



## Article

# Improvement of Organic Farm Assessment Procedures on the Example of Organic Farming in Poland—Recommendations for Organic Farming in Poland

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**Abstract:** Organic farming is an agricultural production system that combines tradition, innovation, and science to provide high-quality food, benefit the shared environment, and promote fair relationships and a good quality of life for all involved. It is a subject of certification (i.e., issuing a declaration by a third party) based on a decision preceded by a review that compliance with specified requirements has been demonstrated in relation to products, processes, systems, or persons. As a result, organic food is created. The aim of the article was to conduct a critical analysis of the procedures and practices for the evaluation of organic farms carried out by Polish certification bodies and to identify areas for their improvement. The presented results are the effect of qualitative research based on in-depth interviews with the representatives of organic farms certifiers. They were preceded by preparatory research, in which the Delphi method was used. The questioned units in total provide services to approximately 50% of organic producers in Poland and each of them have at least 10 years of experience in the certification of organic farms. Specific areas of improvement in the process of evaluation of organic farms were identified and briefly discussed. As a result, the authors also formulated appropriate recommendations for improvement in the identified areas. Implementation of these recommendations would make it possible to standardize the activities of individual certification bodies and increases the transparency and credibility of the organic farming control system in Poland. Consequently, such implementation has the potential to increase consumer confidence in organic food.

**Keywords:** organic farming certification; Delphi method; risk assessment; inspection procedures; areas and recommendations for improvement; consumer trust; and regulatory bodies



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## 1. Introduction

*Organic agriculture is a production system that sustains the health of soils, ecosystems, and people. It relies on ecological processes, biodiversity, and cycles adapted to local conditions, rather than the use of inputs with adverse effects [1].*

The result of organic farming is organic food—food that is produced in accordance with organic agriculture principles [2] (p. 7). It is a subject to obligatory certification (i.e., a third-party attestation) related to the object of conformity assessment [3]. Certification, or lack of it, is the result of a control (inspection)—the examination of an object of conformity assessment and determination of its conformity with detailed requirements or, on the basis of professional judgment, with general requirements [3]. The examination can include a project and documentation review, sampling, testing, an inspection, and an audit [4]. Therefore, the assessment is part of the organic farm certification process and is a broader concept than the control carried out on the farm.

In Poland, from 2004 (i.e., from accession to the European Union) to 2013 (when a peak was observed), an over-sevenfold increase in the number of organic producers was recorded (from 3760 to 27,093). This was mainly due to EU financial support for organic farming [5]. The situation did not change until 2014, when a decrease in the number of organic producers was observed for the first time. In the following years, the number of organic producers in Poland began to stabilize at around 21,000 and then 20,000. There were 21,400 organic producers in Poland in 2017 and 20,549 in 2018. It is worth noting the significant growth of the number of preparatory operators in organic farming over the given period—from 55 in 2004 to 795 in 2017 and 910 in 2018 [6].

Despite the fluctuations in the number of organic farms in Poland, the area of organic agricultural land has been systematically increasing from 82,730 ha in 2004, which constituted 0.5% of the total area of agricultural land in Poland, to 494,978.66 ha in 2017, of which 77.4% was farmland after conversion and 22.6% is still in the conversion period, which accounted for 3.7% of the total arable land in Poland. In 2018, the area of organic farming decreased to 484,676.15 ha [5,6].

Generally, over the analyzed period from 2017 to 2018, the total area of ecological agricultural land in the EU was over 12.5 million ha. Poland, in comparison with other EU countries, was ranked in 9th position in this respect [6].

The first inspections of organic farms in Poland took place in 1990, when 27 farms received certificates confirming the compliance of the production process with the requirements of organic production. Initially, only the Polish Association of Food Producers with Ecological Methods EKOLAND carried out certification of organic farming in Poland. In 1993, the certification was also carried out by the Polish Society of Ecological Agriculture, while the Agro Bio Test certification body was established in 1996, and Bioekspert in 1998. The certification activities of the Polish Society of Ecological Agriculture have been continued since 19 March 2002 by the Ekogwarancja PTRE control body [7]. As of 2019, 12 certification bodies were authorized to carry out inspections and to issue and withdraw certificates in the field of organic farming in Poland [5].

The market for organic products shows very high dynamics of growth, especially in highly developed countries. The global sales of organic food and drink reached 97 billion US dollars in 2017, and the average annual growth of this market was 4.7 billion US Dollars over the period from 2000 to 2017. In Europe, organic products worth 37.3 billion EUR were sold in 2017 (second only to the U.S. worldwide) and the annual market value grew by 10.5% during that time [8].

In Poland, the market for organic food products has been developing since the 1990s. In 2018, the value of the organic products market reached PLN 1.1 billion [9]. Systematic growth of the organic food market is forecasted to continue until at least 2030—at a rate of even up to 20% year-on-year. This will be driven by the growing interest of consumers in a healthy lifestyle (including the consumption of organic food), which will contribute to an increase in the revenue of producers, distributors, and stores offering organic food and to a further increase in the availability of eco-products [8]. Despite this, compared to other EU countries in Western Europe, the availability of organic products (especially domestic ones) on the Polish market is still insufficient, which may be one reason for the development of organic farming in Poland [10].

According to Art. 27 of Council Regulation (EC) No. 834/2007, each EU member state is obliged to establish a control system for organic farming and designate a competent body (one or more) responsible for controlling compliance with the obligations arising from this regulation [11]. There are three possible models of the organic farming control system. The competent authority may delegate control tasks to one or more certification bodies (model A)—these possibilities outline the construction of two types of control systems, delegate its control authority to one or more other control bodies (model B), or create a combination of the first and second approach (model C).

Poland, along with three other EU countries (Spain, Malta, and Luxembourg) has implemented the C system [12]. Certification bodies authorized by the Polish Ministry

of Agriculture and Rural Development carry out organic farm controls [13]. In Poland, during the period of the study, there were 12 organic farming certification bodies. Each control body operates within the scope of its authorization, which may cover organic cultivation of plants and animals (plant production, livestock production, production of vegetative propagating material and/or seeds for cultivation); natural collection (activities in harvesting of wild growing plants and parts thereof); beekeeping; aquaculture products and seaweed; processing of organic products including fodder and yeast, and placing organic products on the market including those imported from countries outside of the European Union [14].

