ECONOMIC AND ENVIRONMENTAL STUDIES No. 7 OPOLE 2005

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THE DISTRIBUTION SYSTEM FOR AGRICULTURAL AND GROCERY PRODUCTS ON THE POLISH MARKET – AN ANALYSIS OF AND PROPOSALS FOR CHANGE INTO THE DIRECTION OF SUSTAINABLE RURAL AND AGRICULTURAL DEVELOPMENT

1. Introduction

The process of the modernisation of agriculture while satisfying the conditions of sustainable development should be treated as a dichotomy, as the effect of the action of market mechanisms and the effect of realising set development goals. The aspects of planning rural development have been widely discussed, due to both the demands imposed by the EU when making use of structural funds and the integration of rural areas with local and regional development. This article seeks to answer the question: what influence do theoretical concepts of agrobusiness have on the understanding of the sustainable development of agriculture and rural areas. The analysis plays particular attention to the following question: Are there regulatory processes functioning in a market orientated agrobusiness which enable achieving positive environmental effects from the production activities of farms? Such instruments could complement the factors influencing agricultural producers and lead to a higher level of effectiveness of intervention from state and regional government in the field of sustained development of agriculture and rural areas.

2. The classical concept of agrobusiness and its influence on defining the instruments of sustainable development

The classical definition of agrobusiness stresses that it is a field of business activity covering the following forms of production and services [Sokołowska, 1998, 10]:

- producing the means of production essential for agriculture and the agricultural- grocery industry,
- producing non-processed food products,
- processing food products,
- marketing agricultural and food products.

When characterising these subsystems one needs to pay particular attention to their evolution. The fact that at the present state of development, agriculture itself is most quickly losing its importance, while the absolute level of agricultural production and agrobusiness as a whole remains of the same importance, should be stressed. The internal structure of agrobusiness is changing, but this does not mean that the food industry is losing importance in the national economy. This sector remains one of the largest sectors of the national economy.

The diminishing importance of agriculture is accompanied by an increase in its market efficiency. Effective microeconomic activity means that the system of market prices is becoming the optimal mechanism for the allocation of market goods through its role of passing on information.

Errors in the allocation of goods through the market mechanism occur when the prices of some goods, which carry out the role of parameters in the calculation of effectiveness, are not set by the market. Some of the inputs and effects are thus neglected in this calculation, which leads to inappropriate microeconomic decisions from the point of view of society. In the case of agriculture this mostly relates to the difficulty of defining ownership rights to natural resources. Moreover, such a situation may lead to so called permanent external effects, which appear in the form of reducing the value of a good to clients and increasing the costs of producers and not to valuation and allocation by the market itself. The greatest problem in an economy is presented by unfavourable external effects of a public nature, which appear in economic practice in the filed of exploitation, degradation and devastation of natural resources. In the Polish literature Fiedor [1990] was the first to pay attention to this phenomenon. On the basis of his arguments the classical approach to agrobusiness treats the concept of sustainable agriculture as a concept taken completely from outside. The success of sustainable agriculture is dependent on the conditions which are created to enable it to develop.

A sectoral approach to agrobusiness leads to fact that in the process of conceptualising a theory of sustainable development applicable to Poland, its nature is only defined in the perspective of the character of agriculture. The most visible relationships are those between the economic dimension and ecological agriculture in rural areas. This is termed as ecodevelopment in the literature [see Woś, 2000]. In the opinion of many Polish researchers such an approach is, however, useful when considering changes in the agricultural systems of EU countries in which ecological problems have appeared as a result of excessive intensification of agricultural production. In Polish agriculture overproduction of food has been achieved by extensive methods. The major problem is not evolution from capital intensive agriculture, requiring little labour, to sustainable development, but how to transform labour intensive agriculture, which a excessive number of people employed in agriculture, into sustainable agriculture while avoiding excessive industrialisation of technical processes and loss of employment [Zawisza, 2004, 14]. The main dilemma of Polish agriculture is between the economic dimension and social inclusion in agrobusiness. An increase in the competitiveness of Polish agriculture is seen to be one of the conditions required for sustained development of rural areas, as is intensive agriculture. At the same time some researchers put forward the idea that the activities of farmers which are regulated by market mechanisms should be separated from those subject to public intervention [see Wilkin, 2003, 340; Zegar, 2003, 201]. In both cases it is agreed that the goal of public intervention is to construct instruments harmonising these conflicts and paying farmers for production activities and activities not related to production on their land which are beneficial to the public good. Public intervention in this field is treated as the building of an institutional system implementing such instruments. As far as solving social problems associated with sustainable development is viewed through the creation of a strategy in which these institutions will take part together with central and local government, in the case of ecodevelopment the role of instutions is seen as the achievement of the appropriate level of production. In this sense the crux of sustainable development is an integrated system of activities, which ensures the observance of all the principles of such development in the agricultural sector.

