

**IMPORTANCE OF HORIZONTAL INTEGRATION IN ORGANIC FARMING**Adam Pawlewicz<sup>1</sup>, PhDDepartment of Agribusiness and Environmental Economics, University of Warmia and Mazury in Olsztyn,  
Poland

**Abstract.** The paper presents the importance of horizontal integration in organic farming, according to opinions of the owners of farms specialising in production of organic food raw materials and operating in Warminsko-Mazurskie province in Poland. The research was conducted using both an opinion poll and participant observation among 297 randomly selected respondents. In Poland, organic farming has been developing rapidly in the recent years. The number of both producers of food raw materials, along with the acreage of agricultural area, and of processing plants has been on the increase. Moreover, groups of producers of organic food raw materials are being established. However, commodity production falls behind, and the market for organic foodstuffs is developing slowly. The main factor affecting organic farming is the agro-environment payment scheme. It has been demonstrated that the process of horizontal integration in organic farming also has an important role, since, according to the research, in the opinion of organic farm owners, such a measure is an important factor for organisation of the market for both organic food raw materials and organic food products. It contributes to the concentration of supply, which allows increasing the economic effectiveness of farms owned by members of producer groups through higher selling prices as well as lower prices of the purchase of means of production. At the same time, it allows reducing the prices being offered to consumers. On the contrary, forming associations entails certain limitations which may restrain activities being undertaken by producer groups.

**Key words:** horizontal integration, cooperation, organic agriculture, economic development.

**JEL code:** D22, L11, O13, Q12, Q13, Q18

**Introduction**

The main problem of producers of food raw materials (including organic ones) is the fact that the competitiveness of an individual farmer on the market is low. This primarily results from the small batches of goods being usually offered by the farmer, which leads to a barrier to individual farmers' influence on the selling prices of their products, and thus, their income. Unfortunately, this contributes to formation of prices of both products from agricultural farms and means of agricultural production, virtually without participation of the farmers. Additionally, as for the market for organic foodstuffs, prices are higher than those of conventional products which results in this sector being a niche market.

At the same time, it needs to be borne in mind that consumers are not willing to accept substantially large price differences between organic products and conventional ones, and, additionally, the accepted differences between prices of those products have recently been on the decrease (Runowski H., 2009). An important form of the rationalisation of production of food raw materials (including organic ones), tackling the effects of the fragmentation of farms, obtaining reliable market information, and, primarily,

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the concentration of supply of agricultural products, is horizontal integration, primarily in a form of farmers' associations. Horizontal integration in agriculture is a process of establishing economic ties between farms producing agricultural products in the same category. In this case, however, full (capital) integration is not being implemented, since only selected measures, such as joint sales, marketing and promotion, are being taken jointly (Kapusta F., 2010). This is an effective manner of mitigating the market-related consequences of small-scale production and the high heterogeneity thereof, and for organic farming, also the existing niche-nature of this market.

An additional problem in the market of organic food raw materials is the small number of entities on the supply side, i.e. both agricultural producers and processors. The currently observed increase in the number of organic farms is mainly associated with the opportunity for receiving higher direct payments than in the case of conventional agriculture which results in a proportion of these entities failing to participate in market exchange (Pawlewicz A., 2007; Jarecki W., Borawski P., 2008; Bobrecka-Jamro D., Romaniak M., 2013). The main forms of farmers' cooperation include producer groups, marketing groups, and cooperatives<sup>2</sup>. These are supposed to include group production (it needs to be noted that each member of a producer group is engaged on their own in the production process in accordance with the all-group guidelines and standards), storage, processing, trading, and supply.

The basis for considerations and analyses in this paper is the argument that in the opinion of organic farm owners, horizontal integration is an important factor in the process of organisation of the market for organic food raw materials, and contributes to the concentration of supply as well as to increasing the economic effectiveness of associated farms, and that the organic farm owners' level of knowledge in this field is high. The truth of this argument is proved by the fact that over the recent couple of years in Poland, both the number of organic farms and processing plants as well as the number of groups of producers of organic food products, has been on the increase. This may also be evidenced by the increasing demand for foodstuffs produced from organic raw materials. Therefore, there is a basis for horizontal integration of agricultural farms in a form of group entrepreneurship, which is supposed to reduce negative market consequences in this sector, namely, the lack of the concentration of supply of agricultural products, the absence of market information, and the fragmentation of farms.