Before starting operations, each certification body is required to obtain an accreditation from the Polish Center for Accreditation. In order to harmonize the approach to this accreditation, the document 'Accreditation of organic farming certification bodies DAC-13' was drawn up [15]. It extends, among other things, the minimum qualifications of the personnel of certification bodies. Their presentation is intentional as it also reflects the qualifications of the respondents in the presented study. The minimum qualification requirements in Poland include the requirements of the Regulation of the Minister of Agriculture and Rural Development of 29 April 2015 on acquiring the qualifications of an organic agriculture inspector (i.e., the obligation to pass the state examination for an organic farming inspector and regular participation in theoretical and practical training conducted by the certification body as well as higher or secondary education in agriculture, food technology and human nutrition, horticulture, environmental protection, zootechnics or veterinary science and at least one year of professional experience related to agriculture and/or food management). Education other than the above-mentioned qualifications and at least two years of professional experience related to agriculture and/or food economy is also accepted. The above requirements apply to all certification bodies and allow the requirements for employed inspectors to be systematized.

Producers who want to start operating in the field of organic farming are free to choose a certification body (from those authorized to carry out inspections and issue certificates in the field of their specialization).

According to the literature [16,17], there are several factors that may influence the producers' decision. They should answer the following questions:

- On which market the certificate will be used (sales of products to countries outside the European Union may require a translation of the certificate or additional confirmation of compliance, e.g., in the case of sales to the United States or Switzerland);
- Who the customers are and what certificate they prefer;
- What the position, experience, and opinion of the certification body are on the market;
- How the recipients evaluate the certification body;
- What cost of certification can be expected; and
- What the distance between the farm and the headquarters of the certification body (especially in the case of a preferred personal contact) is.

Research in the development of organic farming can be found in both the international [18–25] and Polish [26,27] literature. Most research in the field of organic farming in Poland focuses on the characteristics of organic food: its nutritional value and quality as well as on the comparison of organic and conventional food [28–31]. Research in this area has also been conducted abroad [32–36]. Many researchers have also concentrated on customers' attitude to organic food (i.e., [37–45]).

The impact of the traditional linear economy on the environment is also discussed as well as the levels of environmental hazards [46–50]. Efficiency of food production under controlled environments and from organic cultivation is another widely considered area [51–54].

The consumer is not able to verify the production technology at the place of organic food purchase, therefore, they rely on the information and labeling placed on the package of a given product (possibly on the data included in the certificate of conformity in the case of direct sale from an organic farm) [37,42,44]. This is why it is so important that the

production processes of these products are subject to systematic, correct, and complete control by appropriate authorities.

In the case of non-compliance, the organic farming certifier may issue a reminder, warning, or withdraw the certificate for the affected product. It is the responsibility of the producer to remove all references to ecological production methods from the product and to notify recipients of the product of this fact [55].

The role of certification bodies in the control system was discussed in the works of Leśkiewicz [56] and Mickiewicz et al. [57] (this article also made the first attempt to characterize the profession of an organic farming inspector). In the Polish literature, however, the topic of organic farming certification has not been addressed in terms of an assessment of its theoretical foundations and practical aspects. The international literature is richer in this respect, with it being possible to find results of research on the traceability of organic products (i.e., [58]) as well as on the scope of the organic farming control and certification system [59–63] and the profitability of organic production [64,65].

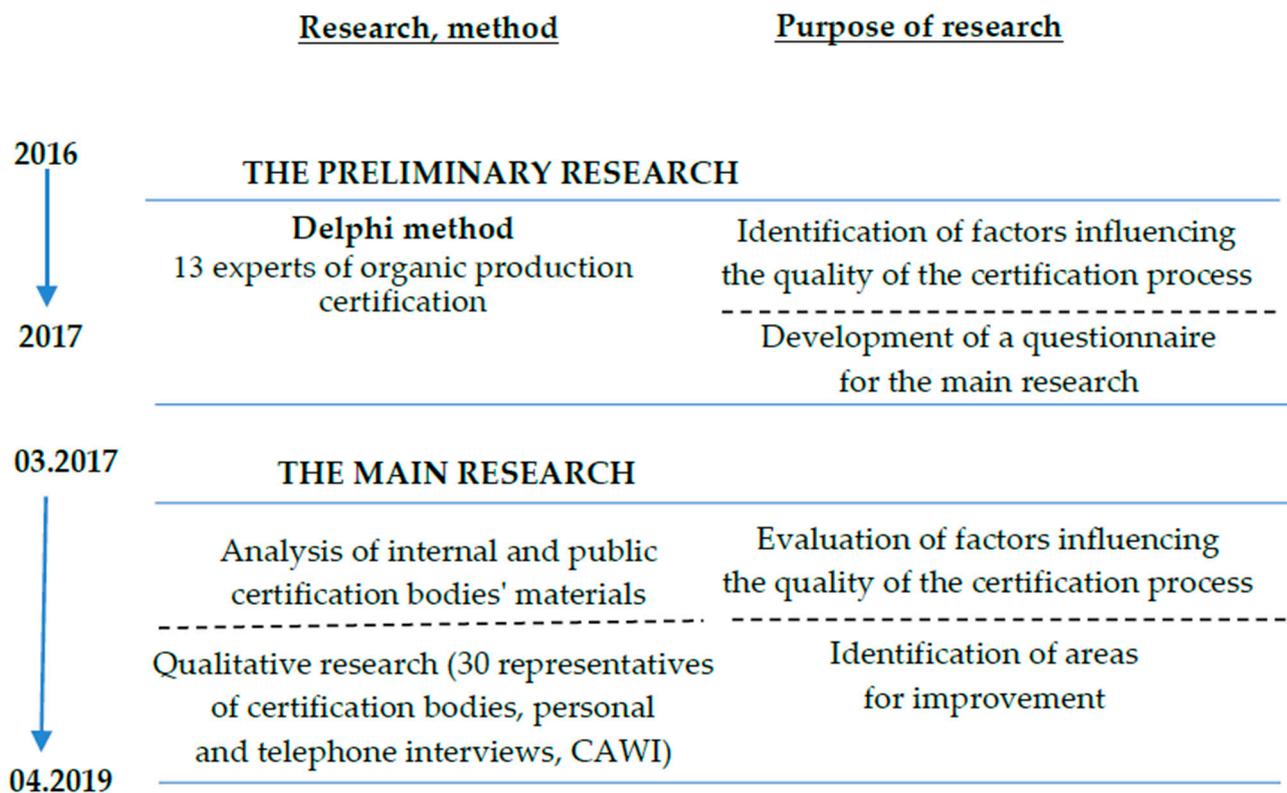
However, there are no analyses regarding the assessment of organic farming certification procedures used in a given country by authorized entities. The paper fills the research gap in this area. The innovative character of the study and its contribution to international literature has to be emphasized.

