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Member selection criteria in fruit and vegetable producer organizations in Poland

Abstract. The role of producer organizations (POs) in enhancing the efficiency of agricultural production and empowering farmers within the agro-food supply chain has gained significant attention among scholars and policymakers. These organizations play a crucial role in addressing the challenges faced by farmers, such as market volatility, limited access to resources, and unequal bargaining power. The primary objective of this paper is to delve into the selection criteria employed by POs and classify them accordingly. By doing so, we aim to gain a deeper understanding of how the member selection process evolves over time and to highlight any divergences between POs that are actively operating and those that have ceased their operations.

By contrasting the selection processes of active POs with those that have discontinued their operations, we hope to uncover potential reasons for the success of these entities. To accomplish this, our study focuses on a sample of 70 producer organizations composed of fruit and vegetable growers situated in two voivodships in Poland.

Keywords: producer organizations, member selection criteria, fruit and vegetable sector

Introduction

The notion of farmer cooperation has been frequently proposed as a potential mean to enhance the efficiency of agricultural production and to increase the bargaining power of farmers in relation to other actors in the agro-food supply chain. While numerous arguments have been put forth in support of this perspective (i.a. Fałkowski and Ciaian, 2016, p. 12) the positive effects of horizontal integration among agricultural producers are typically expected to materialize in two main ways. First, joint action can facilitate the exploitation of economies of scale and minimize transaction costs that arise during the production and marketing of agro-food products. Second, such cooperation can lead to the concentration of agricultural product supply, thereby simplifying the negotiation of sales conditions. Moreover, by making it possible to plan joint production

and aggregate demand for agricultural inputs, it should strengthen farmers' negotiating position vis-a-vis input suppliers.

The potential benefits of farmer cooperation have attracted significant attention, not only in academic circles but also in political spheres. This is evident, for instance, in the composition of the European Union's Rural Development Policy, in which measures supporting horizontal integration at the farm level in the form of producers' organizations (POs) play a vital role, particularly in certain member states (Hendrikse and Bijman, 2002, p. 105). The effects of these programs are also visible in Poland, where the establishment and operation of POs have been promoted for over two decades. After a relatively large wave of interest among farmers in establishing producers groups (in total, over 2 thousand groups of agricultural and fruit and vegetable producers were established), we are now observing a significant decrease in the number of these entities and practically no newly created producer organizations (Chlebicka and Pietrzak, 2018, pp. 13–14; Krzyżanowska, Parzonko and Sieczko, 2020, pp. 61–64). Only 40% of these organizations remain operational, with the majority being dissolved, including 65% of agricultural producers' groups and 38% of fruit and vegetable producer organizations. Therefore, it is worth considering the reasons for this state of affairs.

A PO can be viewed as a type of organizational hybrid, as defined by Menard (2004, p. 348). Hybrids are legally distinct entities that pursue common interests and engage in mutual alignment with limited use of the price system. They share or exchange technologies, capital, products, and services, but do not have unified ownership over them. Hybrids differ from integration in a hierarchical form and from the coordination mechanism through prices characteristic of a competitive market. The primary goal of hybrid agreements is to facilitate the coordination of inter-firm activity and cooperation. This requires a balance of strong market incentives with decisions to invest in shared resources and skills against the risk of opportunistic behavior. Therefore, selecting partners in hybrid organizations is a key success factor (Pietrzak 2019, p. 135).

Drawing on this theoretical observation, we aim to take a closer look at the criteria used by producer organizations in selecting their members. The objective of this paper is first to identify and classify the selection criteria used by producer organizations when choosing their cooperative partners, and to gain a better understanding of how the process of member selection evolves over time in partnership organizations. By analyzing the member selection criteria for active and dissolved POs, the study also aims to identify potential factors that contribute to the success or failure of POs, and provide insights that can inform the development of effective membership policies for these entities. To achieve this, we use data obtained from surveys conducted in 2016 with the presidents of fruit and vegetable producer organizations. The structure of this paper corresponds to the research objectives set out. In the first part, we conduct a review of the literature on the types of criteria used in selecting partners for cooperation, as well as the significance of selecting members of POs for the success of these ventures. In the second part, we diagnose the development of producer

organizations in Poland and discuss the legal regulations concerning membership in producer organizations. In the following section, we present the results of our empirical research. The paper concludes with a synthesis of the findings and key conclusions drawn from the study.