As regards organic farming in Poland, for several years one has been observing both a rapidly increasing number of certified farms and an increasing acreage of organic agricultural area; however, those values continue to be not significant market-wise. According to the Main Inspectorate of Agricultural and Food Quality Inspection (*GIJHARS*), there were 23,449 organic producers being engaged in production of food raw materials at the end of 2011 (both after the conversion from conventional production into organic production, and during the conversion) (*Number of Organic Producers ...*, 2012). This only accounted for 1.04% of the total of 2,253,135 farms in Poland which ranks Poland the third among the EU Member States after Italy (45,852) and Spain (30,462) (*Statistical Yearbook...*, 2012). In turn, in terms of the acreage of agricultural land, the acreage of the land being utilised in an organic manner amounted to 605,519.61 ha (*The Area of Organic Agricultural Land...*, 2012), which accounted for slightly more than 3% of agricultural area in Poland. On the contrary, horizontal integration in this sector is only just developing. The number of producer groups in Poland, being engaged in production of

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<sup>2</sup> All organisational and legal forms are referred to, both commonly and in official documents (e.g. RDP), as Agricultural Producer Groups (APGs). The designation "producer groups" generally refers to the idea of the association-forming agricultural producers

organic food raw materials, amounted to 7 entities at the beginning of 2013 (in the total number of 1,255 producer groups, one entity has appeared since 2011) (*List of Groups...*, 2013). In contrast, in terms of the market, certified foodstuffs accounted for only 0.3% of sales of food products. It should be borne in mind, however, that in the countries where the analogous market is well-developed, the percentage of organic foodstuffs accounts for only 4-5% (*The Organic Food Market...*, 2013).

The object of the research were the owners of organic farms in Warminsko-Mazurskie province which sold organic food raw materials on the market, and the subject of the research were their opinions and data on farms. The basis for selection of entities for the research was "*List of Agricultural Producers in Organic Farming in 2011, in Warminsko-Mazurskie province*"<sup>3</sup>. According to this source, there were 1,438 registered agricultural farms in Warminsko-Mazurskie province after the conversion period was completed. On the national scale, this accounted for nearly 10% of organic farms, which ranked Warminsko-Mazurskie province third among the total of 16 provinces.

The aim of the paper is to present the importance of horizontal integration in organic farming in Poland. The base of information was opinions of the 294 owners of farms specialising in production of organic food raw materials, operating in Warminsko-Mazurskie province in Poland. The paper focused on three issues. The first one is a short description of respondents and their farms. The second one is the respondents' opinions on the need to organise such entities, while the third one is a discussion on the benefits and inconveniences to be possibly experienced by potential members of producer groups.

As already mentioned, a very large proportion of farms is only being converted due to the opportunity for receiving higher agro-environment payments than those under the conventional scheme. However, this process is not accompanied by an increase in commodity production. With such an assumption, the list was verified in the first phase of the selection of entities for the research. On the basis of description of the specialisation of activity (type of crop/type of livestock/type of product) and the indications of agricultural advisors from the Warminsko-Mazurski Agricultural Advisory Centre (*W-MODR*) in Olsztyn, the following were excluded from the research: farm owners with no contacts with the market for organic food raw materials, and those being engaged in organic production for their own needs (e.g. animal feeds) or who only owned grassland. As it turned out, there were over 60% of such entities. Therefore, the research population included 575 owners of organic farms. In the second phase of the selection of the research sample, 294 entities were selected for the research as a representative group (a permissible error of 4% with the significance level  $\alpha = 0.05$ ). The measurement was performed in late March and early April of 2013.

For the purpose of the research, the interview method was used along with a standardised questionnaire. Additionally, the participant observation was used, where the researcher becomes both an observer and a participant of the group under research by which he/she is accepted. This allowed the verification of some disadvantages of the selected research method in accordance with the principle of scientific objectivity and obtaining reliable information.

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<sup>3</sup> List of Agricultural Producers in Organic Farming in 2011, in Warminsko-Mazurskie province (Wykaz producentów rolnych w rolnictwie ekologicznym – 2011 r. – województwo warminsko-mazurskie. The list as made available includes data on producers as communicated to the Main Inspector of Agricultural and Food Quality (GIJHARS) by authorised certification bodies in accordance with Article 9( 1)( 2) of the Act of 20 April 2004 on organic farming (Journal of Laws No 93, item 898, as amended); the list being most up-to-date for the period of the measurement (Issue 5 of 15 March 2012)

Methods of tabular and descriptive statistics were mainly used for the purposes of the paper and analysis of the collected materials. The paper also used the generally available secondary data, namely, information included in the literature and source documents.

