

MULTIFUNCTIONALITY OF ORGANIC FARMING: CASE STUDY FROM SOUTHERN POLAND

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Abstract: The main goal of this article is to answer the question whether organic farming, which is developing in some parts of Poland, can be considered as a form of multifunctional farming and contribute so to non-commodity functions and the process of change in a particular territory of given areas. The analyses are based on data obtained from 2013 of several points in the south of Poland representing a cluster of organic market oriented farmers. The results show that namely market organic farming may serve as multifunctional one, but only under certain conditions and for a specific type of farming. Through specific functions, organic farming facilitates the changes, primarily on a local scale. The existence of a strong integrated organic farming sector might influences development and change, resulting in not only the improvement of economic welfare of organic farmers, but also of whole local communities, strengthening the bonds amongst them, mobilising the social resources.

Keywords: organic farming, multifunctional farming, rural multifunctionality, Poland

Streszczenie: Celem artykułu jest odpowiedź na pytanie czy rolnictwo ekologiczne rozwijające się na pewnym obszarze Polski, można rozpatrywać jako odmianę rolnictwa wielofunkcyjnego. Innymi słowy - czy rolnictwo ekologiczne pełni na danym obszarze także funkcje rynkowe i pozarynkowe. Kwestia ta dotyczy więc przede wszystkim kształtu procesu rozwoju wiejskiego w skali lokalnej. Analizy zawarte w tym artykule odwołują się do badania typu case study z 2013 roku, obejmujących kilka powiatów na południu Polski, gdzie istnieje duża grupa rolników ekologicznych, zorganizowanych wokół grupy producenckiej. Analiza dowodzi, że pod pewnymi warunkami rolnictwo ekologiczne, może pełnić funkcje rolnictwa wielofunkcyjnego. Poprzez te funkcje rolnictwo ekologiczne wpływa na zmiany przede wszystkim na poziomie lokalnym, w różnych wymiarach: poprawę sytuacji ekonomicznej rolników, rozwój kapitału społecznego, wzmacnianie więzi z rynkiem.

Słowa kluczowe: rolnictwo ekologiczne, wielofunkcyjność rolnictwa, wielofunkcyjny rozwój obszarów wiejskich

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1. Introduction

The role of farming in the rural economy has been recently undergoing many changes. Not so long ago, rural areas were synonymous with farming and food production. Jerzy Wilkin emphasises the fact that throughout the ages farming was the most fundamental and important economic activity and being a farmer was the primary occupation of the society members. This means that changes in farming and in the society as a whole are highly interconnected (Wilkin 2005). Farming plays important commercial and non-commercial functions and is linked symbolically, as well as physically, to nature and society. Van der Ploeg describes farming as a space delimited by three elements: nature, society and farmers (van der Ploeg 2006). Many experts argue that the development of rural areas only takes place when fewer people are directly involved with agricultural production and more are involved in other economic activities in rural areas. This statement is not in complete contradiction with an opinion voiced by another group of researchers (Majewski 2005, van der Ploeg, Renting et al. 2000), which Bogdan Klepacki seemed to voice most appropriately: 'Farming will always be important to the society, regardless of how low its share of the GDP falls.' (Klepacki 2005: 85) and which may as well be the source of all the changes in the countryside (van der Ploeg 2000). It is also difficult to disagree with Andrzej Kaleta, who wrote that 'without farming, the countryside loses its sense of existence, because not only is it unable to serve its typical economic functions, but also all the other functions towards the global society which have grown in importance' (Kaleta 1998: 68). Indeed, they consider farming as a source of deep change in rural areas. These two opinions are not quite as contradictory as they might seem at first. Recently, the importance of farming in the global economy has been decreasing, but the meaning of non-commercial functions has been on the rise. Agricultural production is becoming multifunctional production. This is not a new concept, but recently has gained a new meaning.

Multifunctionality of farming is currently 'directed inside-out and serves to satisfy a number of needs: environmental, cultural, social and economic.' (Wilkin 2010: 19). It is defined as the use of a farm's resources for agricultural production and non-market outputs (e.g. landscape, organic products, quality products, on-site conservation of biodiversity, etc.) (Pollman, Poppe 2010). According to van der Ploeg's concept, farming exists not only to produce food and other market resources, as it has been seen to be doing throughout the industrial development period, but it should and does serve other, inseparable closely related market and non-market functions. Wilkin divides these functions among: production (commercial and non-commercial), special, cultural and natural (Wilkin 2010). Non-market functions served by farms may also be divided between some that run automatically (care of the landscape and natural environment) and non-automatically (cultural or re-integration functions).

The main goal of this article is to answer the question: to what extent can organic market be oriented² farms be considered a form of multifunctional farming. In other words, can organic farming also play non-commodity functions, as well as commodity functions, in a particular territory? This issue primarily pertains to the overall shape of rural area development on a local scale – development as understood by Zygmunt Seręga and Piotr Nowak (2013: 154): 'rural area development is not only the improvement of economic welfare, but must also be associated with changes in social and political structures, and community institutions; it is also a change encompassing local communities, impacting social bonds'. The other question is: what kind of model of rural development might be achieved due to strong organic farming sector. Because the value of case study is to show the processes, the question is to what extent presented here changes and their directions are only valid for this one region or can they be important in other areas, especially countries of similar fragmented agrarian structures.