Material and methods

The primary data was collected via a survey conducted with 70 CEOs of fruit and vegetable producer organizations (POs) located in Mazowieckie and Łódzkie provinces in Poland. The sample constituted 72% of fruit and vegetable POs from these provinces and 32% of all POs active in 2016. All of them obtained the status of a recognized producer organization and had been operating for more than 5 years. Currently, 42 entities (60%) remain active while 28 have ceased their operations (40%). The POs had an average of 21 members who cultivated a total of 12,700 ha. All the entities had the status of a recognized producer organization. The majority of the POs had a legal form of a limited liability company, while 12 cooperatives were also present in the sample. Most organizations specialized in apple production, with some specializing in tomato and mushroom production. Fresh produce sales accounted for 83% of the total sales, 16% was from deliveries of products to processing plants, while the remaining 1% was withdrawn from the market under the CAP measure. The comparison of the POs from the sample vs the entire population is presented in Table 1.

Table 1. Selected characteristics describing the membership of producers’ organizations – investigated sample vs population

Selected characteristics	POs in the sample		POs in the population	
	active	dissolved	active	dissolved
Number of POs	42	28	211	127
Number of members	1806	700	5062	2511
Average number of members	34	25	24	20
Median of the number of members	23	20	10	7
Max number of members	165	97	165	203
Min. number of members	5	5	5	5

Source: own elaboration based on survey and the register of fruit and vegetable producer organizations maintained by The Agency for Restructuring and Modernisation of Agriculture.

Literature review on a selection of partners for cooperation

According to Dyer and Singh (1998), partner selection criteria serve as an important mechanism for mitigating opportunism in inter-organizational relationships. Opportunism is a major concern in such relationships, as self-interested actors may attempt to manipulate information, violate agreements, or engage in other forms of unethical behavior to further their own interests at the expense of their partners. Lavie

(2006) argues that partner selection criteria can reduce opportunism by facilitating information sharing and aligning the interests of partners. In particular, partner selection criteria can help to reduce information asymmetry, which is a key driver of opportunistic behavior. By requiring potential partners to disclose certain information about their organization, such as their financial position or their commitment to the organization's mission, partner selection criteria can help to reduce the uncertainty and risk associated with partnering with the organization. This, in turn, can help to build trust between partners and reduce the likelihood of opportunistic behavior. According to Das and Teng (1999), partner selection criteria can also help to align the interests of partners by setting clear expectations for their behavior and performance. For example, a hybrid organization may require partners to adhere to certain ethical or environmental standards or to contribute a certain amount of resources towards achieving shared goals. By setting these expectations upfront, partner selection criteria can incentivize partners to act in a mutually beneficial way and reduce the likelihood of opportunistic behavior.

The importance of selecting partners with compatible goals, appropriate skills, and effective motivation has been widely recognized as crucial for successful collaboration (Dacin and Hitt, 1997). The partners chosen for collaborative projects can impact the overall mix of available skills and resources, as well as the operating policies and procedures (Geringer, 1991). To ensure the success of collaborative projects, organizations should identify selection criteria prior to setting up collaborations. Furthermore, the process of setting up collaborations is both time-consuming and costly, yet many organizations still select partners in an ad-hoc manner.

Although an almost unlimited range of criteria exists for selecting partners, Geringer (1991) simplified the process by distinguishing between broad categories of criteria, known as task-related and partner-related criteria. This typology provides a better understanding of the selection process and how organizations proceed in selecting partners (Tatoglu, 2000). Task-related criteria are those that focus on the specific objectives of the joint venture and the tasks that the partners will undertake together. These criteria include factors such as the compatibility of partners' technical skills, production capabilities, and financial resources. Task-related criteria are essential to ensure that the partners have the necessary resources and capabilities to achieve the goals of the joint venture. Partner-related criteria are those that focus on the characteristics of the partners themselves. These criteria include factors such as the compatibility of partners' management styles, culture, and communication. Partner-related criteria are essential to ensure that the partners have a shared vision for the joint venture and can work effectively together. It is important to note that the classification of task-related and partner-related criteria is not mutually exclusive, and some criteria may fit into both categories. For example, a partner's financial resources may be both a task-related and a partner-related criterion, as it relates to both the tasks the partners will undertake and the partner's characteristics.