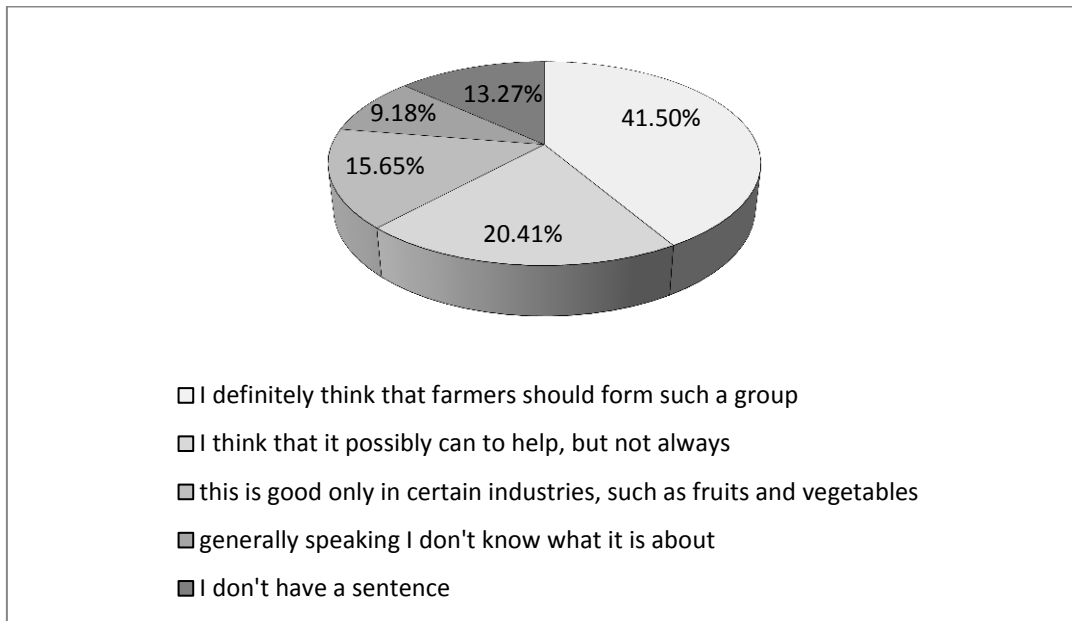
### **Research results and discussion**

The respondents' average age was nearly 40. These were predominantly men who accounted for over 65% of the group under research. Almost a half of the respondents (47.82%) had received secondary education, while every third farmer (34.78%) participating in the measurement had received higher education. Participants of the research mainly held diplomas of agricultural higher education facilities and schools.

The average area of an organic farm as owned by the farmers participating in the research amounted to 20.15 ha, i.e. nearly twice as much as the average area of a farm in Poland (*Average Area...*, 2012). In turn, the acreage of agricultural area amounted to 19.84 ha on average. The minimum area of the farms under analysis amounted to 3.09 ha, while the maximum area was 101.21 ha. As regards the land use pattern in the respondents' farms, grassland was predominant (meadows – 58.60%, pastures – 4.83%). In turn, cereals accounted for 18.37%. As for the pattern of orchard crops, apple trees (61%) and raspberries (37.33%) were predominant. Livestock production was incidental, and only reported in 8.7% of farms.

It should be noted that all respondents reported having had problems with sales of organic food raw materials. Almost 69% of the respondents indicated that they had been selling organic raw material as conventional ones. On the contrary, only 16% were selling organic raw materials directly in the farm to permanent or one-time customers (mainly individual ones), 9.7% did so single-handedly on marketplaces, and only 5.35% to "organic" processing plants. Nawrocka T. (2012) points out that problems with sales are mainly associated with the preparation of a ready batch of goods meeting all the required criteria, and primarily with the insufficient amount of products accumulated in one location. Therefore, the market for organic food products in Poland virtually does not operate. This is why measures that will allow the development of this food market, for example, horizontal integration, are of significance.

