Celina SOŁEK and Bogusław BEMBENEK Rzeszów University of Technology, Poland

BARRIERS TO AND OPPORTUNITIES FOR AGRICULTURAL DEVELOPMENT AT THE THRESHOLD OF INTEGRATION WITH THE EUROPEAN UNION

1. Introduction

We live in a world in which industrial civilisations using industrial methods of agricultural production have led to, and continue to contribute to, negative local and global changes in natural and physical environments, bio-kinesis and human health. In our contaminated environment it is difficult to consider healthy food production. Lack of consideration for the environment, and egoistic, linear thinking are characteristic features of present day farmers. It is necessary to realize that "earth" pollution, even if it is not permanent, affects all generations [Umiński, 1995, 17].

Poland, as a future member of the EU, has very favourable conditions for development with large amounts of acreage of unpolluted land, a wide variety of crops, and millions of workers in the countryside, who desire to earn a living. These factors can combine to ensure the fast reconstruction of Polish agriculture, and present certain advantages over other EU countries, where it is necessary to regenerate and re-cultivate land, due to the pollution created by chemical industries. The process of modernizing Polish agriculture should take place at every level, on every farm, in every community, in every province. Only efficient and modern agriculture will be able to compete within the EU market.

The European Union expects from Poland a certain acceleration of agricultural modernisation, an increase in economic efficiency and competitiveness in agriculture. What the EU requires is more active farming

policies regarding the undertaking of visible national efforts, such as coherent agricultural and rural development programmes, as well as greater budgets assigned to agriculture. The EU, however, is aware that in the present circumstances of falling agricultural production, lower income from agriculture and high unemployment in the country, Poland will only be able to put into force and implement small changes. Most of these will take place after Poland's accession to the EU, and must be financed by the EU budget as in other member nations [Znaczenie Integracji..., 2000, 11].

2. Range of concepts and the essence of ecological agriculture

Ecology and the environment are two common words often mentioned in mass media broadcasts, invariably in relation to human beings and their environment. These concepts are inseparable with the notion of ecological agriculture. The notion of the term "ecological agriculture" has no universal definition, but there is general agreement as to what it consists of, Generally this is a process of agricultural production relying on the utilisation of nature. Depending on ones point of view, the notion of ecological agriculture refers to agriculture of a strictly defined farming production technology, or goes beyond narrow notions and embraces other social, economic, energy and food quality problems. Finally, consideration should be given to understanding the relationship between agriculture and the environment [Runowski, 1996, 23]. It should be emphasised that ecological agriculture targets the production of a sufficient quantity of food of high nutritional value. According to Bechmann [1993], such a form of agriculture is the most "intelligent" one when considering biological aspects. Ecological methods of farming are based on a thorough knowledge of ecological agriculture and active engagement of farmers in agricultural production. Ecological agriculture endeavours to assure farmers a reasonable standard of living, and according to United Nations agreements, reasonable incomes and satisfaction resulting from participation in protection of the environment, and a sense of satisfaction in their job [Rolnictwo Ekologiczne..., 1993]. Ecological agriculture is also a way of achieving sustainable vegetable production and animal breeding within farms by the use of biological and mineral fertilisers.

Taking into account the problems of modern agriculture, considering environmental protection, and the stability of family farms, eco-agriculture is a reasonable future alternative, whilst easing the burden on farmers with relation to costly rivalries with nature they cannot hope to win. The farmer's task is to achieve the enhancement of nature's forces, so as not to disturb ecological equilibrium while achieving high crop yields, which are a consequence of the biological conditions of soil. He must not use artificial means of production delivered from outside, as in conventional agriculture [Brząkalik, 1997, 6]. Ecological agriculture is a system of farming, which activates productive mechanisms by natural means. Ecological processing assures the permanent fertility of soils and wholesomeness of animals, together with a high quality of biological products. This is a system sustained ecologically and economically, to a large degree independent of external outputs, making it safe for the environment. This makes the development of rural areas and agriculture unique values in themselves. It will not be an exaggeration to state with certitude, that ecological agriculture is more modern than technological agriculture, as it is characterised by high levels of innovation and draws conclusions about the mistakes of various systems, enabling them to be overcome.