The study conducted by Gulati, Nohria and Zaheer (2000) provides insights into the factors that influence partner selection in strategic networks. The research findings

suggest that firms prefer partners who have similar resources and capabilities, as this enhances the compatibility between the partners. The study also highlights the importance of trust in partner selection, as firms prefer to collaborate with partners who they trust will deliver on their promises. Additionally, the study shows that firms seek partners who have a strong reputation and a good track record of successful collaborations. These findings have significant implications for firms that are seeking to form strategic alliances, as they need to carefully consider these factors when selecting potential partners to collaborate with.

Partner selection criteria in farmers' cooperatives is an area that has received limited attention in the literature. The main reason for that is the fact that the vast majority of traditional cooperatives implement open membership policy that allows anyone involved in agriculture or related activities to become a member. The membership is open to all individuals and entities that share the cooperative's values and principles. In open membership cooperatives, the members collectively own and control the organization, and decisions are made democratically, usually through a one-member-one-vote system. New Generation Cooperatives (NGCs), on the other hand, are a relatively new type of cooperative organization that emerged in North America in the 1990s (Chaddad and Cook, 2004). NGCs are designed to address the needs of agricultural producers who want to capture a greater share of the value of their products by vertically integrating into processing and marketing activities. Compared to open membership cooperatives, NGCs are generally more specialized in their focus and have a narrower membership base. NGCs typically require their members to produce a specific crop or product and may also require a minimum amount of production. NGCs also tend to be more vertically integrated, with members participating in multiple stages of the value chain, including processing, marketing, and distribution.

The only empirical study on this topic conducted in Poland by Banaszak (2008), revealed that most of the 50 producer groups surveyed did not have a formal procedure for selecting new members. Instead, the decision to admit new members was usually made by the group's board. However, a few groups reported having certain criteria for selecting new members, such as the quality of products or the willingness to cooperate. The lack of formal selection procedures in most producer groups highlights the need for further research in this area to better understand how farmers' cooperatives select their partners and what factors influence these decisions.

The study focuses on producer organizations that engage in marketing fruits and vegetables. The establishment and recognition of producer organizations in Poland are subject to specific legal regulations aimed at ensuring that they meet the objectives of stabilizing producer prices and environmental protection standards, and optimizing production costs and profits while ensuring adequate supply and demand planning for their products. These regulations require producer organizations to meet specific criteria, including being a legal entity, having at least five producers/farmers, pursuing one or more of the above objectives, and submitting a declaration that they do not belong to another recognized producer organization for the same group of products. Additionally, the total value of products produced by the producers and sold in the

selected twelve-month period must be at least PLN 500,000. More than half of the revenue from the sale of products belonging to the product group in respect of which the entity applies for recognition must come from sales of those products produced by producers affiliated with that entity and from sales of those products produced by producers who are members of another organization, in the case of sales made through the organization concerned. Additionally, legal or natural persons who are not fruit and vegetable producers can also join producer organizations if they meet certain conditions, such as having technical means for storage, sorting, or packing of fruits and vegetables, possessing professional qualifications to manage the organization's activities, and not receiving direct benefits from European Union-funded activities.

There is also an important rule stating that no member or shareholder can hold more than 49% of shares or stocks and cannot dispose of more than 20% of votes at a general meeting of partners or a general assembly of members. This solution is similar to the concept of democratic control in agricultural cooperatives and it ensures that no single member or shareholder can dominate the decision-making process. This principle ensures that the producer organization operates in a fair and democratic manner, and no single member can influence decisions based on their economic power.

