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THE CHARACTERISTICS OF ORGANIC AGRICULTURE DEVELOPMENT IN POLAND AGAINST THE BACKGROUND OF WORLD TENDENCIES

The description of the development of ecological agriculture requires adopting its definition so as to enable international comparisons. Therefore, the Introduction presents various ways of understanding ecological agriculture and arguments for its understanding used in Poland. This has permitted a general specification of such agriculture in selected countries of Central Europe, with regard to the possibility of entering the markets of these countries with Polish ecological food. Furthermore, factors determining the development of ecological agriculture in Poland have been presented.

1. INTRODUCTION

Organic agriculture is defined and called differently depending on the linguistic area. It is interchangeably defined as organic (organic agriculture) or biological (agriculture biologique). In the German linguistic area there are two more terms functioning: Ökologischer Landbau (more frequently used) and Biologischer Landbau.

The definition of organic agriculture is based on oral agreement because the criteria of including small holdings in ecological groups are still being corrected in different countries (Łuczka–Bukała 1995, p. 31–37). Ecological small holdings, according to local conditions, can differ among themselves and therefore one way of production in one country can be approved as ecological while in another country it is not. In general, organic agriculture is a production system that:

– avoids or excludes the use of synthetic manures, pesticides, growth regulators, and addition to fodder,

– advises the use of crop rotation, remnants following the harvest, cow dung, papilionaceous plants, green manures, non-agricultural sources of organic matter, mechanical agriculture of ground rocks containing mineral components and propagates the biological struggle with pests in order to keep the fertility of soil, ensures that agricultural plants are given enough

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nutritive components and protects them from disease, pests and weeds (Ryszkowski and Luty 1993, p. 214).

There are two methods of organic agriculture developed in the world (ibid. p. 213):

- biodynamic,
- organically-biological.

The author of the first method was R. Steiner (German), of the second – H. Müller (Swiss). Steiner refers to cosmic energy which means the use of the moon phases while sowing, cultivating and cropping plants. These phases affect people, plants, animals and whole agriculture. Müller does not advise the use of cosmic rhythms but assumes that soil will be fertile as a result of green manures use and proper crop rotation. Both methods show many similarities and they definitely differ from conventional agriculture (ibid., p. 215).

In Poland, by organic agriculture, according to the Decree of European Common Market Council no. 2092/91 of 21. 06. 1991 (operative since 1.01.1993) concerning organic agriculture with marketing its products and nutritive elements, one understands agricultural production with the following requirements:

- exclusion of agricultural chemistry elements (in production) and food chemistry (in food processing),
- requirement of controlling small holdings from the view-point of fulfilling the organic production criteria,
- satisfying the conditions of marking the market products offered as ecological (Sołtysiak 1995).

2. CHARACTERISTICS OF ECOLOGICAL AGRICULTURE IN EUROPE AND POLAND

Ecological small holdings appear in all highly developed countries which include on average 1% of small holdings and from 1–2% of the soil used for farming purposes (Germany – 2%). The rise of ecological food production can be seen in countries which have a very well developed local market. Germany is the predominant market in which are sold about 50% of ecological food consumed together in the remaining EU countries. Organic agriculture experiences retrogression in countries producing for export (mainly Germany) (Brul 1995, p. 171–172). France, Italy and particularly Hungary did not note production growth in years 1989–1993 considering the growth (274%) of organic cultivation areas in Germany. The area of all cultivation belonging to the Union countries has increased by 91%. One of the most important ecological farmers' aims is trade development which will influence the decrease of prices at producer level instead of reducing

distribution costs. The majority of ecological farmers predict unprofitable changes of prices because of imports from Poland and other Eastern European countries (ibid., p. 172). Germans tend to protect their native ecological farmers by preferring their own expensive goods rather than cheaper ones imported from Holland, France or Central European countries. Those tendencies are going to influence the potential exports from Poland: crops, potatoes, dairy products, meat, fresh fruit and vegetables. Polish producers will have to compete with other European producers in quality, dependability and prices. It is also observable that in relation to items such as fruit preserves, buckwheat, millet, dried chicory and dried vegetables, Poland has no or few competitors. German farmers are aware that the prices they offer after producing those articles are too high which substantiates the necessity of importing them. This shows a big opportunity for us to achieve positive effects as a result of organic agriculture development.

In Poland the idea of agriculture dissemination was often misinterpreted in terms of threatening the country's food safety as a result of identifying organic agriculture with natural (primitive) agriculture. This trend was broken at the beginning of the '90s. Organic agriculture in Poland has more than a fifty-year tradition. The first holding was built by Count S. Karłowski in Szalejewo in 1930. It developed very slowly. In 1980 a new society was set up – Ecological Methods Producers Society EKOLAND. These days there function other organizations, consisting of farmers who use ecological methods on their farms. These are: Polish Society of Organic Agriculture, PRO–VITA, Association of Agricultural Communes EKO–ROL and others. Those organizations created, at the beginning of 1995, an agreement called Polish Union of Organic Agriculture PURE, whose aim is to co-ordinate the actions taken by those organizations for the benefit of ecological development.