In the Polish literature the most holistic treatment of this problem was presented by Runowski [2000, 94–102]. He put forward 12 criteria for the sustained development of farms. The first criterion is ensuring that land remains fertile. The next four criteria relate to crop production and animal husbandry. The other criteria are related to ogranisation and management of a farm, qualifications and level of knowledge and

the market and social position of farmers. The following factors also influence the implementation of sustainable development:the social conditions of families, technical infrastructure, activities promoting sustainable development and legal regulations. The author attributed from 2 to 6 determinants to each criterion, in total he mentioned 45. In this way he defines in detail the relatively difficult conditions which any farm must satisfy if a farmer wishes to qualify as a member of the group of farmers certified as being ecological.[1]

Hence, farms must be managed by farmers with wide knowledge, not just about agriculture, but about ecology and economics too. The Codex of Good Agricultural Practice (*Kodeks dobrej praktyki rolniczej* [Duer et al., 2002]) is aimed at propagating such knowledge, as are the functions of the National Agricultural Advice System (Krajowy System Doradztwa Rolniczego).

In order to assess the level at which individual farms have implemented the norms of sustainable development and thus make various forms of subsidies accessible to them, a concept of the structure of institutions monitoring and controlling sustainable development in agriculture is being constructed within the framework of the classical theory of agrobusiness. However, the specific nature of these institutions is becoming more and more recognized. Hence, it has been proposed that these institutions should be integrated, especially in the framework of monitoring the implementation of the strategy of regional development. [see Toczyski, 2004, 250; and Malik, 2004, 196-ff].

The classical approach to agrobusiness in the theory of the modernisation of rural industry puts forward a classification of three subsectors in the agrobusiness sector [Zegar, 2003, 173–176]:

1) agriculture, understood as the sector of the national economy dealing with the production of foodstuff and finished food products, *i.e.* groceries,

2) rural areas and agriculture as the living and work place of 14.6 million people (38.2% of the population of the country), according to this understanding rural areas and agriculture create the goods and services necessary for existential needs,

3) rural areas and agricultural as the biggest and most effective aparatus for national environmental protection, according to this understanding rural areas and agriculture create environmental goods and services.

Changes in the functions of rural and agriculture are accompanied by a change in the understanding of the function of a farmer from the role of the head of a farm to a manager of land. Such "land management", apart

[1] Another classification, determinants and indicators useful in assessing the sustainability of a farm have been proposed by Golinowska [2001, 241–255].

from its economic functions, should serve to break down the psychological-social barriers within the farming community that are a result of the diminishing importance of this sector, that is to say the decrease in their bargaining power within the framework of the agrobusiness sector.

Without neglecting the role and importance of such diagnosis and theoretic structures as the academic basis of rural and agricultural development, it should be stressed that their effectiveness will depend on processes differentiating the role of farms. Such a process should not, however, be based on deconcentration, but in accordance with the mechanism of the creation of forming various local and regional clusters, which will lead to the more effective use of resources. A classification of such clusters has been proposed and although they are meritorically correct [see Filipiak, 2003; Michna et al., 1998; Poczta and Wysocki, 2002] do not take into account the marketing-distribution mechanisms behind their formation. Hence, their value as a method of diagnosis may be questionable. For example Michna et al. [1998] designate the administrative region of Opole to be a megaregion II in which large farms, formed mainly by the privatisation of former PGRs (state farms), dominate. This region is classified as a region in which the impementation of sustainable agriculture is stagnant.. However, the fastest growth of the spatial structure of farms in Poland is observed in the Opole region. These processes are occurring not only due to the restructuring of the resources of the National Treasury. Without taking the specific nature of agricultural production, as well as its distribution mechanisms, it is impossible to formulate any final conclusions regarding threats to the realisation of the concept of sustainable rural development. Moreover, the variability within a region is greater than interregional variability, which is an opportunity, but also threat, for sustainable development of rural areas and agriculture. For example, in the Opole region there are relatively small pig farms surrounded by clusters of corn producers. If their integration is only based on distribution, then the pig farms may be a threat to the environment.

