INSTITUTIONAL BARRIERS TO THE DEVELOPMENT OF ORGANIC FARMING IN POLAND

Key words: organic farming, organic farms, development, institutions, barriers

ABSTRACT. The purpose of this paper is to identify and describe institutional barriers to the development of organic farming in Poland. As a secondary objective, this paper seeks feedback from organic farmers on measures taken by the institutional environment to promote the development of organic farming. This paper is based on literature reviews and selected findings from empirical research carried out in 2019 with 262 organic farms. The sample used in this study was representative of the general population of certified organic farms. The survey was a CAWI. The study found that organic farming faces many barriers, with frequent amendments to regulations being of key importance. This destabilizes and adds uncertainty to the functioning of organic farms. Another significant barrier are the high standards of organic production and low levels of financial and non-financial support. To a certain extent, these barriers result from the inefficiency of institutions surrounding organic farming. As a consequence, they are considered to poorly contribute to organic farming development.

INTRODUCTION

Organic farming is a specific system of agricultural production which is believed to play a special role in the delivery of environmental functions [A. Bartkowiak, P. Bartkowiak 2008]. Of all the production systems used today, organic farming proves to be the most sustainable system. However, due to the small area of agricultural land and low production volumes, organic farming has a disproportionately smaller importance in generating positive environmental effects than the dominant farming system, i.e. conventional farming, which has large-scale adverse environmental impacts. The scale of positive externalities in organic farming depends on the area of agricultural land and production volumes. The higher these figures, the greater the expected environmental effects per unit of production.

Meanwhile, despite a growth trend, the level of organic production and supply is insufficient and fails to fully meet consumer demand. Hence, the market for organic food is affected by excessive demand and, as a consequence, by persistently high price levels (exacerbated by cost drivers). Although demand for organic food is on a sharp rise, the share of organic food in the food market does not exceed 2-3% (or 1% in Poland). The question arises why both the share of organic farming in total agricultural land and the
organic production volume are low despite growing consumer demand for organic products and despite the beneficial environmental impacts of organic farming. What are the reasons behind the supply-demand mismatch in the organic food market, and what are the supply-side sources of this incompatibility?

A declining growth rate of – or even a decrease in – the area of organic farming land is a new process witnessed in recent years in some countries. This is true for Poland which has recorded the world’s largest continuous decline in the area and number of organic farms over the last 5 years. In Poland, the area of organic farmland dropped from 669,900 ha in 2013 to 484,700 ha in 2018 (by 27.7%), and the number of farms declined from 26,598 to 19,207 (by 27.8%). In view of the above, the question arises on what the barriers to organic farming development are, and how important they are.

The purpose of this paper is to identify and describe institutional barriers to the development of organic farming in Poland. As a secondary objective, this paper seeks feedback from organic farmers on measures taken by the institutional environment to promote the development of organic farming. This paper is based on literature reviews and selected findings from empirical research carried out in 2019 with 262 organic farms. The sample used in this study was representative of the general population of certified organic farms. The survey was a CAWI.

Organic farming is a complex structure which strongly depends on institutions, especially with regard to legal standards and regulations. This paper uses a widely adopted definition of institution, as proposed by Douglass North [1990, p. 3]: “the playing field for the society or, more formally, the humanly devised constraints that structure the mutual interactions between humans.” According to him, institutions “consist of both informal constraints (sanctions, taboos, customs, traditions, and codes of conduct), and formal rules (constitutions, laws, property rights)” [North, 1994, p. 97]. North identified formal institutions (constitutions, laws, legal regulations, written systems of rules) and informal institutions (customs, conventions, norms, traditions, faith). This paper agrees with the opinion of Joseph Stiglitz who claims that “indisputably, organizations are institutions,” and gives the term a broader meaning [2000, p. 19]. This means that, in addition to rules and imposed mechanisms, institutions also include organizations that support market transactions. Studies carried out by the author of this paper rely on the widely adopted definition of institutions, which assumes that the restrictions which structure the mutual interactions between people can either be formal or informal. While these restrictions can be established by the government, they may also emerge spontaneously in the course of the evolution of rules followed by society.