The goal of the research was to identify and critically analyze the procedures for the evaluation of organic farms carried out by control bodies in Poland and to define areas for their improvement. It resulted in the formulation of recommendations for improving the process for the evaluation of organic farms. The aim of these recommendations is to increase the credibility of the system, and thus, boost consumer confidence in organic food. The developed solutions constitute a proposal to modify elements of the organic farm qualification process by certifying bodies in Poland, taking into account their role in the organic farm control system.

The system of organic farming control in Poland has been established in accordance with EU regulations on organic farming; therefore, the developed solutions are a part of the harmonization of control and supervision of organic farming certification on an EU-wide scale. The validity of such activities has been demonstrated, for example, in the recommendations formulated in the CERTCOST project report [66].

## 2. Materials and Methods

As part of the presented project, qualitative tests were carried out, which included representatives of six units certifying organic farming in Poland in the period from 2017 to 2019 (Figure 1). The selection of the research sample was deliberate. Participation in the study was offered to all twelve certifying units operating in Poland in the analyzed period, of which six agreed to participate in the study. The interviewed units together provided services to approximately 50% of organic producers in Poland and each of them had at least 10 years of experience in the organic farm certification. It was the only possibility in this case—we depended on the acceptance of the certifying units, as their active participation in the research was required. The deliberate sampling is simple, easy, and convenient and does not require sampling frame and strict use of random sampling techniques. However, the selection of sample upon accessibility may not be representative of the population, since the sample was not chosen by random selection, it is hard to determine possible sampling errors.



**Figure 1.** The research, method, and the purpose of research specification. Source: Data compiled by the authors.

The leading research was preceded by preparatory research carried out in 2016 using the Delphi method. The aim of it was to identify factors influencing the correctness of certification of organic farms, and then to verify and determine the significance of these factors. The criterion for selecting experts was specialist knowledge in the field of organic production certification, supported by practice (at least five years of work as an inspector) and/or scientific publications in this field. Thirteen experts in the field of organic production certification, both from the world of science and practice, agreed to participate in the study. Two experts were representatives of the world of science, five experts practice, and four experts combined science and practice. In the preparatory study, based on experience and the literature, a preliminary list of potential factors determining the correctness of certification of organic farms was prepared. This was sent to experts for verification and comments. Then, taking into account their responses, the list of seventy factors was updated. In the next phase, experts were asked to rate their significance on a scale of 1–5, where 1 is the least important and 5 the most important. In this way, a list of the twenty-nine most important factors was obtained and they were analyzed as part of leading research—interviews with units. In order to summarize the preparatory study, experts were informed about the results of the study, providing them with an average score for each factor compared to their own assessment. The results of this stage of the research were published [67].

The leading research was carried out in the period from March 2017 to April 2019 in Poland. The technique of in-depth interviews was applied with the use of a questionnaire in the form of personal and telephone interviews, supplemented with interviews conducted with the CAWI (Computer Assisted Web Interview) method. The questionnaire used during the leading research consisted of 19 closed-ended questions with space for comments and was verified at the stage of the preparatory research. To assess the questions' reliability and validity, a pilot test and test-retest were conducted. This involved administering the survey with a group of five respondents and repeating the survey with the same group in a month. We then compared the responses at the two time points. Ultimately, the questions'

reliability and validity was confirmed and thirty representatives of control bodies were interviewed in the main research. They certified farms that reported activities in the field of organic plant cultivation and animal maintenance. This category of organic farming was selected due to the fact that in 2018, such activity was conducted by 93.47% of all organic producers in Poland on 19,207 farms out of 20,549 reported [68].

The factors used in the study were divided into four categories:

1. Organizational factors:
  - Rights and competences of employees involved in the certification process;
  - Commitment of the top management to ensure the correctness of the assessment of organic farms;
  - Internal communication (e.g., between the certification body and field inspectors); and
  - External communication between the certification body and external entities (e.g., supervisory authorities, other certification bodies).
2. System documentation of the certification body (procedures and instructions):
  - Method of documenting the control results (including the uniform control minutes form developed by the certification body and used by inspectors);
  - Rules for qualifying non-compliance, sanctions for producers, and validation;
  - Application documentation forms for producers;
  - Ensuring the completeness of the documentation provided to the inspector as a part of their preparation for the assessment of the organic farm, in particular the complete application documentation;
  - Criteria for selecting producers for the planned sampling on the farm;
  - Criteria for assessing the risk of non-compliance on the farm with organic production rules;
  - Criteria for selecting an inspector to conduct the assessment;
  - Recommended techniques for carrying out the evaluation (control and sampling) of organic farms; and
  - Principles for planning the evaluation of organic farms (drawing up a control plan).
3. Resources for assessment:
  - Requiring the inspector candidate to participate in theoretical training at the certification body's headquarters;
  - Requiring the inspector candidate to participate in practical field training;
  - Ensuring the impartiality and confidentiality of full-time and external employees;
  - Supervision of an experienced inspector during the first independent inspections carried out by the newly employed inspector;
  - Error-free and complete documentation of control results through correct and accurate preparation of post-control documentation;
  - Errors indicating an unreliable or biased control by inspectors;
  - Errors indicating inefficient or negligent control by inspectors;
  - Planning and implementation of practical training for field inspectors;
  - Requirements for the competences and qualifications of inspectors who carry out controls on organic farms; and
  - Requirements regarding the experience necessary for inspectors carrying out controls on farms.
4. Clients:
  - Catalog of non-compliance, sanctions, and validation, which is clear and accessible to producers;
  - Producers' access to the up-to-date forms used in the certification body;
  - Efficient forms of contact with the client;
  - Clear criteria for determining the fee for the certification process;

- Adequately planned time necessary to carry out the inspection on the farm; and
- Producers' access to the up-to-date price list of the certification body.

In addition, internal materials that were part of the system documentation of the two certifiers with which the cooperation agreement was signed amounted to valuable source data used during the study. The internal materials included documents that were part of the quality management system including the inspector's personal questionnaire, rules and protocol for sampling products—not used in the tests, farm inspection report with attachments, inspector's evaluation sheet, farm supervision inspection report, rules of organic farm control/organic production control, or a section of the contract with inspectors. As a result, the information made available to the public on the websites of certification bodies, the collected research material, and the opinions and comments of the staff of the certification bodies allowed for the review of the evaluation procedures of agricultural producers used in Polish certification bodies. This made it possible to identify, establish, and evaluate the control procedures used by individual certification bodies with regard to the most significant factors affecting the regularity of the certification process. On the basis of these, adequate recommendations have been made to improve the certification procedures for organic farms.