The analysis in the article will be dealing with a specific definition of multifunctionality – based on a definition proposed by Terry Marsden and Roberta Sonnino (2008), which stresses that multifunctionality is a pro-development tool serving to promote more sustainable economy. This term is going to be employed as a kind of framework for further analysis. Seręga, Nowak also

² As the research shows, in case of organic farming, market-oriented holdings can operate even on a few hectares. It has to be stressed that the research focused on the market-oriented farms, because it is estimated that over half of all organics farm in Poland do not produce any goods on market.

stress that real change can only be observed when economic improvement is experienced by the society as a whole, not just by particular social groups (Seręga, Nowak 2013). This analysis will not focus on the main goal of organic farming, understood as the production of high quality foods in a sustainable way, but rather on social and economic functions.

2. Theory

The notion of multifunctional agriculture.

The idea of multifunctionality of farming has become a frequently used notion in the political and scientific discourse since the 1990s, especially following the 1992 Agenda 21, but on the other hand it is a hard-to-define notion. Madsen and Sonnino notice that there are a number of ways multifunctional farming may be defined, depending on the paradigm of rural area development is employed. When multifunctionality in the context of the agro-industrial paradigm is taken into account, multifunctionality is synonymous to pluractivity, or the diversification of human actions – in other words, the combination of farming and non-farming within one homestead. If seen from the post-productive paradigm point of view, multifunctionality is a pro-development tool serving to promote more sustainable economy (Marsden 2003). Therefore, in order to determine that certain activities are multifunctional and are serving the development of rural areas, they need to meet the following three criteria:

- be an added value, both in terms of income increase and the employment possibilities in farming;
- serve to build the new agricultural sector which meets the expectations of the whole society;
- serve the redefinition and reconfiguration of rural resources, both within the homesteads and outside them (Marsden, Sonnino 2008: 423).

As Renting, Rossing, et al. state: ‘multifunctional agriculture concept may play a crucial role in opening new, innovative perspectives on crucial questions such as the evolving relations between agriculture and wider society and changing role of agricultural activities in sustainable rural development.’ (Renting, Rossing, et al. 2003: 113). It needs to be stressed that the development of multifunctionality in farming serves the multifunctional development of rural areas as a whole and allows to change the perception of relations between farming and the rest of the society or the influence of farming on the sustainable growth of rural areas. Such a view of the problems shows the bounds between multifunctional farming and the issues of sustainable rural area development. Multifunctional farming is related to a dynamic process of changes rooted in contemporary and historical rules of farming, and at the same time requiring innovation and further development. Both the idea and the research area defined by it are broad, although they cannot be treated separately. Scientists point at the following approaches to the research of multifunctional farming:

- from the market point of view;
- from the use of the land point of view;
- from the actors point of view;
- from the political instrument point of view (Renting et al. 2009)

Referring to the research categories enumerated by Renting, the article will focus on researching multifunctional farming from the perspective of the market. However, taking into account the definition of multifunctional farming which results in the appearance of public and private goods, with the functions it serves being inseparable, one may not limit the analysis only to market aspects.

While describing organic multifunctional farming, one may not escape the contemporary paradigm of sustainability. Multifunctional farming, offering a real possibility of impacting the natural environment and allowing to fulfill a range of social values and needs, fits well into the ideas of sustainability (Wilkin 2010). Organic farming, as stressed by Pugliese (2001), is

sustainable farming to its extreme, currently limited by a number of legal regulations. She points at four elements joining organic farming and sustainability of rural areas: innovation, participation, integration and preservation. According to her, these are the key elements defining sustainability in the countryside, and organic farming facilitates its growth. The issue of multifunctional farming being an integral part of sustainability paradigm is not only the matter of finding the relation between production and environment, but also the bounds between farming and 'the social structure of the countryside and the cultural condition of local rural communities' (Knieć 2012: 54).

Development of organic farming in Poland

Organic farming is also defined as "biological, organic, sometimes also biodynamic and refers to an economic system with sustainable plant and animal production within a homestead. It is a fixed, self-sufficient and economically safe system." (Ramowy plan działań dla żywności i rolnictwa ekologicznego w Polsce na lata 2014-2020, p. 3). Organic farming, apart from its primary goal, namely the production of high-quality food from natural resources and with due respect to the natural lifecycles, is to serve other roles, such as:

- increase of farming income (raised added value of organic production and higher prices of organic products as compared to conventional counterparts);
- increase and diversification of employment in rural areas (with intensive production there is a need for higher number of workers, organic farming facilitates the development of agro tourism and educational tourism);
- preservation of the environment, biodiversity and landscape, the use of native species of plants and animals, positive impact on soil and water protection, preservation of traditional rural landscape by the use of natural production methods;
- development of food chains, especially on a local scale (the use of diversified sales channels: direct sales, local bazaars, supply to local restaurants, school diners and the like).

As this article focuses on the interrelations between organic farming and the socio-economic change in rural areas, the definition of multifunctionality in a sustainable development paradigm seems the most appropriate for our purpose.