3. A marketing-distribution understanding of agrobusiness and its instruments supporting creating sustainable development

3.1. Vertical integration and its instruments supporting sustainable development

The concept of agrobusiness was introduced for the first time by Davis and Goldberg in 1957 in order to highlight the highly developed pro-

cesses in the vertical integration of agriculture, industries supplying agriculture, the food processing industry, as well as the marketing of food products. It should be noted that from the time this concept was formulated, it has been understood as a form of economic ties, not as permanent organisational structures [Sokołowska, 1998, 10]. Despite the concept of agrobusiness being based on the idea of ties betweeen its individual subsectors, the marketing-distribution concept of agrobusiness differs from the classical definition in many aspects. The following are among the most important differences: the goal of agrobusiness and its range of functions. The basic goal is not the production of agricultural goods and groceries, but satisfying the nutrional needs of consumers. This means that not only production processes are taken into account, but marketing processes as well. Due to this, a distribution system may be defined as a collection of links between institutions and people taking part in the realisation of one or more functions related to marketing [Karasiewicz, 2000, 14].

Due to the goal of this article, basic functions such as buying and selling will not be described. Instead, we will concentrate on complementary functions supporting the process of distribution.

According to Kulawika [1996, 43–45] cooperation between farmers and the next chain up in the distribution system can be presented uwith the aid of a "map of the space of means of coordination" (Fig. 1).

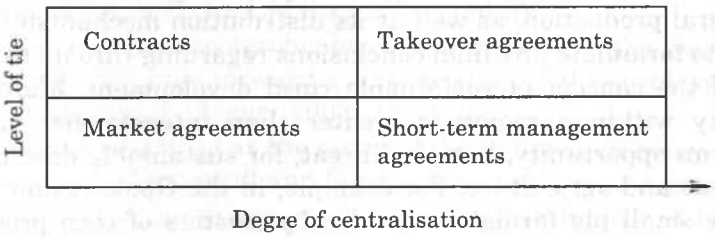

Fig. 1. Space of the means of coordination

Source: Kulawik, 1996, 43.

This map is arranged with the aid of two criteria: the level of ties between actors and the degree of centralisation. The first dimension gives information on the period of time for which coordination occurs. The second dimension measures the ability of one actor to control other actors. In Poland market agreements are mostly observed at agricultural markets, as well as at wholesale level and commodity exchanges. Only in the final case are there any procedural regulations, such as: quality standards, information regarding prices. Management agreements hold for

a short period of time and are most often used by firms in the grocery sector. Descriptions of quality standards are a key element of such agreements, price and quantity are specified less often. Such agreements are especially common on the corn market. Long term contractual agreements require the specification of: quantity, quality and price of the products included in the agreement. An important part of such agreements are decisions regarding reciprocal services to be carried out by the sides of the agreement. Takeover agreements mainly concern channels which are integrated in terms of capital. For example, some meat producers own their own livestock farms and large scale farms act in the form of a company, *e.g.* Top Farms in Głubczyce own their own distribution-marketing firm.

The administrative region of Opole is one of the Polish regions in which modernisation of individual farms is advancing most quickly [Bisaga, unpublished]. At the same time it is strengthening its character as a crop producer. The recent research of Sokołowska et al. [2004] indicates that farmers do not have any problems with selling their corn. However, only a small minority (5.3%) had a contractual agreement. Almost all transactions were carried out on the basis of market agreements. It should be noted that as many as 47% of respondents were considering setting up a contractual agreement. In the case of the Opole region this fact is not associated only with difficulties in selling produce. Only 33% of respondents sought information from agricultural advisors about opportunities for selling produce and these requests mainly concerned information on alternative channels of distribution. The interest in contractual agreements results from the existence of large scale farms, which operate in the form of a company and possess such agreements, as well as due to the existence of the only producer group in operation in the Opole region. The quality requirements of purchasers and payments for storage mean that 7% of crop producers possess a drying room and 21% possess a corn silo.

3.2. Contractual agreements as elements of sustainable development

Depending on the range of obligations placed on the two sides of a contract, one may differentiate three types of agreements on cooperation between farmers and firms in the grocery sector: contracts specifying just the quantity and quality of goods, in which a farmer obtains little technical and financial support, but the economic risk lies on his side; contracts specifying technical and financial support, but with the price based on the market price; the final type – a contract guaranteeing an

income, which is associated with substancial financial, organisational and technical support.

