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Research of Producers' Cooperation in the Hungarian Fruit-Vegetable Sector

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1. Abstract

The European Union devotes important role to producers' marketing cooperatives (PMCs) of the fruit-vegetable sector in coordinating the product lifecycle from agricultural policy point of view. Statistical data show that in spite of the available support organisation has recoiled during the previous years in Hungary; currently 20% of the producers are members of a cooperative.

The starting point of my analysis was the "National Strategy" of 2008. I made a comparative SWOT analysis based on the interviews with leaders of PMCs hence the advantages and disadvantages of membership over non-membership were discovered. As a result of my research I revealed those macroeconomic problems that obstruct the effective operation and increasing organisation of producer corporations.

Keywords: Fruit-Vegetable sector, production groups, co-operation, SWOT analysis

2. Research Background

The producers' cooperatives in the European Union member countries have dominant role in growing, primary processing and marketing of fruit and vegetables. Having seen the successful predecessors, Hungarian producers were looking forward to joining the Union since they expected financial subsidies as well as new markets that would increase their income. That is why the 25/1999. (III. 5.) FVM decree that was harmonised with the common law and enabled foundation of fruit and vegetable Producers' Market Cooperatives was welcomed. The aim was to set up such flexible cooperatives like the Western European ones. Improvement of vitality and competitiveness of the organisations were to be achieved so that they could create greater economic power. (HORVÁTH, 2013).

The first producers' marketing cooperatives were set up in Hungary in 1999. DUDÁS and JUHÁSZ (2013) divided the development of PMCs into 4 stages: "Initial difficulties" until 2002, "Joining peak" 2002-2004, "Concentration" 2005-2009, and "Stagnation" from 2010 until now. Statistical data show that the number of members is decreasing and the land covered is increasing. Therefore it can be stated that the level of organisation does not increase within the sector but there is a concentration process within the PMCs. (DOMJÁN AND FARKASNÉ, 2014) Being present in both the markets of consumer products and business products illustrates the market relations of PMCs. Statistical data show that the product value of PMCs has been decreasing since 2009 due to the loss some of their market share of fresh products. It proves that their competitiveness in the fresh market has failed. (DOMJÁN ÉS FARKASNÉ, 2011)

The domestic importance of this topic can be detected in the increasing number of theoretical and applied researches and number of publications in recent years. The theoretical and practical aspects of co-operation have been researched by SZABÓ G. G. (2011, 2013), FERTŐ I. & TÓTH J. (2012) as well as SERES A. et. al. (2011). Several authors (DUDÁS GY. – FERTŐ I. 2009, HORVÁTH Z. 2010, DUDÁS GY. – JUHÁSZ A. 2013) have dealt with the economical evaluation of PMCs as well as their integrating role in the fruit-vegetable sector. The complexity of the topic as well as the role of the sector in the employment justifies the continuation of researches in this field.

3. Literature and Methodology

The PMCs of permanent and temporary recognition operate according to the programmes in the *National Strategies for Sustainable Operational Programmes in the Fruit and Vegetable Sector of 2008* (hereinafter referred to as National Strategy) that is based on and harmonised with the Commission Implementing Regulation 543/2011/EU. This document was reviewed in 2012 in “*The National Strategies for Sustainable Development in the Vegetable and Fruit Sector*” ordered by the Ministry of Rural Development. The aim of the research was to evaluate the experiences of operation and draw conclusions that may assist PMCs in improving the quality of their work.

3.1. Methodology of the Comparative Research of the Fruit-Vegetable Sector and PMCs

The basis of the review of the strategic plan was a SWOT analysis made for the National Strategy in 2007. The five years that have passed since then have brought lots of changes into the macro- and microeconomic environment of the sector. Therefore, with interviewing 29 managers of registered organisations, I examined how the internal and external relations of the sector and of the PMCs had changed compared to that of the SWOT analysis. Interviewees were asked to analyse the Hungarian agriculture, the fruit-vegetable sector and PMCs of the sector in semi-structured interviews. The replies were summarised in a SWOT analysis on the fruit-vegetable sector and the PMCs and then the differences between PMC member and non-member producers were analysed. The SWOT analysis was selected because it allows the comparison of internal (strengths and weaknesses) and external (opportunities and threats) aspects as well as their changes in recent years.

3.2. Introduction of the Research of PMCs

In the second part of my research I examined the operation of the PMCs. The strategic goals of the National Strategy form an integrated and logical system the producer organisations must adjust their programmes to. These documents are the operative programmes that are based on the conditions of the actual organisation and contain the tasks to be executed by the PMC. The operational programmes include the following:

- Activities aiming at the planning of production
- Activities aiming at improving and maintaining the quality of products
- Activities aiming at improving distribution as well as promotion and communication
- Research and pilot production
- Educational activities
- Crisis prevention and management measures
- Environment protection activities
- Other activities

The operation of PMCs were analysed based on the annual reports of 2008-2011 that provided information on the effectiveness and efficiency of the execution of the activities.

