

CONDITIONS OF ORGANIC FARMS DEVELOPMENT IN POLAND AND MALOPOLSKA AREA

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ABSTRACT

According to the definition of International Federation of Organic Agriculture Movements (IFOAM) organic agriculture is a set of several approaches to agricultural management systems, according to the requirements of soil, plants and animals and its overall objective is manufacturing of high quality food and simultaneous maintaining best biological balance in the natural environment. In organic agriculture production is managed in a closed soil- plant-animal cycle with retained considerable self-sufficiency. Owing to this fact certain benefits may be achieved such as protection of the natural environment for future generations and health of consumers of food produced in this system according to the motto "To produce but not destroy the natural environment – to feed but not harm the consumer". Dynamically developing organic agriculture has been observed over the recent years in Poland, which is naturally predisposed for this system of farming. The number of organic farms in Poland almost doubled between 2004 and 2005 to 7183. In Poland organic farms occupy almost 204 thousand hectares. Despite dynamic development organic farms constitute only 0.2% of all farms and cover only 0.5% ha of arable lands. Mean organic farm area is 28 hectares and is third bigger than the average for traditional farms, i.e. 8 hectares. Almost 90% of organic farms cover less than 50 hectares. Smaller organic farms are localized mainly in central Poland and in its southern part, whereas large ones are situated in the eastern and northern parts and along the western border of Poland. Meadows and pastures (52%) dominate in the structure of organic farms, arable lands (43%), orchards, berry plantations (4%) and vegetables (1%) place next. The most frequently cultivated crops include mostly potatoes, then rye and wheat. Organic farm development is greatly supported by the Government, which plans to increase their number to 10000 by 2010. In 2005 the total number of organic farms in the Malopolska area was 1177, the number of organic farms increased by 91% in comparison with 2004, whereas in relation to 2003 over three-fold increase was registered in the number of farms using ecological methods of production. The asset of organic agriculture development in the discussed province is a greatly numerous farmer population, low cost of labour force, low degree of intensification and chemical use in agriculture and low pollution of the natural environment.

Key words: organic farms, development, Poland

INTRODUCTION

According to the definition of International Federation of Organic Agriculture Movements (IFOAM) *organic agriculture is a set of several approaches to agricultural management systems, according to the requirements of soil, plants and animals and its overall objective is manufacturing of high quality food and simultaneous maintaining best biological balance in the natural environment.* In organic agriculture production is managed in a closed soil- plant- animal cycle with retained considerable self-sufficiency. Owing to this fact certain benefits may be achieved such as protection of the natural environment for future generations and health of consumers of food produced in this system according to the motto

” To produce but not destroy the natural environment – to feed but not harm the consumer”.

Dynamically developing organic agriculture has been observed over the recent years in Poland, which is naturally predisposed for this system of farming. The number of organic farms in Poland almost doubled between 2004 and 2005 to 7183 (fig.1). In Poland organic farms occupy almost 204 thousand hectares. Despite dynamic development organic farms constitute only 0.2% of all farms and cover only 0.5% ha of arable lands. Mean organic farm area is 28 hectares and is third bigger than the average for traditional farms, i.e.8 hectares (fig 2). Almost 90% of organic farms cover less than 50 hectares. Smaller organic farms are localized mainly in central Poland and in its southern part, whereas large ones are situated in the eastern and northern parts and along the western border of Poland [Global Agriculture Information... 2006]. Meadows and pastures (52%) dominate in the structure of organic farms, arable lands (43%), orchards, berry plantations (4%) and vegetables (1%) place next. The most frequently cultivated crops include mostly potatoes, then rye and wheat. Organic farm development is greatly supported by the Government, which plans to increase their number to 10000 by 2010 [Szymańska 2003]. In 2005 the total number of organic farms in the Malopolska area was 1177, the number of organic farms increased by 91% in comparison with 2004, whereas in relation to 2003 over three-fold increase was registered in the number of farms using ecological methods of production [www.ijahr-s.gov.pl]. The asset of organic agriculture development in the discussed province is a greatly numerous farmer population, low cost of labour force, low degree of intensification and chemical use in agriculture and low pollution of the natural environment [Klima 2003].