At present large grocery firms in Poland face the task of building up a system of contracts, in order to eliminate many of the negative effects of short-term cooperation with agricultural producers. PZZ Sorgo Trade (an acquisition firm within the Lubella company) is an example of a firm which uses short term contracts on a wide scale. The acquisition of corn is carried out at 11 points in the administrastive region of Lublin. Four inspectors of marketing and distribution play a crucial role in these activities. Their tasks include: finding potential suppliers, signing contractual agreements, monitoring sowing, gathering information about competing firms, organising meeting and training courses for farmers (often with the help of agricultural advisory centres), coordination of supplying farmers with means of production.

Additional services play an important role in each contractual agreement. In this way firms and supermarkets secure for themselves a product which will satisfy or create consumer needs. This does not mean that farmers fully understand the role of contractual agreements. Research in the administrative region of Wielkopolska indicates that as many as 77.6% of respondents see the goal of ensuring a market for their produce as the most important role of contractual agreements. The importance of this research is underlined by the fact that this region has one of the most advanced structures for production, sales and food processing. This result is similar to the results of research carried out in the Opole region. A very small proportion of agricultural producers mentioned the advantage of such agreements in avoiding intermediaries, increasing the quality of produce, support from the side of the food processing industry, the possibility of specialising [Pondel and Słodowa-Hełpa, 2002, 184].

In the internal European market (thus including Poland) the need for high quality agricultural raw materials will rise more quickly than demand for food. However, the demand for low quality agricultural raw materials will first rise at a slower rate and after some time start to fall. The research carried out in the Opole region in 2004 indicates that farmers are aware of such changes. One of the questions asked was: *What type of control related to making use of EU funds are you most afraid of?* (Table 1).

40% of the respondents did not give an answer to this question. In turn 31.3% of the respondents are afraid of control of the quality of produce. Of this number, only 29.8% of the respondents also feared the control of some other factor, mainly the number and types of crop protectors used (78.6%). Respondents also commonly expressed fear regarding the possibility of control of the chemical composition of soil (10.7%) without

Table 1. What type of control related to making use of EU funds are you most afraid of?

Answer:	Number of respondents	% of respondents
Type of control:		
– chemical composition of the soil	16	10.7%
– type of crops farmed	4	2.7%
– number and types of fertilisers used	15	10.0%
– number and types of crop protectors used	36	24.0%
– product quality	47	31.3%
I do not fear any control	2	1.33%
No answer	60	40.0%

Source: My own calculations based on questionnaire research carried out in the administrative region of Opole.

mentioning any of the other factors which have an influence on its composition.

On the basis of the research carried out one should consider that the lack of knowledge regarding the effects of agricultural practices in a particular area on the environment. It has been often suggested recently that the ecological education of farmers and inhabitants of rural areas should start from illustrating the effect of agricultural practices on the environment, and through that on the quality of life and health.

3.3. The role of formal markets and their influence on sustainable development in agriculture

The organisational procedures of formal markets have had a certain influence on farmers. Formal markets may be defined as places of contact between sellers and buyers which are open to trade at regular times. Such markets lead to the concentration of the trade of certain goods in time and space. From the point of view of their level of development we differentiate between three types of such market: wholesale markets, auctions, commodity exchanges.

The programme of building a network of wholesale markets and exchanges began in Poland in 1994 and anticipated financial support from the state in the process of creating three market institutions: commodities, wholesale markets and producer-marketing groups. This programme started before supermarkets and foreign capital started to appear in the Polish grocery sector. Hence, at that time there were no channels of distribution which were characterised by a high level of con-

centration. The localisation of wholesale markets and commodity exchanges was based on a thoroughly theoretical approach and was governed by criteria of spatial development within the country and, to a lesser degree, by the transformation of space under the influence of the possibility of integration into the EU. The assessment of regional differences in the agricultural sector accepted in these plans for localisation had a similar character. As a result it became apparent that regions with a higher concentration of markets does not fit the assumptions of the localisation plans. The low level of integration of agricultural producers and the lack of financial instruments in the form of mutual saving and borrowing plans have meant that these markets have not played a significant role in the creation of quality and development of modern methods of producing healthy food. The necessity of vertical integration of farms and formal markets does not only result from the experience of European countries. The largest number of producer groups and the most advanced wholesale market – the Wielkopolska Agricultural-Gardening Market (Wielkopolska Giełda Rolno-Ogrodnicza S.A.) in Poznań cannot be explained simply by the traditions of the region and the close vicinity of Berlin.