**LITERATURE REVIEW**

In the Polish literature, for some time now, there has been a growing number of publications addressing organic farming and the economic conditions of its development. These are largely reviews which focus on the quantitative growth of organic farming (in terms of area and farm number), compare it with other European Union countries, and discuss the general outlooks and opportunities for development [Komorowska 2006, Kłos 2010,
Nowogródzka 2012, Mazur-Wierzbicka 2016, Kondratowicz-Pozorska 2018, Łuczka 2018]. Most of these publications claim that farmers embark on the organic path as a result of rational actions taken to optimize the allocation of resources. This rationale is underpinned by the strengths and weaknesses of agriculture. According to many publications, the development of organic farming can primarily be driven by its labor-intensity and demand for labor which can fight rural unemployment. Another potential driver of development is the unexploited potential represented by the large share of small farms at low levels of production intensity [Gil 2016, Golik, Żmija 2017, Golinowska 2013]. An important advantage of organic farming is that it produces a smaller environmental burden than conventional farming because it does not rely on chemicals and makes the right use of resources. These papers vaguely describe the opportunities for the further growth of organic farming and of the organic food market in the near future.

When it comes to analytical papers, particular attention should be given to publications that address the issue of economic viability of organic farms [Nachtman 2009, 2012, 2013, 2015, Brodzińska 2018]. The authors indicate that financial support (provided under agri-environmental programmes) has a positive impact on the profitability of organic farms. Interesting findings also emerge from the few studies on the relationships between organic farms and the market [Nowogródzka et al. 2013, Drygas et al. 2019]. Indeed, they revealed a large percentage of non-commercial farms and farms at low levels of marketable production which are weakly linked with the market.

The Polish economic literature only includes a few papers focusing on the reasons underlying insufficient supply in the market for organic food; the elimination of these factors will be decisive for the future growth of organic farming. Findings from only three dedicated publications are available; however, the sampled population of organic farms were small (from 70 to 84) and failed to meet the conditions for the representativeness of the entire population of farms [Pawlewicz et al. 2010, Kociszewski 2014, Drygas et al. 2019]. The main obstacles faced by organic farming were found to be economic barriers (relatively low yield and high production costs) and barriers related to sales opportunities, i.e. weak linkages with formalized distribution channels, limited opportunities for the horizontal integration of producers, poorly developed processing and distribution systems, volatility of regulations and bureaucracy. These studies found that following Poland’s accession to the European Union, organic farming experienced a period of dynamic growth driven by a liberal policy of financial support, which consisted in providing financial aid to organic farms based on the area of agricultural land and crop mix.

International literature emphasizes that organic farming is not an easy alternative, and involves production, market (marketing), institutional and social barriers. Organic farming is believed to be a complex structure embedded in a specific institutional and market environment, which may either stimulate or pose barriers to its development. These factors differ in nature and scale. Based on research into Irish farms, Brendon Howlett et al. [2002] demonstrated that barriers to the development of organic farming are financial and production restrictions, the absence of outlets, and insufficient marketing efforts. Susan Sterrett et al. [2005] identified many barriers, the main ones being high production costs; and the absence or poor availability of farming-related production information and of market information. According to Walter Schneeberger et al. [2002], Austrian farmers
hesitated to shift to organic methods due to production barriers related to lower yield, difficulties in eradicating weeds and pests, and greater demand for labor. In turn, American studies indicated the complexity of institutional, technical and individual factors related to organic farming [Douglas, Jin 2010].

Polish research on organic farming fails to provide an exhaustive reply to the question about the reasons underlying low organic production volumes and the continuous decline in the area and size of organic farms experienced over the last 5 years despite increased support. Can it only be explained by structural features of the organic production system, or is it also related to other external restrictions? Questions concerning the stagnation in growth of organic farming are highly important in the context of unused potential benefits to the environment and society (consumers) brought about by the development of organic farming.