4. Results

4.1 SWOT Analyses of the Fruit-vegetable Sector and the PMCs

The SWOT analyses of the fruit-vegetable sector and the PMCs are the results of the interviews. (Tables 1 and 2)

Table 1: SWOT analysis of the fruit-vegetable sector

INTERNAL	EXTERNAL
STRENGTHS	OPPORTUNITIES
Expertise based on century-long cultivation experience and traditions.	Favourable ecological conditions, water base for irrigation, climatic and soil features.
Traditional cultivating and processing technologies.	Proximity of export markets, logistically advantageous geographical location.
Species and technologies of excellent quality.	Availability of European Union subsidies.
Numerous, well trained workforce.	Increasing demand for healthy food.
Existing PMC network; dissemination of operation experiences.	Increasing demand for fruit and vegetables as a result of changes in nutrition habits.
	Contamination of the natural environment is low.
	Widespread of information technology.
WEAKNESSES	THREATS
There is little crop land equipped for irrigation.	Lack of sector specific banking services.
Low level of willingness for cooperation.	Low level of social capital in the economy; general lack of trust.
Heterogeneous, sometimes low technical and technological standards.	High ratio of black market in the economy and in the sector.
Low level of capital supply.	Prolonged effects of the global crisis.
Lack of contractual discipline.	Changes of the climate; extreme weather, frequent drought.
Underdeveloped post-harvest technologies.	High quality expectations of export markets.
Unorganised marketing, lack of concentration of supply.	High concentration of commerce and processing industry.
Fragmented lands.	Price sensitive, not sufficiently conscious customers in domestic markets.
High average age of producers.	Stagnating/decreasing real income.
Fluctuating yields. General commodity supply shortage.	Appearance of cheaper import products in high volume.
Weak marketing activities.	Lack of fair and calculable taxation policies.
Weak and not full quality control.	The primary producer system that allows abuse.
Low ratio of organised producers.	Changes of customer demand.
Deficiencies of expertise in planning and operations management.	Increasing price of basic commodities and energy.
Lack of research and independent counselling in the sector.	Appearance of new competitors in the traditional markets.
Lack of recruitment of professional and committed experts.	Further decrease of processing industry capacity.

Source: Interviews (n = 29)

Table 2: SWOT analysis of PMCs

INTERNAL	EXTERNAL
STRENGTH	OPPORTUNITIES
Having professional, management with PMC system management skills.	Use of geological proximity for acquisition of new markets, market segments.
Great production experience, expertise, knowledge of modern technologies. Environmental awareness.	Favourable ecological and climatic conditions for production.
Substantial quantity of means of production.	Support of PMCs with governmental promotion of cooperation.
Organisation is stronger than that of the sector.	Modern production technological items are available.
Transition financial resources are available.	Tightening commercial regulations, elimination of competition distortion effects.
Capability of producing excellent quality premium products well-known abroad as well.	Use of EU subsidies.
Good logistics.	Opening towards quality markets.
Good innovative abilities.	The export and domestic consumption may be increased in the long run.
Processing technology can be broadened.	Water for irrigation and thermal energy is available.
Application of quality assurance systems.	Introduction of new species and production technologies.
Important role in employment; their carrying capacity is favourable.	Strengthening vertical integration. Increased role of PMC sin rural development programmes.
WEAKNESSES	THREATS
Low capital power and shortage of resources characterize some members.	Unstable macroeconomic environment.
Heterogeneous combination of members; the number of uncompetitive producers is high.	Unfavourable taxation policy; anomalies of the primary producer system mean competitive disadvantage.
Low ration of irrigated lands.	High ratio of black market in the fruit-vegetable trade.
Attractiveness of PMCs is low; membership benefits are not clear.	Decrease of solvent demand. Price sensitive, not sufficiently conscious customers in domestic markets.
Weak marketing activities and communication.	Strengthening global economic crisis, slow market development.
Deficiencies of information management.	Decreasing funds.
Few professional and committed experts.	Capital shortage, lack of affordable investment and current asset loans.
Lack of well-trained and experienced professional counsellors.	Increasing dominance of commerce and processing companies.
Bureaucracy.	Further increase of food import.
No means against “free-rider” members.	Employment problems (seasonal work).

Source: Interviews (n = 29)

The following differences were identified between the situation of the fruit-vegetable sector and the PMCs from the interviews:

- In the area of strengths it is an important difference that the professional management of PMCs are committed to cooperation. Knowledge of modern technologies and environmental awareness are also characteristic. As a result of financial subsidies lots of developments have been executed by PMCs which is also an advantage against other entities of the sector. Application of quality assurance means competitive advantage in safe-production sensitive markets. Use of innovative solutions in production technology and marketing activities are also advantageous for PMCs. Developments in logistics aid the concentration of supply and marketing of members' commodities. Their role in employment, in production and processing is significant, too. The advantage of temporary mutual financial support of members arises from the organised nature of PMCs.
- In the case of opportunities PMCs can get support that increases their carrying capacity and competitiveness and are unavailable for other players of the sector. Concentration of supply is essentially important for smaller producers to be able to appear in markets where non-member producers of the sector cannot. It is true that larger non-member producers may find their markets via their relations but it is more difficult for small producers. It is also beneficial for members that PMCs buy inputs in bulk which helps them to compensate increases of price.
- Compared to the sector operation of the organisations is more bureaucratic and gaining the available financial resources is more difficult for PMCs, which can be regarded as a weakness of PMCs. In order to receive the subsidies besides the general accounting and labour registers PMCs must observe other regulations and monitor them. It entails significant workload on both members and the organisation. It also makes PMCs less flexible compared to non-organised organisations of the sector. A specific weakness of PMCs is the conflict of interest between producers of larger and smaller volumes. This conflict characterises the sector as well but in case of non-member producers harmonisation of interests and activities is not necessary.
- The majority of weaknesses are in relation with the threats that threaten the whole sector but PMCs cannot avoid them or only with difficulties. Such threat is, for instance, the high ratio of black market and the anomalies of the taxation policy, etc. The black market means more significant financial and moral risk on PMCs than on other organisations of the sector because PMCs' compliance with the law may cause competitive disadvantage as against those who do not comply with law. It does not make PMC membership attractive in spite of the benefits. Interviewees expect positive discrimination and strict legal actions against fraud so that they do not suffer competitive disadvantage. It can be stated that PMC members will always be at disadvantage in this respect unless whitening of the fruit-vegetable sector is fulfilled.

Respondents evaluated the National Strategy as moderately successful. The most successful were the creation of the PMC system and the role of PMCs in employment but there has not been a break-through in the fields of market concentration, cutting down on black market, counselling and creating sector specific marketing and research and development. On the whole it can be stated that respondents consider organisation beneficial in several areas, therefore they judge all efforts that support the operation of PMCs positively.

4.2. Examination of Efficiency and Productivity of Provisions Applied in the Operative Programmes of PMCs

For the sake of successful execution registered PMCs prepare annual financial reports to measure the execution of operative programmes and efficiency of provisions can be traced. In the second part of my research I examined the financial reports of recognised PMCs in order to evaluate the productivity and efficiency of the provisions of the operative programmes. Based on the documents examined it can be stated that some provisions served the objectives at different degrees in the research period:

- The activities aimed at production planning contributed significantly to the successful operation of PMCs. The activities met the requirements but long-term planning was made more difficult by factors originating from the macro- and micro-environment.
- Resources for improving or maintaining the quality of products were successfully and effectively used so these activities contributed to the improvement and maintaining of the quality of products. In the period of investigation PMCs became important partners of fruit and vegetable processing companies and their position was enhanced by the quality assurance systems employed.
- Out of activities concerning marketing promotion and communication were the most successful, other marketing tools were less used. In order to improve the ratio of fresh market consumption it would be necessary to devote more resources and pay more attention to marketing and especially marketing logistics.
- Environmental activities contribute successfully and effectively but moderately to the operation of the organisations. The most successful actions were the ones of soil and water protection as well as decreasing the amount of waste.
- Research and experimental production activities contributed to the successful operation of PMCs to a certain extent. Although there is claim to research and experimental activities but PMCs are not prepared for organising such activities.
- Similarly, training activities and activities related to advisory services partially contributed to the successful operation of PMCs. It spoils the efficiency of trainings that there are few experts in various areas and there is lack of financial resources for hiring advisors. Trainings cannot replace permanent advisory work.
- Other subsidized activities aiming at improving the productivity contributed to success a little; the organisations hardly used the opportunities offered by these provisions therefore their efficiency was at satisfactory level.
- Preventive and handling tools of crisis contributed to PMCs' crisis preventing activities to a lesser extent. PMCs did not apply the classic tools of preventing crises though it would be important for them to fill their funds up so that they could support members in bad times. Due to lack of trust and conflicting short term interest of members the organisations do not take advantage of this.

All in all it can be stated that provisions of the National Strategy served the operation programmes of PMCs effectively but with different efficiency. Since the operational programmes are not flexible enough regulations forced the PMCs to make unnecessary steps instead of covering the actual operational expenses with redistributing the resources. It shows that provisions should be changed in order to support producers' cooperatives more efficiently.

5. Summary

It is clear from the research that the operation of Hungarian PMCs should be improved and developed in several areas. One of the most important tasks would be the improvement of marketing activities that increase the ratio of fresh product sales in domestic markets. The results of my research show that PMCs have achieved several partial results which prove the usefulness of cooperation for members as well as for the sector.

PMCs operate by several rules and provisions of the operating programmes that are based on the principles of The National Strategy. The operating programmes of PMCs serve as strategic plans that must be made for 5 years. For the sake of success regulations should be much more flexible with regular feedback. Control mechanisms should be made less bureaucratic so that PMCs could accommodate consecutive changes easier and become more attractive among producers.

My research also pointed out that the operation of PMCs should be improved in several areas but their activities must be propagated because they have an important role not only in production but in employment and carrying capacity in the provinces.

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