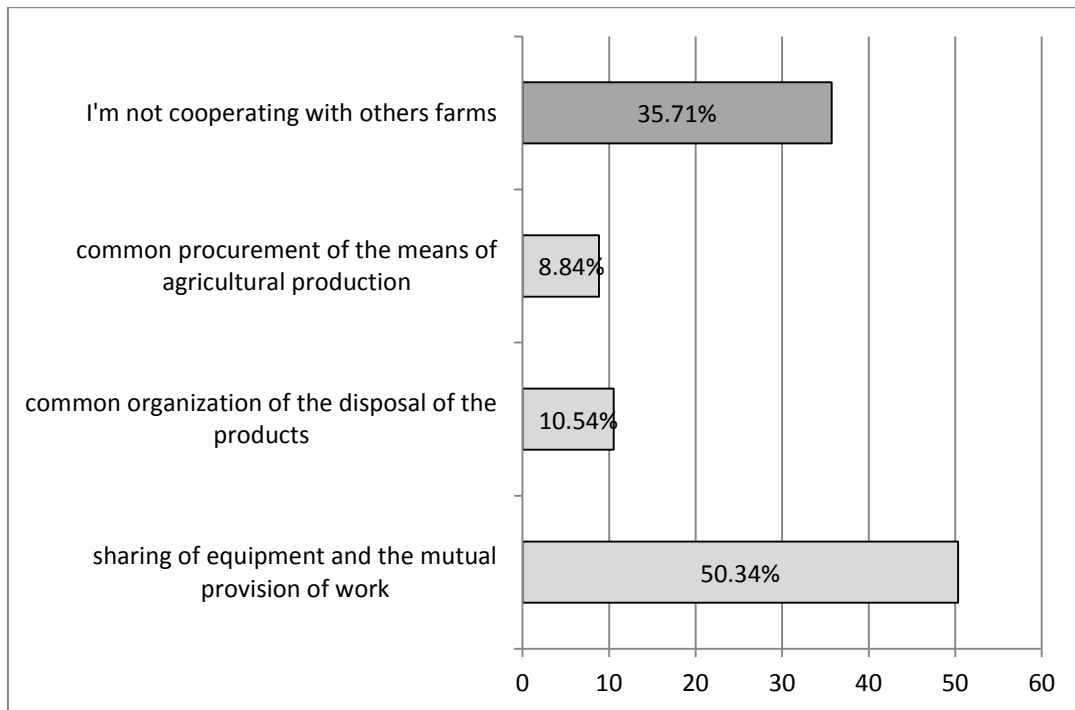
While analysing the problems of Polish organic farming, one can notice an insufficient level of cooperation which would facilitate both advantageous negotiations and sales of the produced agricultural products (e.g. the previously mentioned small number of registered "organic" producer groups). However, the research shows that over 41% of the respondents strongly emphasised the importance of forming associations to enhancing the competitiveness of farms on the market. This implies that they are highly aware of the need to establish producer groups. In turn, a fifth (20.41%) of organic farm owners participating in the research did not have a high opinion of such a measure. According to them, formal or informal cooperation may not always be successful, especially in a situation where farmers participating in horizontal integration are not able to define similar objectives of their activities. Over 15% of respondents believed that this was a good idea but only in certain sectors, e.g. fruit and vegetable production. Less than 9% of the persons interviewed did not know what producer groups were, while over 13% had no opinion whatsoever on this subject (Figure 1).



Source: author's construction

Fig. 1. **Opinion of the owners of the organic farms on creation of producer groups, % of indications**

Approximately 65% of the respondents indicated that they had already cooperated informally with other farmers, and achieved benefits in production, market, and financial areas. The lack of registration of the activity may result from certain convenience and simplicity of unregistered cooperation as well as an opportunity for avoiding a variety of additional administrative and legal fees.



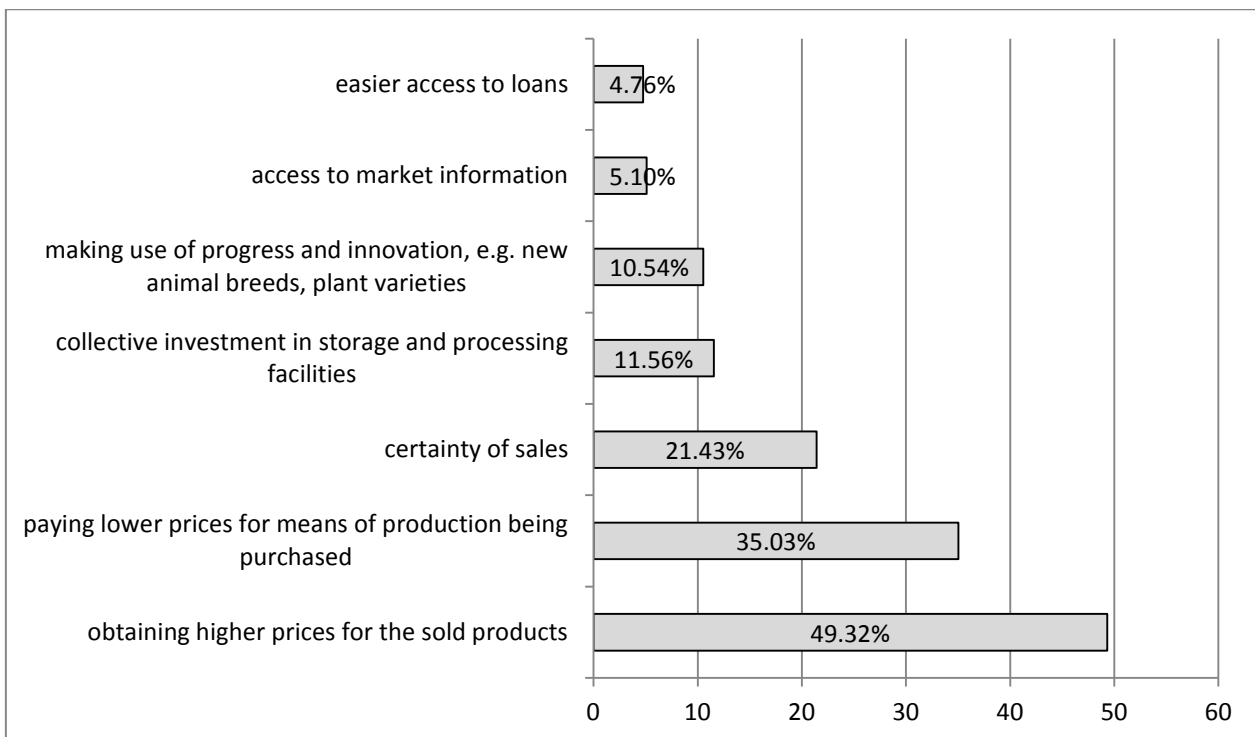
Source: author's construction, respondents could indicate more than one answer