In the EU, consumer awareness of the meaning of organic food is constantly increasing. It is one of the drivers of the growth in the number of organic farms and in general organic food production. According to recent estimates, 2% of all farms in the EU are organic, and the area of land dedicated to organic farming comprises over 5% of all arable land in Europe³. As the above data proves, organic farming might not be the most common way of farming in the long run, and will not be a trendsetter in the development of farming in general, but it seems the meaning of this type of farming is gaining importance and has been influencing the logic of the rural development models, especially on the local scale. For example, the preamble to the Council Regulation (EC) No. 834/2007, which is dedicated to the production of organic food, underscores that organic farming plays an important role in the multifunctional development of the European agriculture industry. It might also be a factor influencing many necessary changes in rural areas of Europe.⁴

In Poland the number of organic farms is also constantly growing, with the country being third in the number of organic farms in Europe (the leaders are Italy and Spain). The share of organic farmland in the whole farming area of Europe puts Poland on the 17th place. As we can read in a recent report prepared by the Agricultural and Food Quality Inspection in 2014, the number of organic farms is over 25,000 and has increased by 10% since 2011. Additionally, one needs to notice the growing demand for organic food – the EU market for this type of food is growing by

³ http://ec.europa.eu/agriculture/organic/eu-policy/data-statistics_pl

⁴ <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2007:189:0001:0023:PL:PDF>

10-15% per annum – which gives a lot of opportunities to all sectors in the food supply chain, from the sales of farming machines and equipment to services of individually-tailored diets, serving the economic and social development that reaches far beyond organic farming.

In 10 years the number of organic farms grew by a factor of over 11, with greater growth following the accession of Poland to the EU (Ramowy Plan Działań dla Żywności i Rolnictwa Ekologicznego w Polsce na lata 2014-2020.). It needs to be stressed, however, that experts (Nowogródzka, Szarek, Podstawka 2013) share the opinion that only a small share of organic farms actually produce organic market goods – the average market index in the assessed group was almost 30% lower than with conventional farms, where it was set at 70%. Researchers justify these results with the fact that “agrarian and environment plans” are not set with the market index in mind, but rather with the environment protection (Nowogródzka, Szarek, Podstawka 2013, p. 109). Also, the report “Rolnictwo ekologiczne czynnikiem rozwoju lokalnego – analiza wybranych przypadków” (Organic farming as a factor of local growth – analysis of selected cases) confirms these theses and states that ‘the actual scale of organic market production is lower and reaches 15-20% of the supported farms.’ (Michalska, Jasiński, Śpiewak 2013)

The average area of an organic farm in 2010-2013 was 25 hectares, while the average figure for conventional farms was 10.42 hectare in 2013 (ARiMR). Despite the growth in the number of farms, organic food production is still of marginal importance and according to experts (Majewski 2005) will likely remain so. The growth in demand for organic food is highly correlated with increasing customer awareness and growing wealth.

3. Methodology

The analysis of how much organic farming may be perceived as multifunctional farming is based on case study investigated during a project carried out in 2013 by three researchers from the Institute of Rural and Agricultural Development⁵. The main goal of the project was to assess whether the well developed, market oriented and formally organized organic farming might become a factor of local development. Based on experts opinion locations where there is aggregation of organic market oriented farms were chosen. The other requirement was that there had to be some kind of formal body organising farmers (e.g. a producer group or an association).

Case study method, as indicated by Turowski (1992), is significant not because it analyses representative places or regions (because there are no such things) but because it allows to show the directions and mechanisms of change. This method allows us to analyze precisely a local context, the dynamics of change and thus easier to indicate what functions organic agriculture has, and so to what extent we can talk about the development of multifunctional agriculture. It is especially important when you do not have any adequate quantitative data. What's more, the significance of the local context can help one to understand whether the effects of development of organic farming in the area are only valid for this particular case, or may be relevant to other regions.

The research was set up in Zamość and Biłgoraj powiats (Lublin voivodship) and Lubaczów and Przeworsk powiats (Podkarpackie voivodeship), where the members of the Grupa Producentka Bio-Food Roztocze producer group can be found.

Described location chosen for the research is situated in the regions classified by Halamska (2013, 2014) as peripheral farming or farming areas. The classification was based on the indicator of economic density, defined as value added per squared kilometer (PLN/km²), using the Jenks natural break optimization. This issue will be referred more broadly in the fifth part of this article.

⁵ It was a part of larger research founded by Polish Ministry of Agriculture, under the title: Organic farming as a factor for local change. The research was carried out in summer and fall of 2013.