Growers may only be members of one producer organization to ensure alignment with the offerings of the PO, while producer organizations may sell products from non-member producers as long as more than half of the organization's sales revenue comes from products delivered by its members. Members must adhere to the organization's regulations regarding production reporting, the production itself, environmental protection, and selling their entire production through the organization. However, in certain cases, the organization may allow members to sell a specified portion of their production directly to consumers or sell certain products outside the organization. The maximum level allowed for direct sales is determined by the type of product and the number of product groups recognized by the organization. A PO recognized for one product group may allow its members to sell up to 20% of their production volume directly to consumers for their own use on or off their farms, while a PO recognized for two or more product groups may allow its members to sell up to 25% of their production volume directly to consumers. In addition to direct sales, growers may also market products outside the producer organization if they have marginal quantities compared to the volume sold by the organization, or if the products are not typically included in the organization's commercial activities. Members must also pay membership fees for the operational fund.

Empirical study results and discussion

Most of the surveyed organizations were established between 2009 and 2013, and the average period of operation on the market was 8 years. For all producer organizations under the study, 70% of entities reported an increase in membership since the establishment of their organizations. However, when looking at the data separately for active and dissolved POs, some differences emerge. A majority of active POs (76%) have seen an increase in membership since their establishment. For dissolved POs, however,

the results were different – almost 40% of this category of POs did not experience an increase in membership since its establishment.

To determine if there is a correlation between the status of a PO (active or dissolved) and the answers yes or no to the question „Did the membership of a PO increase since its establishment?”, we performed a chi-squared test of independence. The expected frequencies for PO status (active or dissolved) and increase in the number of members (answers yes and no) are presented in Table 2. The calculated chi-squared value is 3.41, which is less than the critical value of 3.84 with 1 degree of freedom and a significance level of 0.05. Based on a chi-squared test of independence, there is no significant correlation between the status of a PO (active or dissolved) and the answers “yes” or “no”.

Table 2. The expected frequencies for PO status and increase in the number of members since the establishment of a PO

	Increase in the number of members since the establishment of a PO (answer “yes”)	No increase in the number of members since the establishment of a PO (answer “no”)
Active POs	13.36	28.64
Dissolved POs	7.64	20.36

Source: own calculation.

Based on the literature review we expected that the criteria used for selecting members into a partnership organization may differ between the initial establishment phase and the later expansion phase. To explore this potential difference, a question was posed to respondents asking about the selection criteria used during the initial establishment stage and the subsequent enlargement stage. The selection criteria used during these different phases of the PO’s development are presented in Figure 1. Task-related criteria were represented by: substantial financial input, volume of production, quality of produce, on-farm infrastructure. Partner-related criteria were represented by: family relationship, co-operation prior to establishment and grower’s reputation.

At the establishment stage of a PO, the most common criteria used to select members were substantial financial input, with all respondents selecting this option, followed by the volume of production with 87% respondents. Both of these criteria were task-related. Family relationship was also a common criterion with 86% respondents selecting this option. Other criteria such as co-operation prior to establishment, grower’s reputation, and quality of produce were also considered but to a lesser extent. Both family ties and grower’s reputation represented important partner-related selection criteria. On-farm infrastructure, other criteria, and none (no criteria at all) were not selected by any respondents.

During the enlargement stage of a PO, the criteria used to select members differed from those used during establishment. Co-operation prior to establishment became

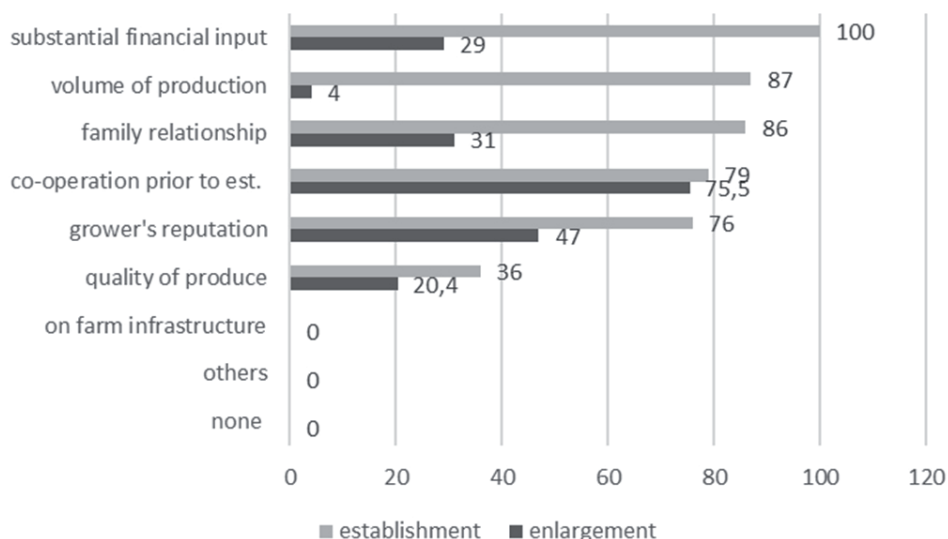


Figure 1. Types of criteria used by POs to select their members at the stage of a PO establishment and later on (enlargement) – in % of all POs for the establishment and in % of POs that increased the number of members for enlargement