During the research, while identifying and analyzing the practices of individual certification bodies, proper care was taken to ensure their anonymity as well as the anonymity of employees of individual units participating in the study. The cooperation agreements were signed with the units that made the materials available, specifying their rules in detail. There were no conflicts of interest. Participants agreed to the terms of the study, declared understanding that the study posed no risks or benefits, and that the researchers will not individually benefit financially from the results of the work. The obtained data were available only to approved members of the study group, were password protected, and housed on a server not accessible to the public.

### 3. Results

#### 3.1. Identification of Practices Applied by Certification Bodies

The research results constituting the basis for the assessment of certification bodies were grouped by the authors into five thematic scopes: recruitment and training of employees, planning the assessment of organic farms, analysis of the risk of irregularities on the farm, organic farm control, and information available to the public. In the further part of the analysis, based on the research results obtained, 10 areas for improving the certification of organic farms were identified, for which appropriate recommendations were developed. At this stage of the project, there was no participant input.

The areas of improvement are summarized and presented in bold text below, and the recommendations are provided in Section 4.

##### 3.1.1. Recruitment and Training of Employees

The audited certification bodies, when looking for candidates to work in the field of inspections on organic farms, mainly rely on external recruitment (the announcement of recruitment and individual interviews with candidates). Some units, in order to find experienced employees directly contact agricultural advisors, counted on their experience and practical knowledge resulting from their profession.

Before allowing a newly employed inspector to conduct inspections of organic farms independently, the observation of at least five (and in the case of one of the certification bodies even a dozen or so) inspections carried out by a more experienced inspector was needed. The observations of controls performed by a few different inspectors, in the case of one of the audited entities, and internal examination (qualified control) allowing an inspector to work independently, consisting in supervising the conducted control by a dedicated employee of the certification body, were identified.

The work of inspectors carrying out controls commissioned by certification bodies is subject to periodic evaluation with the frequency of once every 1–3 year.

Each inspector must participate in internal training at the certification body's headquarters (in theoretical and practical parts). This training covers at least the issues required by legal regulations (i.e., organic farming regulations, threats that may cause an organic product to lose its organic status, standard control procedures used by the certification body, inspector's errors identified by the certification body, irregularities of organic producers, and explanations and information on errors and irregularities identified as a part of GIJHAR-S supervision) [14].

The obligatory nature of training organized by certification bodies for employed inspectors was assessed positively. However, there are doubts relating to the fact that each certification body conducted trainings separately, as potential differences between them may arise. In order to ensure uniform qualifications of all organic farming inspectors and to provide the possibility of a wide exchange of experience between inspectors (regardless of the certifying body employing them), it is worth extending this practice with training at the national level, conducted on behalf of supervisory authorities (i.e., the Chief Inspectorate of Commercial Quality of Agricultural and Food Products), in cooperation with the Minister of Agriculture and Rural Development and the Chief Inspectorate of Plant Health and Seed Inspection. So far, only one such training took place in Warsaw in 2017.

**The insignificant number of such trainings or meetings has been identified as a potential area for the improvement in organic farm certification.**

Certification bodies declare various solutions in the field of internal communication: from appointing employees responsible for direct contact with specific inspectors, the electronic delivery of selected information to all inspectors collectively, to setting up an electronic platform, where each inspector has their own individual account. Employees of the bodies with the use of various forms contact the inspectors they employ to inform (or not), among other things, them about changes in legal regulations, documents of the Polish Center for Accreditation, or information contained in the guidelines of the Chief Inspector of Commercial Quality of Agricultural and Food Products (published regularly only since March 2019).

**Inconsistencies in the ways of communication between certification bodies and inspectors can be considered as another area for improving the process of evaluating organic farms.**

### 3.1.2. Planning the Assessment of Organic Farms

When selecting an inspector to carry out controls on an organic farm, units take into account the inspector's declaration as to the readiness to carry out a certain number of inspections in a given area—100% of the inquired certifiers, inspector's competences and qualifications—100% of the inquired units, inspector's experience—83% of the inquired certification bodies, professional education of the inspector—33% of the inquired certification bodies, and record of control correctness, timeliness and availability—17% of the inquired certifiers.

Certification bodies do not take into account aspects such as farm specialization, the risk group to which the farm is assigned, or the time of commuting to the farm.

**Taking into account the above-mentioned relevant criteria for selecting an inspector to carry out the organic farm assessment should be considered another area for improvement.**

Each inspector shall receive an inspection order for prior inspection and written acceptance containing the data and addresses of the farms and the information on the preferred time for the execution of the control. Sometimes (in the case of difficult, complicated controls), a team of inspectors is created.

### 3.1.3. Analysis of the Risk of Irregularities on the Farm

According to the information obtained from direct interviews and during the analysis of the documentation of certifiers, while assessing the risk of irregularities on a farm, the certification bodies most often took into account:

- Simultaneous ecological and conventional activity—84% of the inquired certifiers;
- Irregularities discovered during previous inspections and the sanctions imposed as a result of them—67% of the inquired certifiers;
- Specialization of plant production (the predominant type of crops) or livestock (species of kept animals)—50% of the inquired certifiers;
- Production and sales volume—50% of the inquired certifiers;
- Potential external threats (proximity to conventional crops, areas of increased contamination risk—waste treatment plants, landfills, factories etc.)—50% of the inquired certifiers;
- Positive results of testing product samples (finding residues of substances not allowed in organic farming)—50% of the inquired certifiers;
- Use of external means of production—33% of the inquired certifiers;
- Change of the certification body—33% of the inquired certifiers;
- External (e.g., from another certification body) information that affects the risk of irregularities—33% of the inquired certifiers;
- Time that has elapsed since the start of conversion (the conversion year)—17% of the inquired certifiers;
- Simultaneous organic production and production during the conversion period—17% of the inquired certifiers;
- Use of exemptions from the organic production conditions—17% of the inquired certifiers;
- Organic product labeling—17% of the inquired certifiers;
- Storage of organic products—17% of the inquired certifiers;
- Outsourcing activities to third parties—17% of the inquired certifiers; and
- The inspector's own assessment—17% of the inquired certifiers.

Certification bodies, when assessing the risk of irregularities on the farm, should also take into account information from the supervisory authorities on the problems relating to domestic organic production and the problems that may affect each group of organic producers. It is good practice for certification bodies to plan sampling mostly on farms that have been qualified in a high-risk group. During the research, discrepancies were identified among the factors that individual certification bodies take into account within risk analysis.