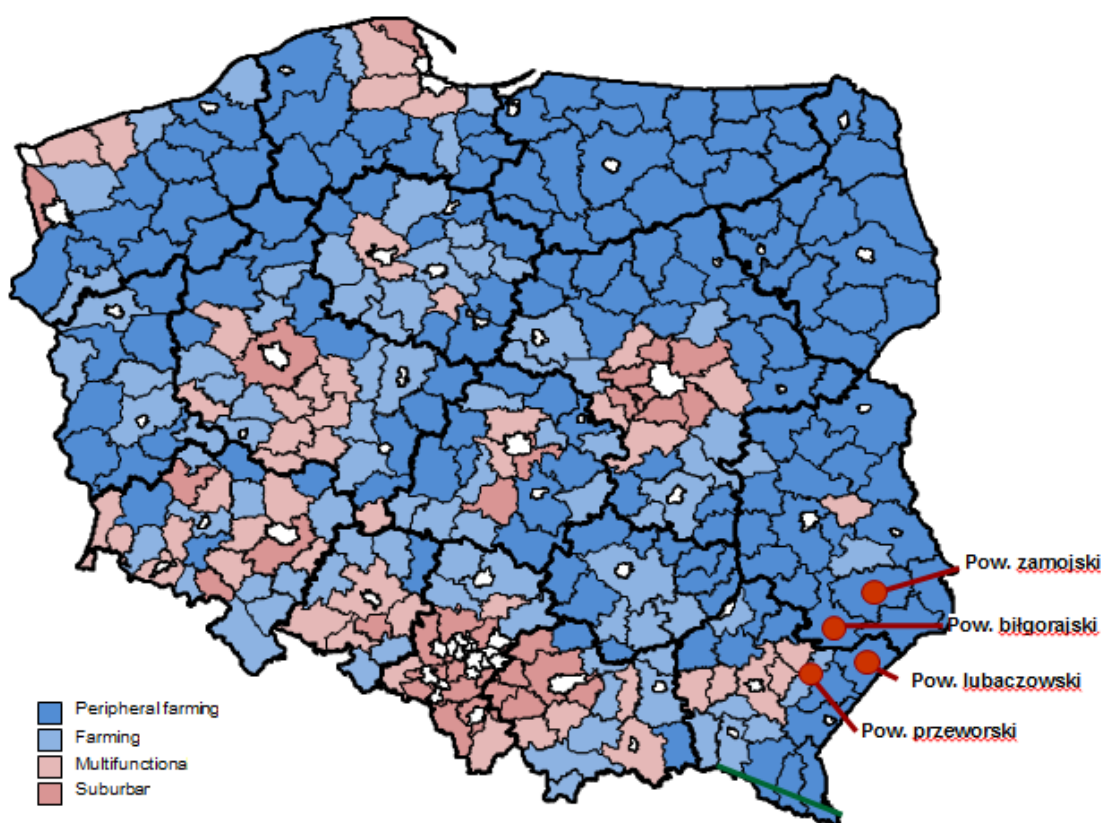


Fig 1. Researched locations on the map of sub-regions and local economy types, according to Halamska's typology Scale⁶. Source: Halamska (2014)

Between beginning of June and end of July of 2013, personal semi-structured interviews with people organising local organic farmer associations and with local authorities have been conducted – these were often the pioneers of organic farming in the respective areas – as well as two focus group interviews (FGI) with organic farmers and the representatives of institutions that cooperate with them such as local governments, farmers' advisory boards, rural women's associations, entrepreneurs etc. (all together 22 people). Respondents were selected based on the snow ball sampling process. All questions were open and concerned characteristics of the area, volume of production, history of organic production, development of market of organic goods, farmer's motivation, forms of local cooperation between farmers, local institutions.

Described case reflects area where the organic farming has been developing dynamically for an extended time and – as the results of the interviews confirm – has been doing so independently of the financial support from the EU. The approach to the subsidies and treating them outside the category of crucial factors for switching over to organic farming, but rather as an auxiliary motivator shows real affiliation with organic farming exclude the drive to reach for short-term financial benefits. This does not mean farmers do not use EU subsidies, but they do not treat them as the deciding factor in the process of switching their production to the organic mode. As they claim, the monetary support is directed to further development or the increase in the quality of food they produce (cf. Jasiński, Michalska, Śpiewak 2013). Such a course of the phenomenon (here: dynamic development of organic farming) poses questions such as the existence of the agricultural sector impact on rural development at the local scale.

⁶ Peripheral farming: 148, i.e. 47% of powiats; 54.5% area of the country; 20.8% population; Farming: 85, i.e. 27% of powiats; 20.7% area of the country; 15.1% population, Multifunctional: 49, i.e. 16% of powiats; 12.3% area of the country; 9.9% population, Suburban: 32 i.e. 10% of powiats, 5.9% area of the country, 8.5% population.

The selected case will primarily show the extent to which market organic farming in Poland meets the criteria set by Marsden and Sonnino (2008), constituting multifunctional farming. It will serve as a basis for observing how organic farming may serve the change in rural areas. The notion of multifunctionality is a sort of matrix of ideas, which – upon setting as a layer over the example – will show the mechanism and direction of changes in the areas where organic market production is the dominant production mode. Identification, as well as noticing and describing the functions of farming as divided between production (commercial and non-commercial), social, cultural and natural will be a crucial step in the scientific analysis of the phenomenon.

4. Empiric results

Grupa Producentka Bio-Food Roztocze Sp. z o.o. and its activities. Characteristics.

The described location consists of four powiats⁷ located on the border between the Lublin and Podkarpackie voivodeships in south-east Poland. The region is characterised by high agrarian disintegration – in 2013, the average arable land per farm was 7.50 hectare in the Lublin voivodeship, while in the Podkarpackie voivodeship the value was 4.60 hectare⁸, as well as high unemployment rates – see Table 1. In case of the organic farms the values were 17.2 and 15.6 hectare (Ramowy Plan Działań dla Żywności i Rolnictwa Ekologicznego w Polsce na lata 2014-2020).

The strategic documents of each of the powiats mention organic farming as a potential developmental angle, supported by clean environment and small farmsteads. In case of the gmina of Tarnogród (where is located food processing plant owned by the Group), the organic angle is underlined the most visibly. One of the operational goals of the Tarnogród gmina development strategy for 2009-2015 is the development and modernisation of farming, including the support for the growth of organic farming. As part of this goal, the support for a variety of farmer integration and cooperation with advisory bodies are stressed.