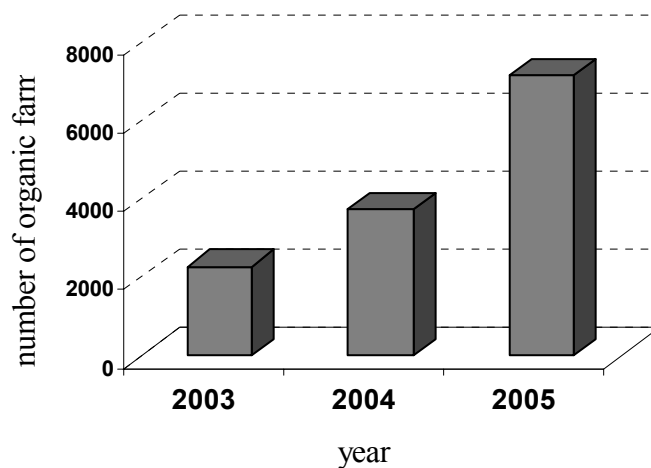


Fig. 1. Number of organic farms in Poland.

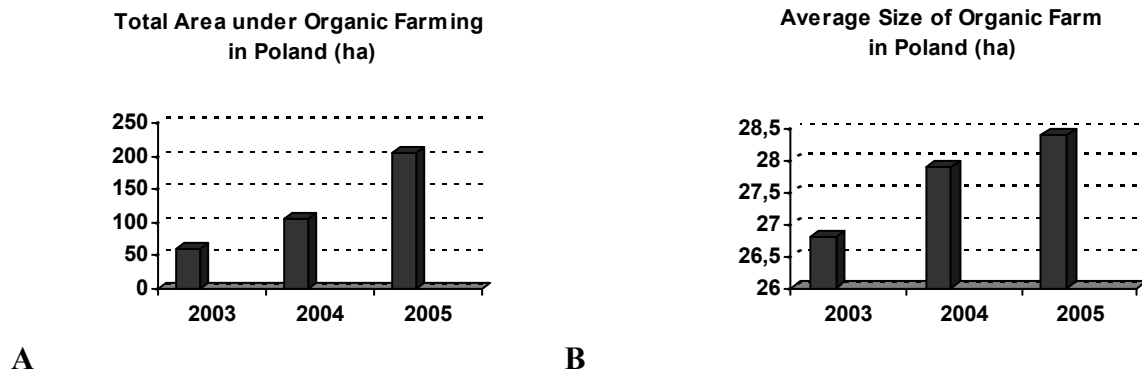


Fig. 2. Number of organic farms in total area (A) and average size of organic farms [Agricultural and Food Quality Inspection...2005]

Since Poland joined the EU in May 2004, Polish organic farmers have also been able to receive a per hectare subsidy depend on the type of production (tab. 1). The Agency of Modernization and Restructuring of Agriculture is responsible for these area payments. Applications are accepted through September and farmers should receive payments at the beginning of the following calendar years.

Table 1: EU Subsidies to Organic Farms

EU Subsidies to Organic Farms	PLN per hectare per year
Farms without certificate*	680
Farms with certificate	600
Meadows, pastures without certificate*	330
Meadows, pastures with certificate	260
Vegetables production without certificate*	980
Vegetables production with certificate	940
Special production (orchards, berries) without certificate*	1800
Special production (orchards, berries) with certificate	1540

Sources: The Agency of modernization and restructuring of Agriculture [www.arimr.gov.pl]

Farmers receive 100% of the subsidy amount for the first 100 hectares of organic cultivation, 50% for the next 200 hectares and 10 percent for each hectare above 300. The subsidy amount for yet-to-be certified organic farms is higher because of the cost associated with transitioning from conventional to organic farming. According to Ministry of Agriculture officials, there are plans to shift the allocation for organic subsidies more towards labor-intensive production like vegetable, orchard and animal, and away from less labor – intensive production such as meadows and pastures.