**The lack of established uniform criteria for assessing the risk of non-compliance with organic production rules applicable to all certification bodies is another area with potential for improving the process of organic farm assessment.**

#### 3.1.4. Organic Farm Control

The interviewed representatives of certifiers declare that the inspector, prior to the inspection, is provided with all documents necessary for the inspection and test sampling kits. Inspectors usually receive photocopied or scanned documentation. Representatives of two of the inquired units declared that they provided inspectors with an electronic version of the documentation through appropriate software. It is important that the original documentation submitted by the producers always remains in the office of the certification body.

The manufacturer is informed about the date of the inspection in several possible ways, these being: by phone or email by the organic farm inspector; in writing, by email or via SMS by the certifiers; in writing by sending a control plan by the certifiers; or in writing by an organic farm inspector.

Each control body develops and approves an inspection report form. In 50% of the analyzed certification bodies, the inspectors filled out the control report forms by hand and delivered a paper version of the report to the office of the body. Another practice is the use of a computer program (including, in the case of one certification body, the electronic signature of the inspector), which enables easy preparation of the inspection report in a computer version and printing it once the inspection is completed. Thanks to such software, receiving

the minutes from the inspector after the performed inspections, the body has access to the electronic database with all information collected by inspectors during inspections. This solution significantly facilitates the further development of certification documents, prevents the so-called “misspellings”, and improves reporting for the relevant authorities.

This means that the certification bodies use different solutions for completing the inspection report. The forms used by the individual certification bodies vary in structure and the level of detail. The lack of a uniform method of documenting inspection results for all certification bodies is another area for improvement in the organic farm certification process. Certification bodies most often declare that all buildings and plots reported for inspection are subject to inspection. However, there are situations where the on-site assessment is spread over time or is carried out by different inspectors (e.g., due to the large distance between the plots of the farm). The inspector verifies the documentation from the date of the last annual inspection or, in the case of producers starting the conversion period—from the date on which the producer is included in the control system.

Not all bodies have instructions on how to carry out controls on the organic farm. According to the requirements, such an instruction is required when its absence could compromise the efficiency of the inspection process [69]. Some units have developed the so-called standard control plans according to which on-the-spot controls are carried out. They include an overview of different stages of the inspection, namely, the opening meeting, farm inspection, filling in the inspection report, and the closing meeting.

The control procedures of all analyzed certification bodies specify the maximum number of controls an inspector can perform in one day. The inquired bodies admitted that it is good practice to carry out only two inspections a day (although it is acceptable, and sometimes happens, that three inspections are performed). Sometimes it is permissible to carry out more controls (e.g., in the case of random controls). Due to the need to maintain impartiality, a similar limitation also applies to the number of controls the same inspector may perform in a row in relation to one producer.

The inquired certification bodies do not specify in their procedures the minimum time necessary for the proper performance of controls. In two bodies, this time (the start and the end time of control) is not recorded at all—in this case, it is impossible to determine how long on average the control lasts on the farm. The inquired control bodies had great difficulty in estimating the time spent on field inspections. According to the answers received, they may last from a few to even a dozen or so hours (although 3–6 h were given as the optimal time). A representative of one of the certification bodies assured that the time devoted to each stage of the inspection (the inspection of plots, the verification of documentation, the preparation of an inspection report) is recorded and saved in the software used by the inspectors during the control. **The indefinite time needed to carry out checks on the organic farm can also be considered as a potential area for improving the assessment process.**

All certification bodies make effort to minimize the number of errors made by organic farming inspectors during controls. They take the following actions:

- Detailed verification of minutes (especially in the case of newly employed inspectors with less experience—a certain number of minutes is analyzed before issuing a new inspection order);
- Keeping statistics (balance) of errors for the entire year for each inspector;
- Monitoring the inspectors' competences;
- Rejection of the report that does not comply with the procedures and forms of the certification body;
- Individual meetings with inspectors;
- Informing supervisory authorities;
- Contractual penalties for delay or failure to perform the control;
- Oral instruction to the inspector;
- Written rebuke for the inspector; and
- Terminating cooperation with the inspector.

### 3.1.5. Information Available to the Public

Certification bodies operate websites through which they can communicate with customers, potential customers, business partners, and consumers. From the perspective of transparency of the control system, the content, documents, and forms made available to the public by individual entities play an important role. The most important of these include a description of the certification program of organic farms, contract on farm certification conditions, production schedule (plan), application for certification, description of the production unit, forms of production records to be maintained on the farm, catalog of non-compliance, sanctions and validation, and price list. Not all certification bodies make the above-mentioned information available to the public (Table 1).

**Table 1.** Documents and forms provided by organic farming certification bodies on their official websites.

No.	Name of Certification Body	Certification Program	Certification Agreement	Plant And livestock Production plan	Proposal for Certification	Description of the Production Unit	Registers	Catalog of Sanctions, Non-Compliance and Validation	Price List
1	EKOGRWARANCJA PTRE Sp. z o.o.	+	+	+	+	+	+	–	–
2	PNG Sp. z o.o.	+	–	+	+	+	+	–	–
3	COBICO Sp. z o.o.	+	+	+	+	+	+	–	+
4	BIOEKSPERT Sp. z o.o.	+	–	+	+	+	–	–	–
5	BIOCERT MAŁOPOLSKA Sp. z o.o.	+	–	+	+	+	+	+	+
6	Polskie Centrum Badań i Certyfikacji S.A.	–	–	–	–	–	–	–	–
7	AGRO BIO TEST Sp. z o.o.	+	–	–	+	+	+	–	–
8	TÜV Rheinland Polska Sp. z o.o.	+	–	+	+	+	+	+	+
9	Centrum Jakości AgroEko Sp. z o.o.	+	–	+	+	+	+	+	–
10	SGS Polska Sp. z o.o.	–	–	–	–	–	–	–	–
11	DQS Polska Sp. z o.o.	–	+	+	+	+	+	–	–
12	Bureau Veritas Polska Sp. z o.o.	–	–	–	–	–	–	–	–
13	Krajowe Centrum Badań i Certyfikacji “Gwarantowana Jakość” Sp. z o.o.	+	–	+	+	+	+	–	–
	SUM	9	3	9	10	10	9	3	3

Source: Data compiled by the authors.

From the point of view of the correct course of the certification process, customer access to a catalog of non-compliance, sanctions, and validation, the existing forms, and a fixed price list is the most important [68].