Name of the powiat / gmina	Unemployment rate among the adult population in 2008	Unemployment rate among the adults in 2013 / average for powiats and gminas in Poland	Average size of farmland	Number of organic farms ⁹	Average size of farming land in organic farmsteads (including undergoing conversion) ¹⁰
Zamość	11.4	16.2/16.6	6	288	5.5
Biłgoraj	7.6	9.4/16.6	5	163	5.1
Przeworsk	13.6	19.5/16.6	3	244	6.8
Lubaczów	18	17.8	5	86	6.4

Tab 1. Economic characteristics of the powiats. Source: own analysis based on "moja polis" and JIHRS data

The first organic farms in these four powiats started to appear in 1997. The number of farms grew rapidly after Poland became a member of the EU. Recently, in the described area one can find villages where over 90% of arable land is dedicated to organic farming.

The powiats where the members of the producer group came from are traditional places for raspberry farming. These were all small crops, close to the houses, on the areas of a few tens of acres. Development of organic farming caused many homesteads to professionalise and increase the crop area. Currently, raspberries are still the most popular fruit grown in the area,

⁷ As of January 1999, a new, three-level territorial division of the state was introduced, according to which the state consists of: communes (gminas), districts (powiats) and provinces (voivodeships).

⁸ Cf. <http://www.arimr.gov.pl/dla-beneficjenta/srednia-powierzchnia-gospodarstwa.html>.

⁹ Own calculations based on JIHRS data.

¹⁰ Own calculations based on JIHRS data.

but a new species has been introduced chosen by the leaders of the Group, in most cases – more efficient and suitable for organic growth. The main customer for the produce was BioConcept, a company seated in Kańczuga, in the Przeworsk powiat. An especially intensive growth of organic farming may be observed after Poland joined the European Union. Nowadays, in the researched area there are villages where up to 90% of all farming is undertaken in the organic way. The number of organic farms – both in the area and in the country at large – is steadily increasing, these being mostly family-run farms. According to the research participants, most organic farmers in the area use their farms as the sole source of income; organic farmers are relatively young. The interviewed people underlined the fact that organic farming is the only task that can bring sufficient income to the farmers in the area, with its characteristically hilly landscape, and with the current sizes of farmsteads. A key factor to the development and stabilisation of organic farming is the steadiness and unchanging volume of demand guaranteed by the producer group and the abovementioned company. Organic food produced in the area is not part of the offer of local institutions such as kindergartens or schools. According to the results of the interviews, this is a consequence of cost calculation, which in turn is the direct result of regulations. A small share of the farmers undertakes to sell their additional produce, above the contracted amounts, to shops or on farmers markets. Seldom farmers from this microregion engage in food processing.

Based on the expert knowledge regarding the innovative methods of organic growth of raspberries, the farmers from that area managed to achieve almost equal harvest from organic production as from the conventional mode. As the labor costs are the same, the purchase price for the organic fruits is about 50% higher¹¹, there is a steadiness and unchanging volume of demand guaranteed by the producer group, the production's added value is high. The price of organic fruit has remained stable.

The intensive development of organic food production in the area is due to integration and self-organisation activities undertaken by the farmers and others. In 1998, founded by the USA aid money the association „Bio gleba” was established followed by the “Truskawka” organic farm association. In 2005 the members of the association, together with other organic farmers from the Podkarpackie voivodeship, established the Podkarpacka Izba Rolnictwa Ekologicznego (Podkarpacki Chamber of Organic Farming). Such an institution, integrating, representing the individual associations from the whole voivodeship to the Ministry of Farming, voivodeship leaders and the like, is the only institution of its kind in the whole country. Based on the experience of the mentioned organisations and encouraged by the owner of Bio-Concept in 2005, an efficiently-operating BioFood Roztocze producer group was formed, dealing in the purchase and sales of organic produce, especially soft fruit and several types of vegetables. Since the beginnings of the group, the number of organic farms forming the body of its members has been fluctuating. At start, the group was comprised of 60 farms, which grew to 100 in 2013 and fell to 88 in 2014. A number of farmers are interested in becoming the group's member, but due to organisational and communication issues some farmers were not willing to follow all the rules imposed by the producer group (such as selling all the produced commodities to the Group) further growth in the number of members has been temporarily stopped. The group operates as a limited liability company, as most of the currently operating producer groups do (cf. Promocja Grup 2011). The board of the producer group, with the support of local government (making investment land available at preferential rates) build a logistics facility in Tarnogród (Lublin voivodeship), with the investment value of around 30 million zlotys. This does not mean that the group handles only the produce of its members. The purchase sites of the group members are visited by most organic farmers in the area. The average area of the group member's farm is 10 ha. In 2012, the group purchased 2 thousand tonnes of organic fruit and 1000 tonnes of vegetables. The decision to increase or limit the amount of certain produce on the offer is dictated by demand and signed contracts. Practically, the whole production of the group is exported, which is the consequence of very limited domestic organic food market. The largest part of exported goods is shipped to

¹¹ According to data provided by the members of the Group, in 2013 1 kg of organic currant was sold for 2.70 PLN (polish zloty) while conventional was sold for 1.50 PLN, in case of organic raspberries it was 4.00 PLN, conventional was 2.50 and the labor cost of fruit picker is this same – 1.50 PLN – regardless the kind of fruit.