Fig. 2. **Opinion of respondents on working with other farmers in the producer group, % of indications**

The collaboration as indicated primarily includes both the collective use of equipment and mutual provision of labour services (50.34%), thereby, being quite an obvious form of cooperation. Unfortunately, few respondents indicated cooperation in terms of the joint organisation of sales of raw materials (10.54%), and joint procurement of means of production (8.84%). Mainly through such measures the competitiveness on the primary market may be enhanced, and the activity developed, e.g. through investments in distribution infrastructure or processing. It should be added that over a third of the farmers did not cooperate with other farms (Figure 2). The main reason as indicated for that was difficulties in communication as well as other farmers' unwillingness to cooperate.

The main objective of joint activity should be considered the maximisation of benefits, mainly financial ones, of the integrated shareholders, and thus, an increase in profitability of agricultural activity of each farmer. Other motives for which producers voluntarily merge, include: distribution of expenses on the purchase of equipment; organisation of transport; joint negotiation of contracts; group trading in stock exchange; and taking marketing measures. Each of those reasons results from the willingness to survive on the market in which the competitiveness is growing, and the laws of demand and supply apply (Pawlewicz A., 2009).

The conducted research confirmed the above, and indicated that over two-thirds of the respondents were of the opinion that operation of such an entity may yield benefits. As regards the objectives to be possibly achieved, nearly a half of the farmers participating in the research (49.32%) indicated obtaining higher prices for the sold products through the concentration of supply, joint transport, or getting rid of trade agents. Over one-third of opinions (35.03%) concerned paying lower prices for means of production being purchased jointly. In turn, 21.43% of the farmers participating in the research indicated the certainty of and lack of risk in the sales of agricultural products which had been produced on a farm.