MATERIAL AND METHODS OF STUDIES

This paper discusses the findings from a survey carried out in 2019 with 262 organic farms. The survey was a CAWI (Computer-Assisted Web Interview) conducted by an external company, so the respondents could submit their replies online. The survey tool was a questionnaire with 28 questions prepared by the author. These were general questions related to demographic characteristics of farm owners, conversion year, farm type and production structure. The second part of the questionnaire includes detailed questions on the complexity of the organic production system and the three types of obstacles to the development of organic farming: institutional, market and production barriers. The results were analyzed using descriptive statistics indicators and cross tabulation.

The sample used in this study included 262 persons and was representative of the general population of certified organic farms. The stratified random sampling method was used to ensure representativeness across the entire population of organic producers. The stratification procedure took the number of farms located in different voivodships into account. The farms surveyed represented all voivodships in accordance with the territorial distribution of Polish organic farms. The highest share of farms covered were located in three voivodships (Warmińsko-Mazurskie, Podlaskie and Zachodniopomorskie), whereas the smallest share was recorded in the Opolskie, Śląskie and Kujawsko-Pomorskie voivodships.

More than half of the interviewees were in the 31-54 age bracket. Most interviewees had either a secondary (44.3%) or a tertiary (33.2%) education. The largest part (60.1%) were organic farms established in 2006 or later, i.e. after Poland’s accession to the European Union and after the introduction of financial support initiated with agri-environmental programmes. Every third farm surveyed had an area of 20-50 ha; every fifth had an area of 10-20 ha; and every tenth had an area of over 100 ha. In Poland, the average area of organic farms (25.2 ha) is larger than that of all farms (10.4 ha). This partially contradicts the thesis that organic farming mostly provides development opportunities for small farms.
RESULTS OF THE STUDY

The study suggests that most farmers (68.2%) believe organic production to be a complex system. In most cases, this was the opinion of less experienced farmers with fewer years of activity in organic farming. However, experience does not solve many problems involved in complying with strictly defined farming principles. In a way, organic farming combines the traditional approach to certain production processes (hand-weeding) with the need to deploy innovative solutions (for farm management).

As shown by research, a relatively large share of farms (28.2%) tends to reduce their organic production volume in the future. Nearly every fifth (18.3%) wants to discontinue organic farming while more than half (53.5%) plan to scale up their organic farming operations. This suggests that the quantitative aspects of organic farming (the size and number of organic farms) could follow a steady downward trend in the future. Organic farmers face many types of risk (price, institutional and production risk), thus adding to the uncertainty of their business. According to 56.9% of respondents, organic farms struggle with greater risks than their conventional peers. However, the risk is not severe enough to discourage farmers from engaging in organic production. A full conversion of the entire farm would be even riskier, and therefore half of respondents continue with conventional production in parallel. This, in turn, requires them to skillfully use two farming systems in one farm and pursue different goals. Moreover, the dual approach involves additional investment in farm restructuring. When combined together, organic and conventional farming make it possible to gradually scale up organic production as it becomes more profitable while providing farmers with a sense of confidence in the context of growing risks.

The reduction of uncertainty and risk in organic farming depends on many aspects, including institutional factors which respondents believe to be among the pillars of continued growth. The key manifestation of institutional measures taken to reduce the risks involved in organic farming is financial support. Nearly three-quarters (71%) of respondents declared that without financial support they would quit organic farming (Table 1).

<table>
<thead>
<tr>
<th>Farmers’ opinion</th>
<th>Number of farmers</th>
<th>Share [%]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>76</td>
<td>29</td>
</tr>
<tr>
<td>No</td>
<td>186</td>
<td>71</td>
</tr>
</tbody>
</table>

Source: own study, N = 262

The farmers’ subjective views on support are not corroborated by data which suggests that the amount of subsidies disbursed to organic farms is greater than in the whole population of farms (and, thus, generates higher income) [Krupa et al. 2016]. This means the farmers’ views on financial support need to be monitored as they are a factor of importance to the pace of growth of organic farming. If support is believed to be low, organic farming is more likely to stagnate or decline. In order to prevent this, the support policy for organic farming should be flexible and responsive to feedback from the organic farming community.