Germany. The group has obtained EU, NOP, Bio-Suisse, KRAV and kosher organic produce certification so it can sell the goods to other than EU countries, such as USA, Israel. In 2014 the group was finalising the approval plan, which means that it has fulfilled 5 years business plan.

Apart from the functions related to organising and securing the demand for the members' produce, the group serves educational functions – together with a farming school in Różaniec it organises in the winter time trainings (around seven a year) and prepares publications for its members and farmers from the other parts of the country. The group's board focuses strongly on the integration of the members. Together with the Kańczuga women's association (Koło Gospodyń Wiejskich) the group organises integration events or holiday meetings. Attempts at striking partnership with the Lokalna Grupa Działania (Local Action Group) failed, even though specific offers and ideas such as establishing organic nursery plant have been put forward to the activist group by the Producer Group.

Another important factor which influenced the development of organic farming was the activity of two particular individuals. The owner of a local produce purchase company and one of the employees of the farming advisory centre are considered the originators and leaders of organic farming development in the four analysed powiats. The researched people unanimously said that without the knowledge, consistent work with the farmers and the organisation of the sales of organic produce, organic farming would not evolve into organic market farming in the area and therefore would not become the primary source of income for many of the area's inhabitants. Another person who supports the development of organic farming in the area is the chairman of the Tarnogród gmina, who made land available for investment and is trying to support the activities of the producer group. He also sees a series of positive effects of the dynamic development of organic farming in the area. He hopes for one big investment to attract others, which need not be associated with farming. The board of the producer group stressed that the attitude of the chair of the gmina of Tarnogród is unique, in the respect that they, regrettably, received no support from the other local government bodies, where the other members of the group are located.

Based on the collected data and observation it is not easy to pinpoint the reasons of dynamic development of organic farming in the microregion. Definitely, an important role must be assigned to dynamic local leaders. This seems to confirm the observations made by e.g. Gorzelak (1999, 2000) on the importance of local leadership in local development. The development of organic farming in the area was also somewhat of a consequence of lack of alternatives, which was frequently mentioned by the interviewees. The studied area is characterised by serious farming fragmentation, high unemployment rate (see Table 2) and a characteristic hilly landscape, which does not facilitate conventional food production market.

Functions of market organic farming in the researched area

Based on the material collected during the field research, the functions accompanying organic production will be indicated. It is worth mentioning that it was difficult to obtain statistical data related to the functions described above. This is the consequence of problems deriving from the way mass statistical data is collected and aggregated. The difficulty is also the result of a lot of phenomena, e.g. employment-related, where people work off the books. Yet another issue is the problem of measuring social integration or mutual trust on such a small area – in this work secondary data has been used. Despite these potential inaccuracies, the information is presented in this work because it was referred to by a number of interviewees.

In the area of the analysed microregion one can notice positive impact of organic farming on the job market, also in relation to people outside farming families. Developing organic farms allows for employment of a sizeable workforce during the summer. As an example, the interviewees mentioned that it takes up to 12 people to harvest a hectare of raspberry fields. The farmers who were questioned estimate that around 30% of profit from fruit sale during the season goes to fruit pickers. The pickers are usually young people from the region (pupils, students). It has to be acknowledged that as the work opportunities are off the books, they do reduce poverty, improve the quality of life of residents of municipalities, but in the long run do

not stabilise the work situation of the community members. Developing market organic farming also creates employment in few sectors, indirectly linked to farming, such as in wholesale, processing, sales of agricultural tools. The possibility of landing a job on one of the farms decreases migration from the area, especially among the family members of organic farmers¹². Increasing interest in becoming a member of the producer group may be treated as a sign of growing interest in organic production from the farmers, and as the indicator of importance of this mode of production for the local economy. However it has to be stressed that the organic farming doesn't contribute to other activities such as tourism, creation of local restaurants relaying on local food that could be combined with the multifunctional agriculture. In this sense profit from organic farming does not go to the whole community.

Market goods (private)	Non Market-goods (public)	
	Social	Cultural
Organic products (e.g. soft fruit, green beans), mostly exported	Developing and strengthening social networks	Educational and integration activities offered to farmers, workers of ODR (advisory boards) from all over the country. This also supports the development of tourist education
Small-scale food processing for the Polish market	Reduction of unemployment (however, mostly off the books)	Increased knowledge of local residents regarding the organic production and entrepreneurship skills
Part of the production is dedicated to semi-subsistence farms	Decreased level of migration of youth from this area	
	Lobbying for the development of organic food market in Poland, by the leaders of the producer group	

Tab 2. Classification of market (private) and non-market (public)¹³ goods created through organic production in the area of BioFood Roztocze operation. Source: Author's own estimations based on the research findings

However we are allowed to set a hypothesis that organic production, especially delivered in area with an increased share of formally linked organic farms (clusters, producer groups), may be a good way of improving financial situation of small-scale farmers. Such farms are still quite numerous – an average size of a Polish farm in 2013 was 10.42 hectare of farmland (ARiMR 2013). As the abovementioned organic research data shows (Nowogrodzka, Podstawka, Szarek 2013a: 161), the average area of high- and very-high-volume market farms did not exceed 15.5 hectare per farm. In the opinion of Poczta's team, very good economic situation is perceived by only the largest farms, with the farming area exceeding 50 hectares, and the improvement in accumulation options appears in case of farms with the farming area exceeding 20 hectares (Poczta, Pawlak et al 2007)¹⁴. Market organic production, even on small land areas, smaller than the areas of conventional farming, may actually bring higher profits to organic farmers. Therefore, it may be considered market farming in the researched area.