Only three certification bodies posted information about the legally binding catalog of non-compliance, sanctions, and validation on their websites.

Customers have much better access to the applicable forms via websites. Currently, most of the certification bodies make the following forms publicly available: the application for certification, the description of the production unit, or the annual production schedule developed in the certification body. This allows customers to become familiar with the above-mentioned forms and facilitates the exchange of documentation with the certification body. However, the differences in the individual forms between certification bodies are important. The description forms of the production unit vary in the detail of the information contained therein (sometimes it is necessary to duplicate the data provided by the producer in 'Notification of undertaking organic farming activity' or to provide information which, due to the nature of production, is a subject to annual changes, which generates the need to update the documentation frequently). The application for certification is sometimes a separate form, and sometimes it is a part of another document (description of the production unit, production plan). Producers have different deadlines for submitting documentation (e.g., by the end of April, the end of May, mid-June, and even the end of June [70]).

The fact that the bodies do not apply uniform deadlines to deliver the annual production schedule is not a factor in the thorough preparation of inspectors for control, and additionally, it is allowed to postpone the established deadlines. **The lack of uniform application documentation forms (including the production schedule for specific agricultural parcels) and the lack of a uniform deadline for its delivery to the certification body** is considered another area for improvement in the organic farm assessment process.

Despite the fact that in Poland, since 2014, there have been templates for registers of organic producers, some certification bodies still have their own register forms, which are made available to organic producers via websites. This situation leads to systemic inconsistency and confuses organic producers.

Each certification body prepares and provides the producers with a price list including fees for conducting the certification process. The conducted analyses showed that only 23% of the certification bodies operating in Poland published the current price list on their websites. The amount given in the price list is not the only cost that the producer is obliged to pay. Depending on the selected certification body, in special cases, the following are added to the basic rate:

- Registration fee/initial fee—33% of the interviewed certification bodies;
- Additional payment or compensation of the inspector's travel and accommodation costs (e.g., in the case of inability to carry out the inspection within the prescribed period due to the producer's fault)—33% of the interviewed certification bodies;
- Costs of additional control actions arising from non-conformities identified, sanctions imposed, receipt of notifications or cancellations or carried out on the basis of the results of tests confirming the detection of residues of substances not authorized in organic farming—33% of the interviewed certification bodies;
- Costs of laboratory tests, which arose in the course of activities related to the appeal or notification—33% of the interviewed certification bodies;
- Additional fee for the significant distance between the plots within the farm—33% of the interviewed certification bodies;
- Additional fee for the certification of a farm consisting of several production units—33% of the interviewed certification bodies; and
- Additional fee for the certification of more than one standard (e.g., additional certification for compliance with Bio Suisse requirements)—33% of the interviewed certification bodies;

- Costs of additional control activities performed at the request of the producer (e.g., in connection with the extension of the certificate or a change of the certification scope)—17% of the interviewed certification bodies;
- Initial inspection costs—17% of the interviewed certification bodies;
- Additional fee for issuing a certificate in a foreign language—17% of the interviewed certification bodies;
- Additional fee for issuing a certificate duplicate—17% of the interviewed certification bodies;
- Additional fee for extending the certificate—17% of the interviewed certification bodies;
- Additional fee for issuing a request for payment of arrears or a duplicate invoice—17% of the interviewed certification bodies;
- Fee for securing the certificate with a QR code—17% of the interviewed certification bodies; and
- Increased fee in the case of a higher than standard risk level—17% of the interviewed certification bodies.

During the analysis, **producers' limited access to the catalog of non-compliance, sanctions and validation, applicable forms and the price list** was discovered. This is another area for improving the process of evaluating organic farms. Disseminating these data, in the opinion of the authors, should be a good practice of the certification bodies.

Attention should also be paid to the extensive criteria for determining the fee for the certification process in the case of various farm models. A list of factors influencing the size of the certification fee was created. Depending on the certification body, some of them will apply to all certified entities (such as the application of the registration fee), while others to specific groups of producers (such as the fee for the control of an additional production unit or a part of the farm located in another voivodeship). Such differentiation (also incomprehensible for producers) should be considered a potential area for improving the process of evaluating organic farms.

#### 4. Discussion about the Results and Recommendations

The conducted analysis of the practices used by the bodies that certify organic farms in Poland allowed us to identify a number of discrepancies in the actions taken on a daily basis as well as determine important areas for improving the farm assessment process. Among them, one may find inefficient internal and external communication and the limited training for organic farming inspectors organized at the supervisory authority level. The importance of this factor is emphasized, among others, by Dabbert in the CERTCOST project report recommending strengthening the institutional foundations of the organic farming control system, particularly through more direct involvement of stakeholders in the institutional structure and their participation in a knowledge-sharing platform between control bodies, Member State competent authorities, and other stakeholders [66] (p. 16). It emphasizes the need to implement a training system for organic farming inspectors (from the level of individual certification bodies to training at the European level) [66] (p. 19). Maresca and Setti support it in the IRM report [71]. In turn, Zorn et al. [59] underline the need to provide adequate training and organize communication between competent bodies at the European level in order to uniformly implement organic farming legislation in the European Union.

In order to improve the certification process, the certification body should establish an efficient channel for communication with external employees and the measures necessary to ensure smooth communication. These may include access to a mobile phone network, an email box, an electronic database, a virtual employee profile, or an individual electronic signature.

Taking into account the specifics of carrying out checks on the holding, it is helpful to designate the certification body's staff responsible for individual support of individual external inspectors in contact with various problematic situations during daily field work

and contact with producers. From the perspective of the coherent operation of all certification bodies, it is important that correspondence with supervisory authorities containing recommendations be made available not only to all certifying bodies, but also to organic farming inspectors.

In light of Dabbert's recommendations [62], a solution worth considering aimed at improving direct contact with organic farming inspectors would be to create an electronic platform administered by the Chief Inspectorate of Commercial Quality of Agricultural and Food Products, on which each inspector would have access to:

- History of own permissions to carry out inspections grouped according to specialization;
- Registration for subsequent examination dates for organic farming inspectors;
- Registration for nationwide trainings for organic farming inspectors;
- Uniform valid forms of application documentation and inspection reports (with regard to selected specializations);
- An electronic version of the guidelines and interpretation of regulations (with links to individual legal acts) developed by the Chief Inspectorate of Commercial Quality of Agricultural and Food Products; and
- Up-to-date information provided by the Chief Inspectorate of Commercial Quality of Agricultural and Food Products on current problems related to organic farming (including cases of false certificates, the discovered residues of substances prohibited in organic farming in organic raw materials and products, particularly imported from third countries).