The support policy itself can be considered risky if it lacks stability and undergoes continuous change. This is particularly important in the case of organic farming as an alternative agricultural sector, which is currently building a strong market position. Of the numerous barriers to organic farming development, international literature identifies
three types of obstacles: institutional, technical/production and market-related. While they differ in importance across countries, most authors place greatest emphasis on production and market barriers.

According to research, Polish farmers believe market and institutional barriers to be more important than production barriers. Market and institutional barriers had a score of 3.96, compared to 3.31 for production barriers, on a scale from 1 (not important) to 5 (very important). The top three institutional barriers are restrictions related to legal regulations, especially those resulting from the volatility of organic farming regulations, payment eligibility criteria and vague provisions (Figure 1). The volatility of regulations – considered to be the key barrier – contradicts the objectives defined for institutions established to reduce business uncertainty. Unstable legal regulations can adversely affect the agricultural development processes. The above is also confirmed in “Support for organic farming,” the last report from the Supreme Chamber of Control, which claims that, in 2014-2017, the Ministry of Agriculture and Rural Development made seven amendments to the Regulation of March 13, 2015 on the detailed conditions and procedure for granting financial aid under the “Organic farming” measure covered by the 2014-2020 Rural Development Programme [NIK 2019, p. 9]. The conclusion from the report is that “frequent amendments to legal regulations for granting aid to organic producers (...) without market analysis failed to ensure legal certainty and did not stimulate the development of organic farming” [NIK 2019, p. 8]. Some of the measures taken by the Ministry were a delayed response to the improper behavior of certain farmers who accessed the subsidies. In turn, the rationale behind other measures was the need to introduce required coupling between organic payments received by farmers and production and sales volumes. This demonstrates the inefficiency of the Ministry of Agriculture and Rural Development (and related institutions) in the ongoing monitoring of the impacts of organic payments on the implementation of the task defined as stimulating the development of organic farming.

![Figure 1. Institutional barriers to the development of organic farming](source: own study, N = 262, on a scale from 1 (not important) to 5 (very important))
Certification-related barriers (driven by the certification procedure, frequency and costs) are considered to be a barrier mostly by small organic farms. These barriers proved to be so important that the new regulations applicable in the European Union from January 1, 2021 take account of some of the farmers’ expectations as to simplifying the certification procedure. This is reflected in the implementation of the group certification process for small farms and, as a consequence, the reduction in certification costs and the number of inspections (under certain conditions) from one per year to one every two years. The relevant regulations are relaxed in order to ease the conversion process and prevent early-stage farms from discontinuing organic production.

Another significant institutional barrier to the development of organic farming are the high standards of organic production resulting from its particularities. The existence of this barrier is the reason for asking whether the institutional environment provides or -ganic farmers with support in the area of transfer of specialized knowledge, innovations and best agricultural practice, which helps meet organic production standards. Another open question is whether separate specialized knowledge-transfer institutions should be established to strengthen organic farming (which must comply with high production standards) or should mainstream agricultural institutions be used for these purposes. It seems reasonable to establish some new dedicated institutions, especially keeping in mind the low level of self-organization among farmers and their poor willingness to create collaboration institutions and networks (producer groups, teams, associations). The above is also substantiated by the fact that – considering the number of farms and especially the sharp increase in their numbers following EU accession – Poland has a small institutional infrastructure strictly related to organic farming.

Other barriers to the development of organic farming include the low level of non-financial support. The farmers’ opinion on this matter is inconsistent with the measures that the Ministry of Agriculture and Rural Development (and its subordinate units) intended to take in recent years to promote the development of organic farming. The 2014-2020 Framework Action Plan for Organic Food and Farming in Poland suggests that the Ministry and its agencies planned many forms of non-financial support for organic farming to be implemented in that period (support for: promotional and information activities; the integration process with the food industry; communications between market players; development of effective mechanisms of cooperation between producers, processors and distributors, on the one hand, and central or local administrative units, on the other). The basic weakness of measures planned to be taken by the Ministry in 2014-2020 is that they are highly vague and incorporated into measures taken in mainstream agriculture. The divergence between the farmers’ views and the measures declared by the Ministry testifies to the low effectiveness of support vis-à-vis the expectations of the organic farming community.