3. Status and perspectives of the development of ecological agriculture in Poland

It is not difficult to notice that the topic of ecology is very often a primary subject undertaken by political parties, being a volatile point for discussion and consideration. Recently, the term eco-politics was formed, highlighting the relationship between socio-economic rural development and care for the maintenance of natural resources. The idea of ecological development is still being researched. A leading motto of various organisations is the argument: "Ecological agriculture, a chance for rural Poland in a United Europe".

On September 1st, 1989 in Torun, the Association of Food Producers using Ecological Methods, EKOLAND, was created, which certifies ecological farms. The certification programme in eco-agriculture originates from the IFOAM foundation (International Federation of Agricultural Methods), associating over five hundred member organisations from approximately one hundred countries [Łazowy and Marchlewska, 2000]. Amongst the tasks of EKOLAND, one can highlight the following: expansion of ecological agriculture, promotion of ecological products, establishing the criteria for ecological agriculture, supervision of ecological farms, international cooperation and adaptation of national criteria for food production to achieve international standards. An association certificate from EKOLAND is awarded to a farm after a two-year period of farm management by ecological means and methods. Producers can use

their own labels, or labels with the EKOLAND insignia assigned to them. Sales of non-certified products claimed to have been produced by ecological means results in the suspension of a certificate until the next scheduled inspection period. A second infraction of this type results in a suspension of at least two years, and any additional occurrence results in the permanent withdrawal of a certificate [Kulka and Maciejczak, 1996]. In the following years other organisations, which also involved themselves with the promotion of the ideas of ecological agriculture, came into existence. On August 26th, 2001, amongst others, the Galician Association of Farmers formed a group of farmers using ecological methods called "BIOSOIL". Currently its membership consists of over two hundred farmers expressing a desire to run their farms by ecological methods. These farms are in the Przemyskie, Lubaczowskie, Jarosławskie, and Przeworskie districts.

In 1998, the Ministry of Agriculture began working on laws to govern ecological agriculture and the establishment of an executive resolution regarding it. This project was presented in November 1999 during a screening session in Brussels, and was favourably evaluated by the European Commission [Metera, 2000, 3–7]. At its core, the resolution fully "protects and controls" the developing sector of ecological agriculture. On November 3rd, 2001 the rules regarding ecological agriculture within the resolution became obligatory with full implementation of the act starting on March 16th, 2001. This resolution governs the conditions under which the operations of farm production and agriculture-food processing by ecological methods is monitored, regulates the system of production control certification and processing, and also monitors the sale of products of ecological agriculture and their specific markings [Dziennik Ustaw, 2001].

The resolution on ecological agriculture also adapted a national law to regulate this process, which is obligatory within the European Union. This resolution, EEC No 2092/91 of June 24th 1991, refers to ecological agriculture and the marking of related products. Council Resolution (EC) number 1804/1999 dated June 19th, 1999 supplements the aforementioned Council resolution in reference to ecological agriculture in the field of ecological animal husbandry. Also, regulation of combined systems of state/privately owned enterprises was introduced in this resolution [Produkcja Rolna..., 2002].

In 2001 Ministry authorised organisations (the Polish Association of Ecological Agriculture, Agro Bio Test Ltd., Bio-expert) controlled in total 1,787 farms and fifteen processing plants which corresponds to, in comparison to the year 2000, a twenty percent increase in farm inspections. The geographic area occupied by the controlled farms was approximately 44,886 hectares which corresponds to an increase of 17,025 hectares in

comparison to 2000. The farming area increased to 38,732 hectares, an increase of 16,078 in comparison to 2000. Among these controlled farms, the confirmation of concordance was obtained by 669 of them occupying a combined area of 14,967 hectares. In other words, these farms conducted their production in accordance with ecological methods. In 2000 and 2001 the number of farms obtaining certification for production by ecological methods increased by half. In the first year 886 farms (~21,805 hectares) shifted to ecological methods of farming. In the second year there were 233 farms that did so (~8,114 hectares) [Produkcja Rolna..., 2002].