From the perspective of the growing knowledge and exchanging experiences between organic farming inspectors employed by various certification bodies, it is recommended that supervisory authorities regularly organize supplementary training courses at the national level and that all inspectors participate in at least one of them per year.

The weak points of the certification process of organic farms in Poland also include **the lack of uniform forms for application documentation** (including the production schedule form) and a uniform method of documenting the control results. According to the research of Gambelli et al. [63], the harmonization of the collection of data on organic producers is necessary to facilitate the exchange of information (e.g., in case of a change of certification body) and to ultimately improve the certification system. It should be obligatory for all certification bodies to use uniform forms of application documentation, developed in cooperation with the Chief Inspectorate of Commercial Quality of Agricultural and Food Products. The forms should be made available by GIJHAR-S on the official website, as in the case of model registries for organic producers or application forms for derogations from organic production conditions. In addition, it is recommended to set a single date for all certification bodies for producers to deliver an annual production schedule broken down into agricultural parcels.

Due to the fact that most organic producers simultaneously benefit from the EU subsidies for running an organic farm, it is proposed that the set date corresponds to the deadline established by the Agency for Restructuring and Modernization of Agriculture for submitting applications for direct payments (i.e., from 15 March to 15 June each year). It is possible for the Chief Inspectorate of Commercial Quality of Agricultural and Food Products to modify the above-mentioned deadline, but only in relation to all producers who are under the supervision of all certification bodies.

In addition, all certification bodies should use the established, uniform field inspection report form. It should be developed in cooperation with the Chief Inspectorate of Commercial Quality of Agricultural and Food Products and the Polish Center for Accreditation. Furthermore, it should be periodically updated depending on changing legal or institutional requirements. The next stage of harmonizing the operation of certification bodies should be the creation of uniform software for filling in the control report in an electronic version. This would significantly simplify the cooperation between individual certification bodies (e.g., with regard to the exchange of documentation in the event of a

change of the organic certification body by the producer) as well as between the bodies and supervisory authorities (e.g., with regard to obligatory annual data reporting). The ability to complete the inspection report in an electronic version will also be a response to the preferences of a large group of organic producers.

The interviewed certification bodies found it difficult to specify the adequate amount of time that should be allocated to the control. It is obvious that it will depend on the size of the farm or the specialization of its activities. The inspector should carry out the controls reliably, without the temptation to conduct an excessive number of them in one day. Hence, there are restrictions laid down in the procedures as to the number of controls an inspector can perform in one day.

Certifiers in other European Union countries differ significantly in terms of estimating the time needed to perform an inspection. Research by Jespersen (2011) showed significant differences in the time allowed for the inspection of three sample organic farms. Among the European Union countries participating in the study (the Czech Republic, Germany, Italy, the UK), this time varied between 3–17.5 h for a farm specializing in cereal production, 3–20 h for a dairy farm, and 3.5–18.5 h for a farm with a vegetable profile [72].

It should be good practice for certification bodies to keep records of the time inspectors spend on field controls on organic farms. This will allow not only for the minimizing of the risk of carrying out controls in a negligent manner (resulting from rush), but also to limit the possibility of various types of dishonesty on the part of organic farming inspectors.

In the control procedures of certification bodies, it should be stated that the control cannot last less than one hour (in the case of small farms, consisting of plots located in a compact area) or not shorter than two hours (in the case of other farms). The time for random controls should be suitably shorter and depend on the actual scope of the control.

Estimating the time needed to perform controls will also allow for better preparation of organic producers, who will be able to plan enough time to carry out controls on all plots and facilities on the farm properly. In the long-term, it will be possible to plan the use of resources at the disposal of the certification body rationally (the number of employed inspectors, the volume of official inspection equipment, etc.).

Moreover, on the basis of the conducted analysis, it is recommended to take into account the scope of authority and experience of an organic farming inspector as well as his knowledge, education, and availability. No conflicts of interest (ensuring impartiality), production specialization of the assessed farm, and the planned date for performing the assessment are also crucial.

Taking into account the production specialization (profile) of the examined farm is particularly important in the case of specialized farms (other than average production farms).

In difficult cases (e.g., farms assigned to the group of high risk of non-compliance with the organic farming requirements), creating a team of inspectors should be considered.

Among other areas for improvement, one may find **the lack of uniform criteria for assessing the risk of non-compliance with the principles of organic production on the farm**. The authors of the CERTCOST project explicitly recommend further development of the use of control systems based on the analysis of the risk of non-compliance with organic production rules including the provision of common requirements for risk analysis at the European level [66] (p. 12). Similar recommendations at the level of the European Union Member States are postulated by Zanolli, Gambelli, and Solfanelli [73] (p. 2176). The Italian accreditation body Accredia has developed guidelines for certification bodies listing risk factors depending on the organic activity of the producer [73].

According to the authors of the article, the analysis of the risk of non-compliance with the requirements of organic farming on a farm should be uniform for all certification bodies in a given country. The requirements should take into account the following criteria determined on the basis of research results:

- Simultaneous activity carried out with the use of conventional methods;
- Simultaneous activity in different categories of organic farming activities;

- Agricultural area;
- Number of kept animals;
- Number of production units;
- Farm production specialization;
- Volume of production and sales;
- Year of conversion;
- Potential external threats;
- Irregularities discovered during previous inspections;
- Corrective and preventive actions taken by the producer;
- Use of derogations from the organic production conditions;
- Change of the certification body;
- Positive test results for samples;
- Auxiliary activities in the field of organic production (marking, storage, outsourced production);
- Use of external means of production; and
- Inspector's own assessment.

During the research, the customers' limited access to the catalog of non-compliance, sanctions, and validations, up-to-date forms, and the price list of organic farm certification bodies was observed in Poland.

According to the recommendations of the CERTCOST project, all European Union countries should use clearly defined notions of non-compliance and sanctions applicable to them. In this regard, harmonization at the EU level is very important—the current legislation refers to irregularities and infringements as two forms of non-compliance with organic farming regulations, however, they lack specific definitions, which may lead not only to different interpretations between Member States, but also between individual certification bodies within an individual Member State [66]. In the opinion of Gambelli et al., the lack of common standards for non-compliance may result in different interpretations of certification bodies, and hence in different sanctions [63].