In the opinion of the interviewed people – the members of the producer group and other people cooperating with the group – their activity is based on the members' mutual trust, close cooperation and building bonds, as well as on the common feeling of responsibility. The diligence of the group leads to enhanced profits. Taking into account the abovementioned – the difficulty of measuring social integration and the change thereof in time – one may assume

¹² Due to the methods of data aggregation it is impossible to find proper data indicating this change.

¹³ The description omits environmental public goods, because they were not researched during the project. Knieć points out that organic farming secures the following public goods: biodiversity, stopping climate changes, care of the quality of soil and waters (Knieć 2012, p. 93), because these are issues regulated by laws and it may be assumed with high degree of probability that in places where farmers receive support through their participation in organic farming programmes their activity secures the abovementioned goods.

¹⁴ Agrarian structure is still inefficient - the average size of farms in Poland in 2013 was 10.42 (ARiMR 2013).

a thesis based on the opinions of the interviewed people that a strong organic farming sector develops in areas where there exists an established level of social trust which additionally further boosts this characteristics. Setting the above with the idea of multifunctionality – organic farming based on the activity of the producer group serves social functions in the area, facilitates the growth of social trust and strengthens social bonds (including the informal ones). Due to its economic activities, the producer group facilitates social changes.

5. Discussion

According to the results of the 2012 Eurobarometr research¹⁵, the role of farming and farmers is primarily to provide the society with diversified high-quality food, maintaining the living character of rural areas and thirdly – providing environment protection. Market for organic farming seems to meet these goals, although not without some reservations. Organic producers provide high-quality foods, but the percentage of Polish citizens consciously buying such produce is not high. The few research cases in this area indicate that 30% Poles occasionally buy organic food, but only 4% treat organically certified products as the basic elements of their diet¹⁶. Organic farming creates market goods of high quality, but these are still rarely found on the Polish market. Organic food production in itself also has positive impact on the environment, but only under the condition that it is sustainable and farms combine animal and plant production. The introduction to “Plan działań dla Żywności Ekologicznej w Polsce na lata 2014-2020” (Activity Plan for Organic Food in Poland, 2014-2020) states that ‘production in a sustainable farmstead follows the sustainability rules, activates biological processes through the employment of natural means of production and secures unchanged fertility of the soil as well as the health of crops and animals.’

Organic farming may, as the above example illustrates, improve the social-economic situation of a given area. Based on the conducted analysis, a thesis may be voiced that the possibilities of developing organic market food production are greater in areas where farmers are organized. Proper social capital and knowledge of those who started organic food production in an area is a necessity for the emergence and development of a larger organic farming group whose produce reaches the market. As an effect of a leader's or lead group's activities which facilitates the development of organic farming, an increase in the level of cooperation among individual farmers is observed. The cooperation also facilitates the improvement of the financial condition of those involved in production, and to some extent also the whole communities. The confirmation of this thesis may be in the fact that where organic farming develops but where farmers are slow to strike cooperation and do not get adequate support from local authorities, the income level of farmers and satisfaction from farming is lower (cf. Jasiński, Michalska, Śpiewak 2013). Thus, where market farming production exists, an important phenomenon from the multifunctionality point of view may emerge – parallel to market functions, non-market functions develop, including the growth of social capital, social integration, mutual trust and the increased knowledge of the importance of food quality, together with the improvement in the condition of the environment, soil and waters.

The third factor is the most ambiguous. According to Marsden and Sonnino, in order for organic production to be called multifunctional, it needs to redefine and reconfigure rural resources, both within farmsteads and outside. Assigning new meaning and giving additional value to individual rural resources, in this case organic food production, requires an innovative approach and the participation of a wide array of social actors – not only the farmers but also representatives of local governments, small-scale local entrepreneurs and external experts. The Bio-Food Roztocze producer group operates in an area where raspberries and other soft fruit (the main product purchased by the Group) have been grown “forever”, so this makes this fruit a traditional resource. Increasing the raspberry crop area in individual farmsteads and primarily the conversion to market organic farming ought to be treated as assigning new values to traditional resources. Development and efficiency of the altered production is based on the activities and cooperation of the local community, because only upon securing sufficiently

¹⁵ http://ec.europa.eu/public_opinion/archives/ebs/ebs_410_fact_pl_en.pdf

¹⁶ <http://biokurier.pl/aktualnosci/1734-tns-polska-30-polakow-deklaruje-ze-kupuje-zywnosc-ekologiczna>

high quantities of equal quality goods from farms located in close proximity guarantees finding a serious and trustworthy customer for organic goods. For organic farming to be market-efficient and society-efficient, it is vital to appreciate and use a wide range of scientific and managerial (or political) knowledge as well as local knowledge (Adamski, Gorlach 2007). Modern organic production needs to be based on scientific knowledge (Konstandinis 2012). As research participants claimed, this type of farming, as opposed to conventional farming, requires constant improvement of one's competences and searching for innovative ideas.