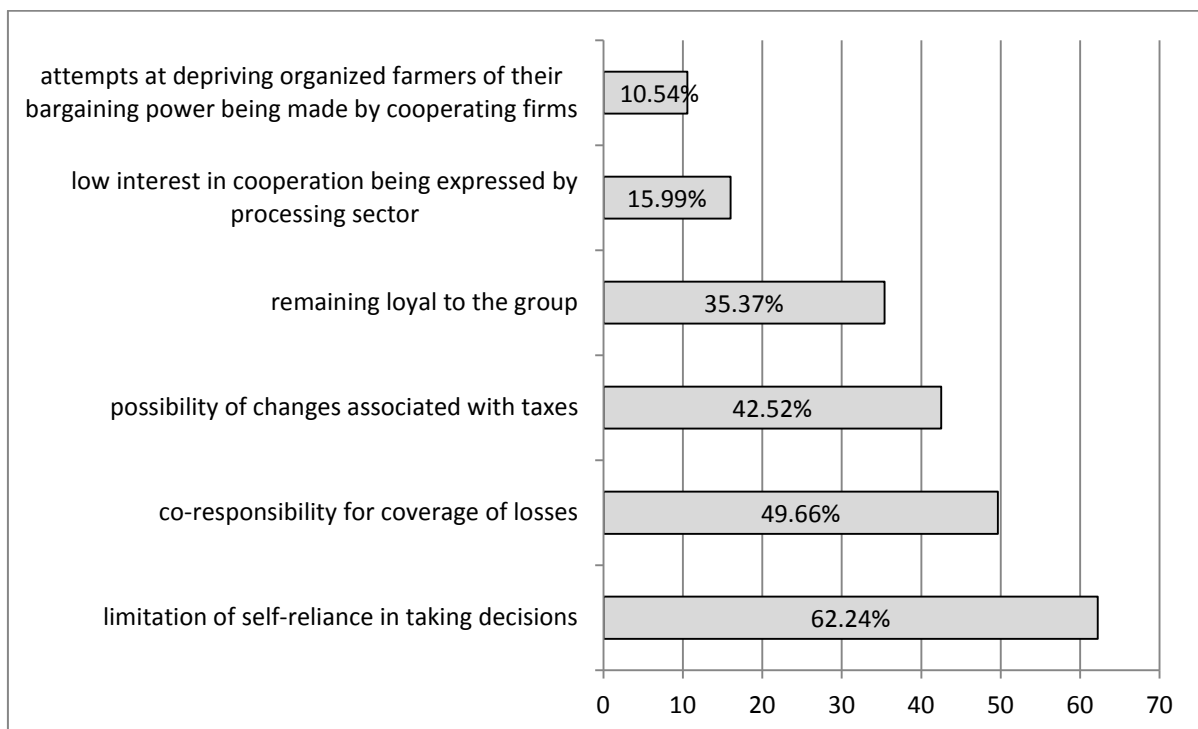


Source: author's construction, respondents could indicate more than one answer

Fig. 3. Benefits to be possibly achieved by farmers after having joined a production group, according to the respondents' opinions, % of indications

Less significant was the collective investment in infrastructure for storage and processing (11.56%), and the opportunity for making use of progress and innovation (10.54%). Moreover, easier access to market information and advisory services (5.10%) and to loans (4.76%) were also mentioned (Figure 3).

On the one hand, forming farmers' associations provides a possibility for cooperation with large customers (retail networks, processing plants), while, on the other hand, raises many concerns and much uncertainty. Since contractors often impose requirements that are difficult to be met, only strong and large producer groups being able to negotiate favourable conditions for cooperation may meet them. Therefore, willingness to establish a producer group should be preceded by the potential members' deep thought of the inconveniences accompanying the joint activity. However, the respondents drew attention, in particular, to the limitation of the existing self-reliance (62.24% of indications). According to nearly a half of the opinions (49.66%), another problem may be the co-participation in coverage of losses to be possibly caused by other members or entities cooperating with the group. Over 42% of the farmers participating in the research indicated the rather significant difficulty, namely, the possibility of changes in the existing tax charges. In turn, according to more than a third of the respondents, a certain difficulty is remaining loyal to the group, for instance, in a situation where independent activity would yield bigger benefits. This may be associated with the cooperating firms' attempts to deprive organised farmers of their bargaining power (10.54% of indications). Producers of organic food raw materials also indicated low interest being expressed by the processing sector (15.99%); this, however, may result from the small number of entities in that sector which operate in Poland and are engaged in production of organic foodstuffs (Figure 4).



*Source: author's construction, respondents could indicate more than one answer*

**Fig. 4. Inconveniences which arise at the time of cooperation, according to the respondents' opinions, % of indications**

**Conclusions, proposals, recommendations**

In Poland, organic farming has been developing rapidly in the recent years. Both the number of producers of food raw materials, along with the acreage of agricultural area, and of processing plants, have been on the increase. Moreover, groups of producers of organic food raw materials are being established. However, commodity production falls behind, and so does the market for organic foodstuffs, which is developing very slowly. This results in a situation where despite the rather great interest being expressed by consumers, the supply is small, and prices of the products being offered are higher than those of conventional ones. Unfortunately, organic farm owners sell agricultural products either as conventional ones or accidentally. Another serious problem is the number of entities which are being converted exclusively due to higher agro-environment payments. Therefore, it is necessary for the development that, *inter alia*, farmers form associations, which will enhance their position on the market, and make it easier to provide an appropriate volume of sales of raw materials at prices being accepted by consumers. Additionally, it is very important to establish a system of organised distribution and marketing for organic products as well as increasing investments in the processing of organic food raw materials.

Despite the above-mentioned problems, the majority of respondents were aware of the need to cooperate, although, a proportion of them concluded that such activity may not be always appropriate. On the contrary, a small proportion of the farmers participating in the research did not know anything at all of horizontal integration, or had no opinion whatsoever on that subject. However, it is a surprising fact that more than two-thirds of the respondents had already cooperated with other farmers, primarily through the joint use of machinery, mutual provision of labour, and, on a small scale, through joint sales and procurement of means of production. These were informal measures, which probably results from being aware that registering the activity may involve the need to pay a variety of additional administrative and legal fees.