Officially in Poland there are 296 ecological small holdings which have the certificate (258 – biological small holdings, 38 – biodynamic). The numerical growth of small holdings and the use of areas in years 1990–1994 is graphically shown in figures 1 and 2. In 1995, the whole area of ecological small holdings was 4,218 ha which is far less than 1% of agricultural land. The average area of ecological small holdings was 14.3 ha and was twice as big as the national average. The largest ecological holding in Poland (now being transformed) is 1,400 ha (Radecki, p. 13–14). As research shows the number of ecological small holdings has considerably increased, but the country still needs advancement as far as ecological education is concerned, and technical infrastructure as well.

The conducted research shows that for 77% of ecological farmers a small holding is the only source of money (ibid.). Ecological small holdings are irregularly spread over the whole country's area and they cover a varied

agricultural land area. The most numerous of them are (1994) in provinces: Toruńskie (29) and Kieleckie (28), Radomskie (23), Olsztyńskie (15), Łomżyńskie and Pilskie (11), Skierniewickie and Sieradzkie have 10 of them. As far as the remaining provinces are concerned, the numbers are 1, 3, 5, to 9. According to the occupied agricultural area the order of ecological provinces is as follows: Olsztyńske (466.0 ha), Toruńskie (363.2 ha), Łomżyńskie (270.0 ha), Skierniewickie (246.7 ha) that has only 5 small holdings of that kind have as many as 230.7 ha in utilization. These data point to the fact that the provinces with the biggest number of those small holdings are characterized with their larger reduction, for example in Kieleckie there are as many as 28 ecological small holdings and they cover only 170.6 ha. In Radomskie 28 ecological holdings cover 166.4 ha (Tyburski, p. 170). There are no ecological holdings in the following provinces: Kaliskie, Koszalińskie and Łódzkie.

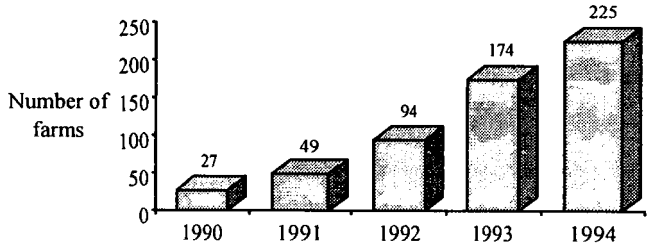

Fig. 1. Organic Agriculture in Poland – the number of farms
Source: Łuczka-Bukała, 1995, p. 31–37.

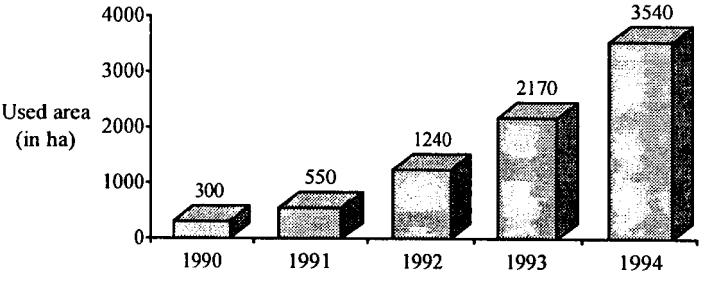

Fig. 2. The ecological agriculture in Poland – used area
Source: see Fig. 1.

In the research there is a very important fact that needs to be mentioned. Despite European tendencies for increased employment in ecological small holdings rather than in conventional areas, in Poland there appears the opposite phenomenon. The

average employment for 100 ha of agricultural lands in ecological small holdings is much smaller than in conventional ones. Besides, ecological farmers are far better educated (about 60% have higher or secondary education). Further growth of the cultivated surface with the use of ecological methods is necessary to achieve indispensable minimum of production. This will enable the proper organization of processing and ecological food market, and also the rise of Poland's importance as the producer of that kind of food.

3. PREMISES TO THE DEVELOPMENT OF ECOLOGICAL AGRICULTURE

For many Polish farmers food production for the local market and for export may be an alternative for the further development of their holdings.

Other countries' experiences show that organic agriculture development is largely dependent on (Brul, p. 170):

– government policies, stimulating the development of pro-ecological methods in agriculture, nature and water conservation,

– the local market induced by the growth of people's interests in high quality food, health development, and the like,

– the development of the supermarkets' network and food industry.

These three aspects have a positive influence on organic agriculture development in Scandinavian countries and in Germany, Holland, Austria, and Switzerland (ibid.). According to quoted research in the coming three year period there appear potentialities of sale in the EU countries of ecological food produced in Poland. There are also some possibilities of exporting dairy products, meat and eggs, but it requires very good processing facilities in Poland. At present, because of very small production, there is little supply. It is easier to begin by exporting raw materials and semi-manufactured articles than to take the further step which is transforming own raw materials and selling finished products. In ecological food processing there is a visible tendency to locate both production and processing in the same area. The solidity of Polish partners in trade and the relatively lower price are factors that can favour the utilisation of potentialities of exporting ecological food onto the EU market.