Of all the different entities of the institutional environment, the lowest score (2.3) was assigned to measures taken by the Ministry of Agriculture and Rural Development to promote the development of organic farming and the market for organic products (Figure 2). That score is also partially due to the contrast between the great potential the Ministry has in that area and the degree to which it is leveraged. Agricultural consultancy centers were rated the highest by farmers, followed by the Agency for Restructuring and
Modernization of Agriculture, which is not only seen in the context of its role in implementing and administering financial support instruments but also from the perspective of information and advisory support offered to farmers at the application stage [Kata 2008].

A medium rating was assigned to institutions related to the certification and inspection of organic farms. Note that the effectiveness of relationships between farmers and their institutional environment results not only from the efficiency of that environment but also depends on whether farmers are willing to enter into contacts and cooperation. However, separate research and studies are needed to address this problem.

**SUMMARY**

The institutional barriers to the development of organic farming, as identified in this paper, reveal the existence of many different restrictions affecting this business. This is related to the complexity and structural characteristics of organic farming. Of all the institutional barriers, the greatest restrictions are those related to legal regulations, especially including frequent amendments. This does not stabilize and adds uncertainty to the functioning of organic farms. Other significant institutional barriers to the development of organic farming are the high standards of organic production resulting from its particularities, and low levels of financial and non-financial support. To a certain extent, these barriers result from the inefficiency of institutions surrounding organic farming. As a consequence, they are considered to poorly contribute to the development of organic farming and its products. The effectiveness of the institutional environment in its relationships with farmers depends not only upon the efficiency of that environment but also on whether farmers are willing to enter into contacts and cooperation. However, separate research and studies are needed to address this problem.
BIBLIOGRAPHY


**INSTYTUCJONALNE BARIERY ROZWOOJU ROLNICTWA EKOLOGICZNEGO W POLSCE**

Słowa kluczowe: rolnictwo ekologiczne, gospodarstwa ekologiczne, rozwój, instytucje, bariery

**ABSTRAKT**

Celem artykułu jest identyfikacja i charakterystyka barier instytucjonalnych rozwoju rolnictwa ekologicznego w Polsce. Dodatkowym celem jest poznanie opinii rolników ekologicznych na temat działań podejmowanych przez otoczenie instytucjonalne na rzecz rozwoju rolnictwa ekologicznego. Analizy dokonano na podstawie studium literatury przedmiotu oraz wybranych wyników badań empirycznych przeprowadzonych w 2019 roku wśród 262 gospodarstw ekologicznych. Próba przyjęta do badań była reprezentatywna dla populacji ogólnej gospodarstw ekologicznych posiadających certyfikat rolnictwa ekologicznego. Badania przeprowadzono metodą CAWI. Z badań wynika, że produkcja ekologiczna boryka się z wieloma barierami, wśród których największe znaczenie mają częste zmiany przepisów, co zwiększa niepewność i destabilizuje warunki funkcjonowania gospodarstw ekologicznych. Inną znaczącą barierą są wysokie standardy produkcji ekologicznej oraz niski poziom wsparcia finansowego i niefinansowego. Istnienie tych barier wynika w pewnym stopniu z niesprawności instytucji otoczenia rolnictwa ekologicznego, co znajduje to odzwierciedlenie w niskiej ocenie ich działań na rzecz rozwoju rolnictwa ekologicznego.

**AUTHOR**

WŁADYSŁAWA ŁUCZKA, PROF. PHD  
ORCID: 0000-0002-1997-8119  
Poznań University of Life Sciences  
Faculty of Economics and Social Sciences  
Wojska Polskiego 28, 63-637 Poznań, Poland