In 2005 the total number of organic farms in the Malopolska area was 1177, the number of organic farms increased by 91% in comparison with 2004, whereas in relation to 2003 over three-fold increase was registered in the number of farms using ecological methods of production [www.ijahr-s.gov.pl]. The asset of organic agriculture development in the discussed province is a greatly numerous farmer population, low cost of labour force, low degree of intensification and chemical use in agriculture and low pollution of the natural environment [Klima 2003]. The malopolskie province is situated in southern Poland and covers only 4.8% of the country area [Small Statistical Yearbook 2005]. Upland and mountain areas over 500 m a.s.l. make up about 50% of the province area [Tokarz, Turzański ed. 1999]. Diversified environmental factors greatly influence both the kind and volume of agricultural production. Annual precipitation amount fluctuates from 600mm to over 1500mm in the upper regions of the Tatra Mts. Vegetation period lasts 220 or more days, except the mountain areas. A variety of soils occurs in Malopolska, including: brown soils and black earths (61.4%), alluvial soils (18.5%), podzols (16.2%) and other soils (3.9%). The best soils are encountered in the hilly areas in the northern part of the province, on the lowlands and in submontane areas east and south of Krakow. Forests cover 28.7% of the province area. There is a number of protected areas in Malopolska, including 6 national parks, 77 nature reserves, 36 837 hectares of landscape parks and 648 306 hectares of protected areas. These terrains constitute 53% of the province area [Small Statistical Yearbook 2005]. Due to the natural beauty of the province landscape, particularly its mountain parts, it is one of the most important recreational regions in Poland, both in summer and in winter.

For the purpose of presented paper the malopolskie area was divided into two zones: 1 the southern (mountain and submontane) comprising 105 municipalities (*gminas*) and 2 central zone comprising 66 municipalities, densely populated by prevalently commuter-farmer population [Żmija 1999]. The assessment of natural conditions used the agricultural production space quality valorization index elaborated by IUNG [Witek 1981], whereas agricultural, ecological and economic criteria were developed by Runowski [1999].

Considering natural conditions (agricultural criterion) the value of agricultural production space quality index was 58.9 in the southern zone 1 and 80.8 in the central zone2 (Tab.2). However, an opposite dependency was observed between the natural condition and the number of organic farms because such farms were developing mainly in zone 1 with poorer soils and prevailing small (3.2 hectares) multi-directional farms [Klima 2003]. In the southern zone organic agriculture is perceived as an element of regional development because it does not lead to environmental degradation. It provided employment opportunities for quite numerous rural communities in this area, where between 40 and 60 persons fall per 100

hectares of arable lands and the number is twice or four times higher than in the other regions of Poland [Tyran 2001, Żmija 1999]. Description of the ecological criterion especially emphasizes ecological sensitivity index, which considers legally protected areas occurrence in municipalities (*gminas*). High value of ecological criterion in both zones (tab.2) may result from two facts: firstly there numerous legally protected areas in the malopolskie province, as has been mentioned in the “Methods” chapter, and organic production may be pursued only in the unpolluted areas [Ustawa 2001]. Analysis of economic criterion pays particular attention to potential market index. It may be noticed that proximity of sales markets for organic products in the Krakow and Katowice city agglomerations proved an insufficient factor for organic farms development, as has been evidenced by the low values of this criterion (Tab.2).

Table 2: Mean values occurring in municipalities of the malopolskie province and number of farms

Criterion	Southern zone 1 Number of municipalities 105	Central zone 2 Number of municipalities 66
Natural	58.9 little advantageous conditions	80.8 very advantageous conditions
Agricultural	0.53 medium good conditions	0.59 good conditions
Ecological	0.45 medium good conditions	0.41 medium-good conditions
Economic	0.29 medium-good conditions	0.49 good conditions

According to Klima [2003] a lack of organized market for organic products (wholesale and retail outlets) facilitating the product way from producer to consumer is the main barrier to development of organic farms in the discussed area of studies.

CONCLUSIONS

1. Steady development of organic products market in all Poland may be an important factor affecting the increase in organic farm number.
2. Currently organic agriculture is developing mainly in the southern part of Poland, mainly in Malopolska province, because of areas of high ecological values and landscape amenities but with unfavourable conditions for agricultural production.
3. Proximity of two city agglomerations (Krakow and Katowice) was insufficient stimulant for organic farm development.

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