Polish farmers want to keep their own products overpriced as long as there is a possibility of a sale. This causes serious difficulties for firms which want to develop long-term projects. Successful co-operation between ecological farmers and farmers' organizations, processors and exporters is necessary. Training and furnishing information to farmers is a condition that must be fulfilled to achieve success. It is the job of the agriculture organizations and the Ministry of Agriculture.

The target market for ecological food produced in Poland could be Germany. Polish farmers entering EU countries' market will meet strong competition with French and German farmers.

Polish ecological products participation at the well-known eco-food fair BIOFACH in Wiesbaden is much desired, where the system of inspection and certification is accepted as well as steady partners of trade responsibility, the proved quality of products and competitiveness of price. Besides, the important aspect of preservation is to establish contacts with potential merchant–importer, advertisement in press, and so forth.

The integration of Polish agriculture with EU needs its modernization and stimulating changes corresponding with the same trends that appear in the commonwealth countries development. In the ecological aspects of integration area the important thing is to create conditions for organic agriculture development both in the way of state management and to stimulate initiatives among farmers. This could be done through training agriculture producers and helping the integrated and organic systems of production. Also very important is agriculture infrastructure development including the environmental requirements. The adaptation of progress that takes place in the world in the field of genetics is also vital.

Organic agriculture is difficult. Specific knowledge is needed, and knowledge about the conditions of the most effective use of means of production. A laboratory warning system indicating the presence of pest or disease in a scale that endangers crops is necessary too.

4. CONCLUSIONS

There is no tested way of organic agriculture development in a mass scale. Twenty years experience in this field in Western Europe shows that production based on organic agriculture rules did not lead to output decrease, and progress in the field will lead to its growth.

There are many economic premises that are for organic agriculture development in the highly developed countries.

They include (Łuczka–Bukała 1995, p. 39–46):

1. Social costs of production, lower in organic agriculture than in conventional one, considering:
   - the level of energy consumption,
   - costs of removing damage caused by production in conventional agriculture,
   - costs of disease treatment caused by environmental pollution and contami-ated food,
   - the amount of received subsidies.

According to calculations, where the chosen elements of the costs were taken into account, organic agriculture in Holland in 1990 brought a loss of 6.5 million German marks and ecological agriculture – 6.1 million DM.

2. Demand for manpower:

Ecological production is more labour-consuming than conventional food production and that is why it enables to support workplaces in the countryside with a lower level of production, while farmers achieve comparable incomes. This premise can have a different importance depending on:

– accepted agriculture development strategy,
– hitherto existing size of employment in the agriculture field,
– expectation of changes in its level.

In Poland the condition mentioned in point 2 can have a very crucial influence on organic agriculture development. The socio-demographic situation in Polish agriculture will be determining the chances of its development, naturally with pro-ecological strategy in land policy.

REFERENCES

Brul, P. (1995): *Potencjalny rynek dla żywności ekologicznej produkowanej w Polsce w krajach UE* [*Potential market for ecological food produced in Poland and in other EU countries*], in: Radecki, A., ed.: *Ekologiczne i integrowane rolnictwo w Polsce* [*Ecological and Integrated Agriculture in Poland*]. Fundacja Rozwoju SGGW, Warszawa, pp. 98–120.

Łuczka–Bukała, W. (1995): *Uwarunkowania produkcji i konsumpcji żywności ekologicznej* [*Conditions of production and consumption of ecological food*]. AE, Poznań. Zeszyty Naukowe [Research Papers], series II: Prace habilitacyjne [Monographs] no. 142.

Radecki, A. (1995): *Stan rolnictwa ekologicznego i integrowanego w Polsce* [*Situation of Ecological and Integrated Agriculture in Poland*], in: *Ekologiczne i integrowane rolnictwo w Polsce* [*Ecological and Integrated Agriculture in Poland*]. Fundacja Rozwoju SGGW. Warszawa.

Ryszkowski, Z., Luty, W., eds. (1993): *Rolnictwo ekologiczne* [*Ecological Agriculture*]. Instytut Biologii Rolnej i Leśnej PAN, Poznań.

Sołtysiak, U. (1995): *Atestacja i oznakowanie produkcji i gospodarstw ekologicznych w Polsce na tle sytuacji w Europie.* [*Certificate and Signs of Production of Ecological Farms in Poland Against the Background of Situation in Europe*], in: Radecki, A., Bednarek, A., Zawadzki, B., Łabętowicz, J. , eds.: *Ekologiczne i integrowane rolnictwo w Polsce* [*Ecological and Integrated Agriculture in Poland*]. Raport z badań.. Wydawnictwo Fundacji Rozwoju SGGW, Warszawa.

Tyburski, J. (1995): *Charakterystyka gospodarstw ekologicznych w Polsce* [*Characteristics of Ecological Farms in Poland*], in: *Ekologiczne i integrowane rolnictwo w Polsce* [*Ecological and Integrated Agriculture in Poland*]. Fundacja Rozwoju SGGW, Warszawa.