Data show that the largest number of farms, in which production takes place in accordance with the criteria of ecological agriculture, were found in the following provinces: Lubelskie (165), Swietokrzyskie (157) and Mazovia (106), all of which combined account for nearly sixty-four percent of certified farms. The largest acreage occupied by ecological farms holding certificates were in the following provinces: Lubelskie (2,682.58 hectares), Warmińsko-Mazurskie (1,802.62 hectares) and Zachodnio-Pomorskie (1,246.98 hectares). The combined areas of ecological farming mentioned above equate to forty-six percent of the entire area used for ecological farming techniques in the whole country.

The largest number of farms which in 2002 could obtain certificates of concordance were in the following provinces: Malopolskie (45), Świętokrzyskie (33), and in the Mazovian Province (28). Considering the general number of farms obtaining certificates in the previous year, one may assume that in 2002 the number of farms obtaining certificates could increase by more than thirty percent [Produkcja Rolna..., 2002].

The development of ecological agriculture is basically conditioned by such factors as the high concentration of light soils, over sixty percent of which is characterised by low levels of mineral retention and resistance to the elements, and a relatively low level of environmental pollution. In addition to factors that favour the development of ecological agriculture, there are also barriers and limitations, there is a low level of dissemination of information on ecological agriculture, a low level of ecological awareness within the population, and a lack of a well-organised system of promotion and distribution of ecological products. Moreover, the lack of essential legal solutions and organised systems of product supplies from farms is an additional hindrance. These issues do not only affect the domestic situation, but also affect export potential.

The export of Polish ecological products is in the early stages of development. Few exporters send agricultural goods abroad, and most of this is to be further processed into other goods. Items such as frozen black and red currants, strawberries, canned cucumbers, cereal, and coffee are

included. According to Professor Makosz, approximately forty percent of all fruit grown or produced in Poland can be qualified as ecological [Makosz, 2001, 14]. Approximately ninety percent of fruit produced is considered safe for human consumption. The remaining 10% are "poisoned" by different kinds of fungus and some are slightly affected by rot. This high percentage of fruit considered safe for human consumption is higher than in many Western countries [Makosz, 2001, 15].

The excess of demand over supply for ecological food products in many EU countries might influence the sales of Polish agricultural products.

Consumers from EU countries are interested to a greater degree in the purchase of food products of the highest quality that are healthy, without preservatives or traces of pesticides, and produced by methods that do not disturb the equilibrium of the natural environment. Increasing ecological awareness among consumers is one of the conditions for generating demand for ecological foods, so it follows that this will also lead to the development of ecological farms [Runowski, 1996, 233].

The subject of Poland's future membership of the EU causes uncertainty amongst farmers and economists. Many of them question whether or not the Polish agricultural market, being in poor condition, will be in a position to compete with modern Western European markets. Supporters of ecological agriculture assume Poland will be able to compete considering the added value of food produced without the use of fertilizers and pesticides, the positive condition of the environment, and the assurance of many work opportunities within the country. It is necessary to combine activities targeted towards widening the market for ecological goods, consumer awareness of ecological issues, adapt legal solutions to the obligatory rules in the EU, and to obtain support from the government for ecological farms [Metera, 2000, 11].

4. Conclusions

Ecological agriculture has favourable perspectives regarding its further development. This can be fostered through adherence to strict requirements with regard to low levels of mineral waste, pesticides, fertilizers, and a more extensive characterisation of agricultural production in comparison to conditions represented in many highly developed countries of Western Europe. The current structure of Polish ecological agriculture containing a dominant group of farms within a small geographic region with diversified production fosters a bio-diverse environment that is among the most rich in Europe. It should be highlighted that within the countries of the European Union, in accordance with the rules of the Common Agricultural Policy, various activities are being undertaken

targeting the expansion of agricultural production and promotion of ecological methods.