3.4. Horizontal integration as an instrument of sustainable development

From the characterisation of the agricultural sector presented here, it follows that food processing plants and large scale trading firms play a key role in the process of rationalising the distribution system of the agricultural-grocery sector in Poland, in the sense of integrating distribution channels. This does not mean that such a role cannot be played by agricultural producers, as takes place in the northern countries of Western Europe. The only way of strengthening the trading position of farms may well be the horizontal integration of farmers. Apart from a few exceptions, capital integration dominates in Poland. Above all, this is connected with an improvement in the spatial structure of farms. One should accept the hypothesis that given similar environmental conditions and levels of technology the growth of the effectiveness of farming depends on the amount of land possessed. From the cited research of Sokołowska et al. it follows that this is the dominant type of integration in the region of Opole. 55% of farmers see an opportunity for developing their farm by buying additional land and 54% by renting land. Many farmers planned both ways of extending their activities. The perecntage of farms renting land, both from the Agricultural Real Estate Agency (Agencja Nieruchomości Rolnych) and from neighbouring farms, is the

highest in the country. From this point of view it is not strange that respondents most often positively assessed cooperative banks out of all the forms of institutions involved in supporting agriculture. Preferential credit was mentioned among the strong points of state agricultural policy.

Capital integration is a condtion for contractual integration, independently of the form it takes (company, cooperative, society) From the experience of the Opole region it also follows that the initiative of forming a poducer group has a chance of being realised, when relatively large specialised farms create a group with other similar farms. The society of Silesian Farmers (Stowarzyszenie Rolników Śląskich), which is active among the autochtonic population, carries out programmes encouraging the creation of production-marketing groups and programmes of multifunctional development of rural areas. In the case of agriculture itself these activities were successful in particular in local conditions which satisfied the conditions mentioned: well integrated capital, specialised farms concentrated in a small area. Producer-marketing groups form a significant base to support sustainable development and rural areas. Through the realisation of a wide range of tasks it is possible to create new jobs in rural areas, which are not directly connected with agriculture. However, the most important social trait of such an organisation is creating entrepreneurship and raising the level of knowledge in local societies. The educational barrier is often recognized as one of the major barriers to sustained development of agriculture and rural areas. However, even the best educational systems cannot break down these barriers without mechanisms which create the need to learn in people.

4. Conclusions

In the Polish literature comparisons are often made between the conditions negotiated by the Polish government in the agricultural chapter of EU accession and the changes made to the Common Agricultural Policy (CAP) in Luxembourg in 2003. It is considered that the simplified system of direct subsidies is completely in accordance with the system of Uniform Payments to Agriculture (UPA), which will be in force in the EU from 2005. It should also be noted that the introduction of so called modulation mechanisms to the CAP based on reducing direct subsidies to larger farms, that is to say to farms receiving more than 5 thou. euro in UPA, by 5% and redirecting the savings gained in this way to the goals of the second pillar of the CAP (sustainable development of agriculture and rural areas). This will enable the implementation of new programmes encouraging raising the quality of agricultural products,

helping adaptation to EU standards regarding ecological standards, the conditions in which animals are kept, work safety, sanitary requirements and human health. Within the framework of these subsidies financial support is given to agroenvironmental instruments and the implementation of stricter controls on the conditions in which animals are kept. Introducing this mechanism into the CAP cannot however lead to the conclusion that increasing the competitiveness of Polish agricultuire does not have to be achieved by horizontal capital integration and that contractual integration can be implemented simply by educational programmes for the leaders of production-marketing groups without restructuring the distribution system of the grocery sector in Poland through a regional development strategy.

Agriculture in the EU-15 countries has a much more effective distribution-market system than Poland. Reducing the UPA to large farms, which are strongly funcionally integrated due to the advantages gained within the framework of contractual agreements, is completely justified from an economic point of view and will lead to a greater effectiveness of the whole system. In the conditions found presently in Poland, no distribution-marketing instrument should be ignored as a way of supporting the sustained development of agriculture and rural areas and of their functions in the field of integrating society.

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