As regards benefits, the respondents primarily noticed the possibility of the concentration of supply which allows obtaining higher prices, and maintains the certainty of sales. Another important objective as indicated by the farmers participating in the research was reducing the costs associated with the purchase of means of production. Less significant was the collective investment in storage and processing facilities, making use of progress and innovation, and access to market information and loans.

However, cooperation – in particular the formal one – requires the members of producer groups to meet their obligations. As regards the inconveniences of cooperation, the respondents primarily indicated the limitation of self-reliance in taking decisions relating with the food raw materials being produced on the farm. What was rather significant was the co-responsibility for coverage of losses which may generate costs in the future. The farmers were also concerned about the possibility of changes in taxation of income. A serious problem is also the need to remain loyal to the group, especially in a situation where attempts to deprive cooperating farmers of their bargaining power are being made by firms receiving raw materials or selling means of production. A rather significant issue is also the low interest in cooperation being expressed by the processing sector, which primarily results from the small number of such entities in Poland.

In conclusion, organic farming in Poland will, in a longer-term perspective, continue to develop, yet, not so rapidly, in terms of the number of entities on the supply side; however, without a significant impact on the market. This primarily results from the existing policy of supporting such activities. It



should be expected that it will remain the source of food raw materials for the still limited proportion of consumers (a niche market), since the main determinant of this market is the high retail price. Therefore, the process of horizontal integration in organic farming has an important role since, according to the research, in the opinion of organic farm owners such a measure is an important factor for the organisation of the market for both organic food raw materials and processed foodstuffs. This also contributes to the concentration of supply, which allows, on the one hand, increasing the economic effectiveness of the farms owned by members of producer groups, and on the other hand, limiting the prices offered to consumers.

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All reviewers were anonymous for the authors of the articles.

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## **Publication Ethics and Malpractice Statement for the International Scientific Conference "Economic Science for Rural Development"**

The conference and its proceedings are dedicated to topical themes of rural development, such as primary and secondary agricultural production and cooperation; integrated and sustainable development; finance and taxes; resources and sustainable consumption; home economics and other.

The Editorial Board is responsible for, among other, preventing publication malpractice. Unethical behaviour is unacceptable and the authors who submit articles to the Conference Proceedings affirm that the content of a manuscript is original. Furthermore, the authors' submission also implies that the material of the article was not published in any other publication; it is not and will not be presented for publication to any other publication; it does not contain statements which do not correspond to reality, or material which may infringe upon the intellectual property rights of another person or legal entity, and upon the conditions and requirements of sponsors or providers of financial support; all references used in the article are indicated and, to the extent the article incorporates text passages, figures, data or other material from the works of others, the undersigned has obtained any necessary permits as well as the authors undertake to indemnify and hold harmless the publisher of the proceedings and third parties from any damage or expense that may arise in the event of a breach of any of the guarantees.

Editors, authors, and reviewers, within the International Scientific Conference "**Economic Science for Rural Development**" are to be fully committed to good publication practice and accept the responsibility for fulfilling the following duties and responsibilities, as set by the *COPE Code of Conduct and Best Practice Guidelines for Journal Editors of the Committee on Publication Ethics (COPE)*.

It is necessary to agree upon standards of expected ethical behaviour for all parties involved in the act of publishing: the author, the editor, the peer reviewer, and the publisher.

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The Editorial Board is responsible for deciding which of the articles submitted to the Conference Proceedings should be published. The Editorial Board may be guided by the policies of ethics and constrained by such legal requirements as shall then be in force regarding libel, copyright infringement and plagiarism. The editor may confer with other editors or reviewers in making this decision.

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The authors should ensure that they have written entirely original works, and if the authors have used the work and/or words of others that this has been appropriately cited or quoted.

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An author should not in general publish manuscripts describing essentially the same research in more than one journal or primary publication. Submitting the same manuscript to more than one journal concurrently constitutes unethical publishing behaviour and is unacceptable.

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Proper acknowledgment of the work of others must always be given. The authors should cite publications that have been influential in determining the nature of the reported work.

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Authorship should be limited to those who have made a significant contribution to the conception, design, execution, or interpretation of the reported study. All those who have made significant contributions should be listed as co-authors. Where there are others who have participated in certain substantive aspects of the research project, they should be acknowledged or listed as contributors.

The corresponding author should ensure that all appropriate co-authors and no inappropriate co-authors are included on the paper, and that all co-authors have seen and approved the final version of the paper and have agreed to its submission for publication.

### **Hazards and human or animal subjects**

If the work involves chemicals, procedures or equipment that have any unusual hazards inherent in their use, the author must clearly identify these in the manuscript.

### **Disclosure and conflicts of interest**

All authors should disclose in their manuscript any financial or other substantive conflict of interest that might be construed to influence the results or interpretation of their manuscript. All sources of financial support for the project should be disclosed.

