage: Examples of good practice

As a good example of interest in the field of vegetable production, it is important to mention the AC "Begec Vegetables" located in the village Begeč. The cooperative has 28 cooperatives and is best known for producing carrots. In addition to these vegetables, the cooperative also produces young potatoes, cabbage and onions. The annual production of the AC "Begečki vegetable garden" carrot is at the level of 30 thousand tons and the average yield is 50 t/ha.

Significant producer of vegetables with a strong influence of interest for connecting to the success of the production and placement of an association

"Futoški cabbage". In the structure of cabbage production, which takes place on more than 500 ha of varieties with the protected designation of geographical origin "Futoški cabbage" has a share of 30% in the total production.

In addition, a good example is the AC "Green Garden", which is located in the village Saraorci near Smederevo city. It is important to note that the cooperative has implemented the GlobalGAP standard, which is necessary for the placement of products in retail chains. Production takes place only in a protected area, i.e. greenhouses on about 10-12 ha. The production period is from March to November and the production structure is dominated by peppers, tomatoes and cucumbers.

Organizational, technical - technological and personnel - structured associations, regardless of the organizational modalities, are able to realize the assumed perspective. The modality of organization is not crucial. It is necessary that the organizational status of the business entity is formally and legally regulated, that property-legal relations have been resolved and that a realistic project has been conceived to define the development strategy.

### **Commercial agricultural holdings**

There are commercial and non-commercial farms. The difference is obvious and it is not surprising that a producer with a commercial status, that is, with a developmental perspective, has no interest in partnering with small farmers. Also, if there is a significant difference in profit effects between the two commercial farms, under the same conditions of economic activity on relatively equal areas, there will be no clear motivation for the association of higher income farm holders.

Give a chance to everyone is quite atypical for the mentality of agricultural producers in the Republic of Serbia (Bodiroga et al., 2018). The prevailing view is that assistance should be given to those who have already proven to be successful producers and who generate significant revenue per unit area, while there is some scepticism towards those producers who lack such resources in the absence of resources.

Whether such an attitude reflects a mentality, distrust in the long term of good relationships, or merely a desire to acquire or maintain a leadership position has not been sufficiently explored. This attitude of existing local leaders can only be changed through education and external incentives. Farmers should be made aware of the benefits that can be gained from connectivity and the development opportunities that connectivity brings. With regard to external incentives, a good example is the possibility of procuring complete lines for planting and/or harvesting differ-

ent vegetables, with performance in operation that goes beyond the needs of the individual producer. The interest in the association would be instantly up-to-date because the individual, and having the means to buy such a line, does not have the surface to satisfy its performance in the work. However, if there are funds available for the purchase of said production lines and areas in the vegetable production system to utilize the working capacities of the lines, the producer must liaise with the economic operator to whom or through whom he will market his products.

## Cooperatives

Agricultural cooperative, according to Law of cooperatives (OGRS, 2015) produce, take over, buy, process and sell agricultural, food and other products of the cooperative and cooperatives, supply cooperatives with reproductive material, energy products, by material for production, parts for agricultural machinery and other goods, trade in goods and services of the cooperative, cooperatives and cooperatives, and provide services to farmers' households in the organization and development of rural tourism and perform all other activities of interest to the cooperative's business.

Previous problems, misunderstandings, and even conflicts between cooperatives and holders of administrative functions in cooperatives have arisen from superficially defined and freely interpreted rules in communication and coordination in performing process actions. Formally, it is provided that the management of priority cooperative links with other cooperatives and other organizational units such as clusters, associations of producers and processors. Likewise, their association with representatives who have processing capacities should result in the secure placement of primary products from the vegetable production of current cooperatives at a predetermined price, which is rarely implemented.

The price of the final product need not be nominally fixed but should be contractually proportionate to the input prices. To assume this type of contractual obligation of cooperatives towards registered agricultural holdings, on the one hand, and organizations from the processing complex to cooperatives and associations, on the other, it is necessary to involve system institutions that have mechanisms through instruments defined by the indicative planning model (national planning). In order to carry out such an interactive connection between producers, purchasers and processors, it is necessary to make a lot of efforts, harmonization and compromise among the entities that are, as a rule, in one way or another competing with each other.

One of the reasons for farmers' distrust of cooperatives is that they, viewed from previous experience, view cooperatives not as a place where they can turn for help in organizing production, crop protection and the like, but solely as a place where inputs for production are procured and where products are sold. Zaric et al. (2008) state in their research that commercial, advanced farmers see the role of former cooperatives primarily as a buyer.

Controversial attitudes were also significantly contributed by the behaviour of the leaderships of former cooperatives that privileged individuals and thus created an atmosphere of mistrust, and often of conflict.