Source: own research.

the most important criterion with 75.5% of POs that increased their membership. Family relationship was also considered but to a lesser extent, with 31% of respondents selecting this option. Substantial financial input remained a common criterion but with a much smaller number of respondents (only 29%). Other criteria such as the grower's reputation and quality of produce were also considered, but to a lesser extent (47% and 20% respectively).

Based on the survey results, we further analyzed how the criteria chosen by producers' organizations (POs) differed at the establishment and enlargement stages, specifically when considering the active POs versus the dissolved POs (Figure 2 for establishment and Figure 3 for enlargement stage).

For active POs, the most common criterion at the establishment stage was substantial financial input, selected by all the respondents representing active POs. The second top criterion was the family relationship indicated by 95% of active POs, followed by the volume of production indicated by 83% of active POs. The three top important criteria chosen by dissolved POs at the establishment stage varied from those of the active POs. The criterion that was chosen the most frequently was the same, i.e. substantial financial input, selected by all respondents representing 28 POs that ceased their operations. The next criteria in the ranking were the volume of production and the grower's reputation indicated by 93% of respondents in both cases followed by the cooperation with a grower prior to setting up a PO (89%). Family ties were less popular and indicated by a smaller proportion of dissolved POs – 71%.

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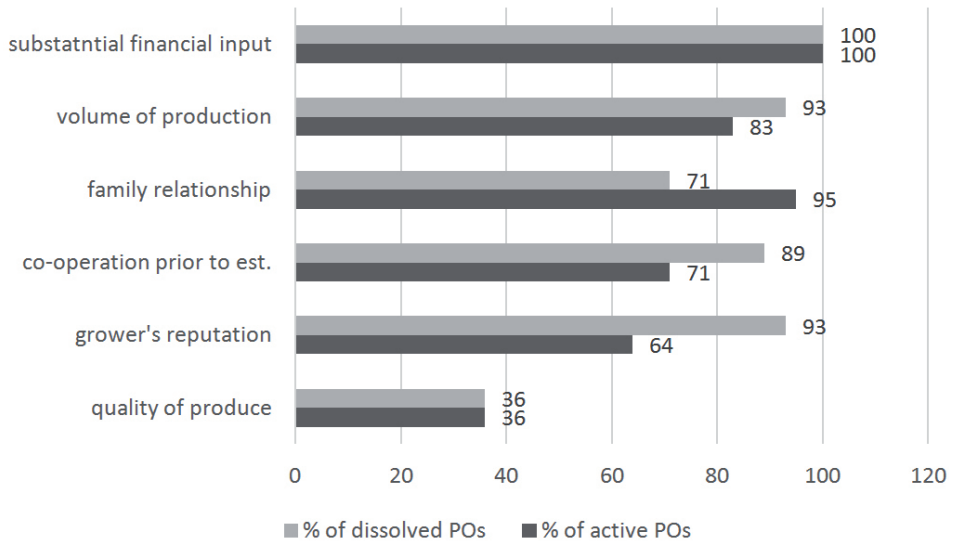


Figure 2. Frequency of criteria used by active and dissolved POs to select their members at the stage of a PO establishment – in % of active and dissolved POs respectively

Source: own research.