In light of these recommendations, the efforts of the Polish authorities to standardize the types of irregularities and infringements concerning organic farming and Polish organic producers should be positively assessed. However, it should be recommended to disseminate among producers the knowledge of the applicable Regulation of the Minister of Agriculture and Rural Development of 11 May 2016 on the types of irregularities or infringements of provisions on organic farming and the minimum measures that the certification bodies are obliged to apply in the event of such irregularities or infringements as part of controls in organic farming and of the guidelines for this regulation [55]. The relevant information should be posted by certifiers on their websites and made available to all producers.

According to Jespersen [72] (p. 21), the Internet is currently the most important and the most transparent tool of communication between the participants of the organic farming certification system. In her opinion, for the sake of transparency and user-friendliness in relation to clients and other interested parties, it should be expected that each certification body should publish the information about the price for the certification process in an easy-to-find place on its website. Currently, the price list for certification fees can be found on the websites of 30% of Polish certification bodies (for example, in 2011 in Italy and Great Britain it was 44%, while in Germany—only 14%) [72] (p. 27). Similarly, Dabbert includes online publishing of price lists by certification bodies for their services in the group of recommendations for increasing the effectiveness and efficiency of organic farming certification [66] (p. 18).

Due to the fact that not all certification bodies provide up-to-date forms on their websites, and only a few of them publish the currently applicable price list for the certification process, the authors of this study recommend developing and making available on the Internet the uniform forms of application documentation for organic producers (including

a production schedule form broken down into agricultural parcels) and a program enabling comparison of fees for the certification process applicable in certification bodies.

Another important element to be improved is **the extensive criteria for determining the fee for the certification process for various farm models**. Jespersen [72] (p. 42) points out that in many cases, the price is calculated in so many different ways that it may not be possible for a potential client to estimate and compare the final price. In some certification bodies, the certification fee is one sum covering both certification (the issuance of a certificate) and control, but sometimes it may consist of two parts: field inspection and certification at the certification body's headquarters, or a combination of a fixed fee and a variable fee depending on the adopted criteria.

According to the authors of this paper, the price list published on the website should include amounts including all mandatory parts of the certification fee. If it is necessary to list additional fees resulting from the type of agricultural production activity, the information on it should be placed at the same place as the price list, with a font size not smaller than the one used in the price list. The fee should include the costs related to acceptance and registration of application documentation including the producer in the control plan as well as the farm assessment (i.e., field controls and the planned sampling and tests, if applicable and is not due to the manufacturer's fault). Costs connected with issuing a certification decision and performing random checks resulting from the conducted risk analysis should also be considered.

It is permissible for the producer to incur additional costs if they result from their fault (e.g., conscious and intentional non-compliance with the requirements of organic farming, an additional control at the producer's request, a loss of original versions of documents etc.).

The results of the present study indicate the possibility of improving the control procedures applied by individual organic farming control bodies in Poland.

These activities, which do not require significant expenses, will significantly support the improvement of organic farm certification procedures, their harmonization and, due to the improvement of the reliability and credibility of the evaluation process, will contribute to building consumer confidence in organic food. Adopting some or all of these recommendations will, however, cost money, not only to the national agencies, but it is likely that those costs will trickle down to the certification bodies and as a result to the organic food consumers. It is possible (and likely) that those costs will be partially offset by charging more to producers seeking certification (who may, in turn, attempt to recover some of those costs from consumers). Consultation with supervisory authorities and certification bodies in the course of further research at the stage of implementation of the developed recommendations is advisable due to the need to determine the profitability of their implementation (the golden mean between the procedural benefits and the control costs incurred by the manufacturer is wanted). The ecological quality of products and consumer confidence in organic food should be the overarching goal. Recommended actions are necessary in light of the dynamics of organic farming development in Poland and in the world as well as in the context of the growing consumer requirements in this area.

## 5. Conclusions

The objective of the study was to identify and analyze the evaluation procedures and practices used by control bodies for organic farming in Poland. The comparison of these procedures, taking into account the factors considered crucial for the correctness of the organic farm certification process, resulted in an indication of the strengths and weaknesses of this process. On this basis, areas for improving the process for the certification of organic farms were identified and proposals for specific improvements were presented.

The implementation in practice of the recommendations formulated will allow long-term benefits to be achieved resulting from the harmonization of the activities of individual certification bodies and from increasing the transparency of the organic farming control system in Poland. This will contribute to improving the exchange of information and

documentation between certification bodies (in the case of a certification body change or cross-checks of producers under the supervision of different bodies); faster communication between supervisory authorities and organic farming units and inspectors, and eliminating differences in the control procedures of certification bodies. Facilitating access to the necessary forms, price lists, the catalog of non-compliance, sanctions, and validation for all organic producers, improving the planning of inspections on farms under the supervision of certification bodies by better assigning the inspector to the assessed farm and adjusting the time of the control to the needs of a given inspection, and improving the qualifications of organic farming inspectors through participation in training and exchange of experiences between inspectors from various certification bodies are other possible areas for improvement.

The areas for improvement were identified and grouped, but further verification of the practical/technical feasibility of their implementation should be the subject of further research. Consultations and opinions by supervisory authorities (to the appropriate extent) and the interested entities themselves (i.e., certification bodies) are recommended. It would also definitely be advisable to conduct an effective information campaign for farmers. The science supporting the social, economic, and environmental benefits of organic systems are reasonably well-established. Ultimately, market share would increase if consumers had greater trust in the organic label.

The developed solutions modify elements of the process of qualification of organic farms by certification bodies, while taking into account the role of these bodies in the organic farm certification system. The solutions have great potential to increase the effectiveness and efficiency of organic farming certification. Due to the fact that the Polish organic farming control system was established in accordance with EU regulations on organic farming, the solutions proposed in the present study are an element of the harmonization of control and supervision over organic farming certification on an EU-wide scale and, thus, are inherently suitable for universal application.

According to the authors of the article, the results of the research can be extrapolated to the entire organic production sector in Poland, and even to other countries with a political and administrative culture similar to that of Poland, like Slovakia. It can therefore be concluded with a high degree of probability that we would then also identify similar areas for improvement in the case of units that declined to participate in the study.

Of course, a study of all the agents involved in the control and evaluation of organic farming in Poland would suffice to verify this assumption. This can be considered to be one of the possible limitations of the research presented in this article. The authors express their hope that all certifying units for organic farms in Poland will be interested in participating in the next phase of research (i.e., the practical implementation of the formulated recommendations in the course of their certification activities). This will allow the above assumptions to be verified.

The research paves the way for further research on the subject of improving the certification process not only in Poland, but throughout the European Union, where the same organic farming regulations are followed.

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