The market of eco-agriculture products currently belongs to the most dynamic and developing sector of the food market in the countries of the European Union. Ecological products of Polish agriculture could become a valuable export. Polish ecological agriculture was partially supported in the medium-term strategy for agricultural development of rural areas. In accordance with this document, in all aspects of food production, one should aim at using modern technology of an integrated type with lower use of minerals and pesticides in comparison to conventional agriculture, and should attempt to utilize ecological methods. With regard to changing farming policies, an increase in quality of agricultural production is specified and stated as an aim in the aforementioned documents.

Running a farm by ecological methods plays an essential role in protecting the natural environment, favours the maintenance of bio-diverse agricultural ecosystems, ensures the proper usage of organic material, improves soil fertility, and considers the agricultural landscape. Currently, many scientists perceive ecological agriculture as "sustainable agriculture", or agricultural activity directed in such a way to satisfy the needs of current and future generations, protect the earth and its water resources, and provide supplies of genetically diverse plants and animals while not degrading the environment. This is also an adequate system when technical and social aspects are taken into consideration [Soltysiak, 1993, 32].

Analysis of the development process of ecological agriculture, and practical predictions regarding the development of the market for ecological products allows one to judge that an intensive deepening of ecological awareness amongst consumers will foster a demand for ecological food. Firstly, we must support, foster, and develop honest ecological education within societies. Secondly, consumers must be made aware of information regarding health foods, ecological products, packaging issues. and ecological waste. Currently there is a lack of such complex social information in Poland. However, considering Polish consumer behaviour. paying more attention to the ecological aspects of agriculture tends to promote such behaviour.

All of the above activities should assure realisation of the maxim: "Better agriculture, better thrift, better life".

Literature

Brzakalik, K., ABC Bioargonomii. Mikołów, 1997.

Delorme, A., Wprowadzenie do Zagadnień Polityki Ekologicznej. Wrocław: Politechnika Wrocławska, 1998. Dziennik Ustaw, No. 11, Item 50, 2001.

Dziennik Ustaw, No. 38 Item 452, 2001a.

Kulka, A., Maciejczak, M., Wykaz Adresowo – Towarowy Gospodarstwa z Atestem EKOLAND. Warszawa: Ośrodek Informacyjny rolnictwa Ekologicznego przy Stowarzyszeniu EKOLAND, 1996.

Łazowy, A., Marchlewska, A., Wykaz Adresowo – Towarowy 2000/2001. Narodowy Fundusz Ochrony Środowiska i Gospodarki Wodnej. 2000.

Makosz, E., Modernizacja Polskiego Sadownictwa. Lublin: Wydawnictwo AR w Lublinie, 2001.

Metera, D., Rolnictwo Ekologiczne w Polsce i Krajach Unii Europejskiej. Rzeszów, 2000.

Produkcja Rolna Metodami Ekologicznymi w 2001 Roku – informacja opracowana na podstawie wyników kontroli upoważnionych jednostek certyfikujących rolnictwo ekologiczne. Warszawa: Inspekcja Skupu i Przetwórstwa artykułów rolnych, 2002.

Pyłka-Gutowska, E., Ekologia z Ochroną Środowiska. Warszawa: Wydawnictwo Oświata, 1997.

Rolnictwo Ekologiczne od Teorii do Praktyki, praca zbiorowa. Założenia rolnictwa ekologicznego i przetwórstwa żywności wg IFOAM. Warszawa: Stowarzyszenie EKOLAND, Stiftung LEBEN & UMWELT, 1993.

Runowski, H., Ograniczenia i Szanse Rolnictwa Ekologicznego. Warszawa: Wydawnictwo SGGW. 1996.

Umiński, T., Ekologia. Środowisko. Przyroda. Warszawa: Wydawnictwo Szkolne i Pedagogiczne, 1995

Sołtysiak, U., Rolnictwo Ekologiczne – pistoryczny przegląd metod. Rolnictwo ekologiczne od teorii do praktyki, praca zbiorowa. Warszawa: Stowarzyszenie EKOLAND, Stiftung LEBEN & UMWELT, 1993.

Znaczenie Integracji z Unią Europejską. Sandomierz: Fundacja Ośrodek Promowania i Wspierania Przedsiębiorczości Rolnej, 2000.