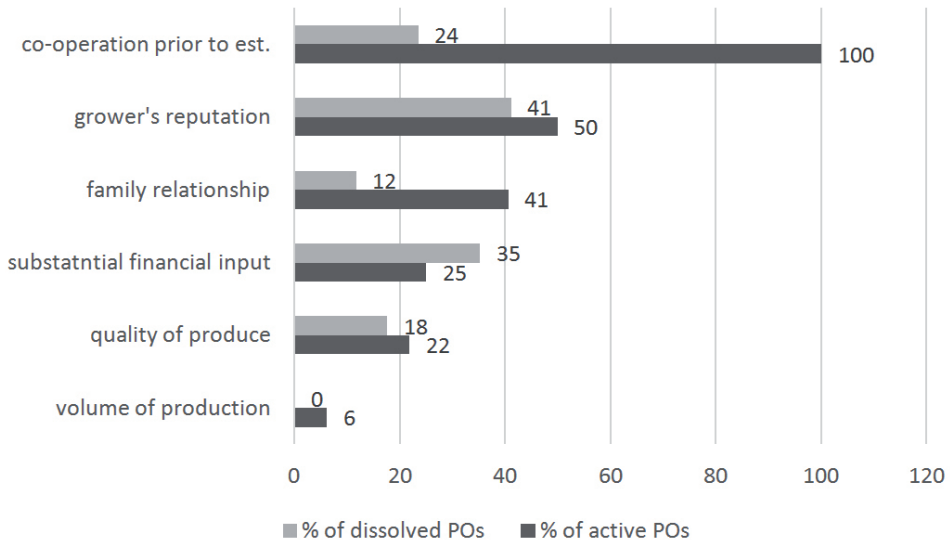


Figure 3. Frequency of criteria used by active and dissolved POs to select their members at the stage of a PO enlargement – in % of active and dissolved POs respectively (only for POs that increased the number of members)

Source: own research.

The analysis of the data from Figure 3 reveals interesting insights into the selection criteria used by active and dissolved POs during the stage of PO expansion. One finding is that the most important criterium for active POs for selecting new members was the cooperation prior to the establishment of a PO, while the grower's reputation and substantial financial input were the most important for dissolved POs. Another difference is observed in the consideration of family relationships as a selection criterion at the stage of PO enlargement. Active POs exhibit a frequency of 41%, indicating a relatively high representation of family-owned or family-operated businesses within their membership. On the other hand, dissolved POs experienced a lower involvement of family relationships in their selection process (12%).

Conclusions

By defining specific criteria for selecting partners, hybrid organizations such as producers' organizations can avoid partnering with individuals or organizations that may have conflicting interests or values, or whose activities could harm the organization's reputation. This can help to protect the integrity and credibility of a PO, which are essential for maintaining the trust of stakeholders and achieving long-term sustainability. The results suggest that most POs that have remained active on the market have experienced an increase in membership since their establishment, while dissolved POs were less likely to do so. The entities under the study did not use the open membership policy which dominated the cooperative movement in agriculture in the past. They rather shared some similarities with so-called New Generation Cooperatives, including their limited membership base and a focus on a specific crop or product.

Furthermore, the study examined the selection criteria used during the initial establishment stage and the subsequent enlargement stage of the POs. During the establishment stage, substantial financial input, the volume of production, and family relationship were the most common criteria used. However, during the enlargement stage, the selection criteria changed, with a reduced emphasis on financial input and increased importance placed on cooperation prior to establishment. The findings highlight the importance of both task-related criteria and partner-related considerations in the formation and expansion of producer organizations, underscoring the need to balance task-related efficiency with partner-related trust and collaboration for long-term success.

When comparing the selection criteria between active and dissolved POs, notable differences were observed. Active POs exhibited a relatively high representation of family-owned or family-operated businesses within their membership, indicating the importance of family ties in fostering trust, commitment, and long-term cooperation within the organization. In contrast, dissolved POs showed a lower involvement of family relationships in their selection process, suggesting potential differences in the dynamics and characteristics of these organizations.

The study offers insights into the differences between active and dissolved producer organizations (POs), providing some understanding of the factors that contribute to their success or dissolution. However, it is important to acknowledge the limitations of the study, primarily related to the sample used, which is not fully representative of

all POs in Poland. As the success rate of promoting the establishment of POs in Poland has been only moderately successful, with a substantial number of these entities ceasing their operations, future research should aim to explore potential patterns and interdependencies between the selection criteria used by POs and their survival rates. Investigating this aspect could provide a promising area for further research, enabling a more comprehensive understanding of the dynamics and determinants of PO success and longevity.

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