Babovic et al. (2005) point out that cooperatives should be modern business organizations of cooperatives trained in entrepreneurship. The same authors state that it is necessary for the associated manufacturers to define the production for the known buyer with management, which is the reason that the cooperatives must, in addition to adequate staffing and know what the market is looking for most, or what should be produced. According to Law of cooperatives (OGRS, 2015) cooperatives can be specialized and complex. Specialized agricultural cooperatives organize the production of only certain products, their processing and marketing. Mentioned Law in Art. 67 states that a complex cooperative is a legal entity, which is a special form of organizing cooperatives, which, by operating on cooperative principles, realizes economic, social and cultural interests and performs the tasks conveyed to it by the founders by the founding agreement and cooperative rules. A complex cooperative can be founded by at least two cooperatives.

Complex cooperatives may own or co-own storage and production facilities. Specialized cooperatives are also not denied this right, but they often do not have sufficient resources to buy into existing ones or build new storage and production facilities. Cooperatives should be the nucleus of a general gathering of all those interested in the subject matter, and the incentives and development of cooperatives require the assistance of system institutions at all levels.

#### Clusters

When the institutions of the system devise programs that seek to promote growth and development, as well as the competitiveness of a branch of agriculture or one of its sectors, it can be said that it is a branch approach to the problem in question. Branch access to an area is essentially a cluster form.

A cluster represents the geographical concentration of interconnected entities and institutions in a particular area of activity in the common interest or activity, that is, the critical mass of enterprises and institutions in one place, of unusual competitive success in certain fields of activity (Porter, 1998). Clusters can also be defined as groups of connected customers, suppliers, competitors and other support institutions, such as universities, schools, research institutions, financial institutions and services, standardization agencies, etc. (Russel et al., 2003). Also, according to Porter (2008), clusters can take different forms depending on the size of the development, but mostly include manufacturers of final products or services, suppliers of special inputs, components, machines and services, financial institutions and related businesses.

In the Republic of Serbia, a specific form of organization and interest association, such as vegetable clusters, has not come to life. No interest was recognized or any potential benefits would be realized if the implementation of the business development program, increased productivity in production and improvement of competitiveness were inter-proactive coordination of resources of combined production capacities, knowledge and experience, both vertically and horizontally, of all interest. Related within and around a production branch such as vegetable gardening.

# Examples of benefits from cooperative of vegetable producers, vegetable processors and sales centres

Large production systems and large retail chains, since they do not usually have a raw material base capable of meeting their production and sales capacities, have been referred to farmers' associations, most often cooperatives, but also small and medium-sized enterprises. They enter into cooperative relations with them, which are regulated by a joint cooperation agreement. These are strategic, legally binding agreements, and it is in the mutual interest that everything works in the spirit of good business practice. Practice has shown that large systems have a positive effect on the organization of production of their subcontractors. They help them to eliminate subjective weaknesses of a technical and organizational nature, point out possibilities of how to operationalize the principle of economy and expediency, improve productivity in carrying out process actions, and point out factors that may limit them. On both sides, the utility effect is coming to the fore, that is, large systems have a secure raw material base and subcontractors have a secure placement of their products at a price that values their business efforts.

#### Conclusion

The Republic of Serbia has the material and social resources, both for conventional and organic vegetable production. In accordance with traditional principles, vegetable production has advanced, in line with its resource potential, and is delivering significant results. Today, when business results are both qualitatively and quantitatively subordinated to improving the quality of life and standards of citizens, vegetable production does not live up to expectations. The highly competitive environment and increasingly demanding markets make a big contribution to this. In order for vegetable production to achieve higher yields and reach a level of satisfactory competitiveness, convention-intensive, and especially organic production, must be based on modern technological solutions in all process operations.

If the coordinate schedules production and processing capacities, introduce modern processing equipment, implement control application of rational technical solutions from the aspect of health security, energy efficiency and environmental friendliness of the manufacturing process, it is possible to raise the level of competitiveness of the food industry and improve the economics of food in general and not for profit effects they would not stand out.

Manufacturers must accept the fact that their business status and profit effects are directly dependent on the conceptualization of the organizational, technical and technological characteristics of production and the acceptance of binding criteria in the association. Before establishing guidelines and elaborating their production program, it is necessary to carry out a proper analysis of the cost calculation of the overall business. The irrational use of labour, raw materials and technical means of labour is directly reflected in production efficiency and, consequently, in competitiveness.

Through the processes of actualization and re-contextualization of the original qualities of a cooperative, it is possible to establish new and contemporary connotations and references to modern cooperatives that associate farmers would trust. It is important to emphasize that the correct relationship is the only relevant connotation of successful business.

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