Marsden and Sonnino (2008), using the example of Great Britain, show that peripheral areas receive more attention when multifunctional farming is concerned. This is not a surprising fact – taking into account the range of functions that multifunctional farming may perform, it is quite obvious that these functions – especially social ones – will develop better at larger distances from the “centre”. The areas where the research was performed are definitely satellite ones, not only considering their geographical location (cf. Fig. 1). According to the classification proposed by Halamska (2013), the researched locations are in areas classified as rural or rurally peripheral. As Halamska writes, “rationality and logic in managing these types of areas comes from farming, with an additional comment that the first type is weaker, peripheral.” (Halamska 2014. p.15). Three of the four powiats described in the study belong to the second category. At the same time, the researched locations have, according to Marini and Mooney (2006)¹⁷, properties of entrepreneurial economy, searching for profit through capitalising on local resources combined with the dependent economy in this sense that income is primarily derived from external sources, as almost all the organic products are exported. Usually, economies of this type are located relatively close to metropolitan areas, but entrepreneurial elements may also be found in areas where economy is not highly-developed, namely peripheral locations and rural areas (cf. Halamska 2014). In the described case it is apparent, however, that farming may be treated as a traditional resource in the area, based on redefinition, and reconfiguration may facilitate the creation of a professional organic farming sector. Marini and Mooney claim that the emergence of an economy of this type is possible thanks to the area possessing a cultural factor (entrepreneurship) and horizontally-organised local businesses. This issue was not analysed in greater detail during this research, but the emergence of at least two efficient businesses allowing for the development of market organic farming was observed. Their success (and the word “success” can already be applied to their activity) is the consequence of there being a leader or a group of leaders, but also the result of the area possessing certain specific cultural properties, such as the drive to work hard and certain social capital. The existence of multifunctional agriculture sector contributes to the realization of a certain type of rural development. Marsden and Sonnino (2008) propose three paradigms of development in which the multifunctional farming has different meaning: Multifunctional agriculture as a palliative to the productivist cost-price’ squeeze, Multifunctional agriculture as spatial regulation of the consumption countryside, Multifunctional agriculture as part of sustainable rural development. Because one deals in this case with the peripheral economy, growing organic farming sector cases it can be observed that the transition between a model where agriculture is “palliative to productivist cost-price squeeze” (Marsden, Sonnino 2008: 422) to the model where multifunctional agriculture becomes part of sustainable rural development. On one hand, decisions about the development of the organic sector resulted from the difficult situation of small farms in this particular area, but the consolidation of the sector, reconnects a priori type of agricultural production to the wider market and social possibilities.

The region described here is not unique in Europe, particularly when it comes to so called „new EU countries” (e.g. Romania, where there is a large number of small farms, agricultural production is often carried out in mountainous areas). Organic farming might become a pro-development tool and to improve the socio-economic condition of the community, even in unfavorable agrarian structure, which is characteristic for many places in Europe. To achieve this it is necessary first to activate local resources, in terms of local knowledge, social capital like social ties, cultural capital like diligence. This way organic farming might satisfy a number of needs: environmental, cultural, social and economic.

¹⁷ Authors suggest the existence of three types of local (rural) economies: support-seeking, dependent and entrepreneurial, the forth category is metropolitan areas.

6. Conclusion

The above research shows that a specific type of farming, namely market organic farming, may serve the purposes of multifunctional farming at least under certain conditions and according to the definition employed for this article. Through these functions, organic farming seems to facilitate the changes, primarily on a local scale. The existence of a strong integrated organic farming sector may influence development and change, resulting in not only the improvement of economic situation of organic farmers, but also the whole local communities and the bonds existing therein, mobilising the social resources. Organic farming present in an area positively influences local job market and wealth, tightening of social bonds, increase of social capital. Effects of these changes, especially those linked to market and social functions, might be more significant if not for the Polish laws overtly emphasising the social functions of organic farming instead of their production aspects (see Jasiński, Michalska, Śpiewak 2013 or Nowogródzka, Podstawka, Szarek 2013b). Organic farming as one of the rare tools shaping the development of rural areas in Poland – if not the sole one – might fit perfectly into the general goals and the vision of rural areas as presented by the Strategia Zrównoważonego Rozwoju Wsi, Rolnictwa i Rybactwa (Strategy for Sustained Development of Rural Areas, Farming and Fishing), as well as serve to fulfil all five of the detailed goals of the abovementioned document¹⁸. This, however, requires a wide range of changes in policies to be implemented, starting with those relating to financial instruments (such as the demand to produce for the market) through additional incentives for farmer integration and the support of local government bodies.

The information and observations collected during this research project allow to draw a conclusion that innovation, participation, integration and protection – in other words the elements that define sustained development of the rural areas as Pugliese (2001) stated – may be reached through organic farming.

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¹⁸ Pp. 18-21: *Strategia zrównoważonego rozwoju wsi, rolnictwa i rybactwa* focuses on the following main goal: Improvement of the quality of life in rural areas and efficient use of the resources and potential, including farming and fishing for the sustainable development of the country. It also mentions the following detailed goals: 1. Increase of the quality of human capital, social capital, employment and entrepreneurial skills in rural areas; 2. Improvement of living conditions in rural areas and the improvement of their spatial availability; 3. Food security; 4. Increase of productivity and competitiveness of the farming and food sector; 5. Environmental protection and climate change adaptation in rural areas.

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