### **Fundamental errors in published works**

When an author discovers a significant error or inaccuracy in his/her own published work, it is the author's obligation to promptly notify the editor or publisher and cooperate with the editor to retract or correct the paper.

### **Editorial Board**

## Foreword

Every year the Faculty of Economics and Social Development, Latvia University of Agriculture holds the international scientific conference "Economic Science for Rural Development" and publishes internationally reviewed papers of scientific researches, which are presented at the conference. **This year** researchers from various European countries representing not only the science of economics in the diversity of its sub-branches have contributed to the conference; they have expanded their studies engaging colleagues from social and other sciences, thus, confirming inter-disciplinary and multi-dimensional development of the contemporary science. The conference is dedicated to topical themes of rural development; hence, the research results are published in 4 successive volumes (No 33, No 34, No 35, and No 36). The first volume of scientific conference proceedings was published in 2000.

The following topical themes have been chosen for the conference:

- Production and Co-operation in Agriculture
- Integrated and Sustainable Regional Development
- Finance and Taxes
- Marketing and Sustainable Consumption
- Rural Development and Entrepreneurship
- Home Economics
- New Dimensions in the Development of Society

Professors, doctors of science, associate professors, assistant professors, PhD students, and other researchers from the following higher education, research institutions, and professional organisations participate at the International Scientific Conference held on 24-25 April 2014 and present their results of scientific research:

University of Economics, Prague	Czech Republic
Estonian University of Life Sciences	Estonia
BA School of Business	Latvia
Baltic International Academy	Latvia
Latvian State Institute of Agrarian Economics	Latvia
University of Latvia	Latvia
Latvia University of Agriculture	Latvia
Riga International School of Economics and Business Administration	Latvia
Latvian State Forest Research Institute "Silava"	Latvia
Institute for National Economy Research	Latvia
Riga Technical University	Latvia
Rezekne Higher Education Institution	Latvia
State Priekuli Plant Breeding Institute	Latvia
Ventspils University College	Latvia
Aleksandras Stulginskis University	Lithuania
Kaunas University of Technology	Lithuania
Vilnius University	Lithuania
Mykolas Romeris University	Lithuania
Lithuanian University of Health Sciences	Lithuania
Vilnius Gediminas Technical University	Lithuania
Szczecin University	Poland
University of Warmia and Mazury in Olsztyn	Poland
Warsaw University of Life Sciences	Poland
Poznan University of Economics	Poland
West Pomeranian University of Technology in Szczecin	Poland
University of Agriculture in Krakow	Poland
Institute of Agricultural and Food Economics - National Research Institute, Warsaw	Poland
Welfare Projects Academy of Sciences in Lodz	Poland
South Dakota State University	USA

Pennsylvania State University, State College  
Russian Academy of Sciences  
Saratov State Socio-Economic University  
Kazakh Economic University

USA  
Russia  
Russia  
Kazakhstan

The comprehensive reviewing of submitted scientific articles has been performed on international and inter-university level to ensure that only high-level scientific and methodological research results, meeting the requirements of international standards, are presented at the conference.

Every submitted manuscript has been reviewed by one reviewer from the author's native country or university, while the other reviewer came from another country or university. The third reviewer was chosen in the case of conflicting reviews. All reviewers were anonymous for the authors of the articles, and the reviewers presented blind reviews. Every author received the reviewers' objections or recommendations. After receiving the improved (final) version of the manuscript and the author's comments, the Editorial Board of the conference evaluated each article.

All the papers of the international scientific conference "Economic Science for Rural Development" are arranged into the following four thematic volumes:

**No 33 Finance and Taxes**  
**New Dimensions in the Development of Society**

**No 34 Production and Cooperation in Agriculture**

**No 35 Marketing and Sustainable Consumption**  
**Rural Development and Entrepreneurship**  
**Home Economics**

**No 36 Integrated and Sustainable Regional Development**

The publishing of the Proceedings before the conference promotes exchange of opinions, discussions, and collaboration of economic scientists on the international level. The research results included into the Proceedings are available worldwide to any interested person.

**The Conference Proceedings are indexed in ISI Web of Knowledge, AGRIS, CAB Abstracts and EBSCOHost Academic Search Complete databases.**

The Conference Committee and Editorial Board are open to comments and recommendations for the development of future conference proceedings and organisation of international scientific conferences.

We would like to thank all the authors, reviewers, members of the Programme Committee and the Editorial Board as well as supporting staff for their contribution organising the conference.

On behalf of the conference organisers

**Ingrida Jakusonoka**

Professor of Faculty of Economics and Social Development  
Latvia University of Agriculture

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