

AGRICULTURAL CONSULTING IN FARM DEVELOPMENT MANAGEMENT – CASE STUDY

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Abstract: *The uneven development of European countries has led to the creation of the Common Agricultural Policy. The aim was to standardise the European agricultural market and related market. From the perspective of agriculture, advisory services play a special role, which should contribute to increasing the standard of living of farmers and increasing the level of agricultural production while maintaining the Sustainable Development Goals, environmental standards and food safety. Agricultural advisory services have a very rich history in Poland, for over 100 years it has been supporting the rural population in overcoming various difficulties resulting from systemic and political, economic, social and organizational changes. It still plays an important role in the process of modernization of Polish agriculture before and after Polish's accession to the European Union. This article will answer the question whether and what impact agricultural advisory has on the management of a selected farm.*

Key words: *rural development, farm management, agricultural advisory*

INTRODUCTION

In the research for the purposes of this study, an oral interview, uncategorized, was used. It was open and individual. The respondent was the owner of a farm located in the town of Brzeźno, in the municipality of Lubiszyn, in the district of Gorzów, in the Lubuskie Voivodeship. The interview was conducted in November 2023. The research took into account the farmer's expectations in the field of agricultural advisory and its assessment. Attention was paid to the tasks set for advisory services and the expected forms of assistance from agricultural advisory services were indicated.

The research was based on, among others, materials documenting the activities of the Agricultural Advisory Departments (ODR), the Agricultural Advisory Centre in Brwinów (CDR), reports of the Agency for Restructuring and Modernisation of Agriculture (ARMA), publications of the Ministry of Agriculture and Rural Development. Rural areas occupy over 90% of the Polish area. According to the Central Statistical Office, there are currently 43,122 villages in Poland, where 40% of the country's population lives [3].

Rural areas undoubtedly belong to society as a whole, we are all stakeholders. According to the statutory definition, a village is understood as a specific settlement unit with compact or dispersed buildings and existing agricultural, service or tourist functions, which does not have municipal rights or the status of a city [7]. This definition does not exhaust the complexity of village types in Poland. The contemporary countryside is constantly evolving, it has different faces [8]. Despite the changes in its nature and in view of the still large and multidimensional importance of agriculture for our country, it is worth taking a closer look at the broadly understood state services for a specific group of rural residents, i.e. farmers [6,14].

From the perspective of agriculture, advisory services play a special role, which should contribute to increasing the standard of living of farmers and increasing the level of agricultural production, while maintaining the Sustainable Development Goals, environmental standards and food safety [4,9,10,15]. Agricultural advisory services have a

very rich history in Poland, for over 100 years it has been supporting the rural population in overcoming various difficulties resulting from systemic and political, economic, social and organizational changes [2,5]. It still plays an important role in the process of modernization of Polish agriculture before and after Polish's accession to the European Union [1,11,12].

MATERIALS AND METHODS

In the research for the purposes of this article, an oral interview, uncategorized, was used. It was open and individual. The respondent was the owner of a farm located in the town of Brzeźno, in the municipality of Lubiszyn, in the district of Gorzów, in the Lubuskie Voivodeship. The interview was conducted in November 2023.

The research took into account the farmer's expectations in the field of agricultural advisory and its assessment. Attention was paid to the tasks set for advisory services and the expected forms of assistance from agricultural advisory services were indicated. In the interview, the respondent was asked about his preferred advisory institutions, the farmer's interests in particular groups of advisory services. They were also asked about the level of professionalism of the employees of agricultural advisory centres, about the most expected forms of assistance from consultancy, what kind of information they were and are interested in, and about payment for advisory services. The information obtained was to answer the question of what role agricultural advisory plays in the management of a selected farm. It was assumed that the advisory services provided on the selected farm contribute to increasing the standard of living of the farmer and his family, increasing the level of agricultural and animal production while maintaining the goals of sustainable development, environmental standards and food safety. Agricultural consulting plays an important role in the process of modernization of the surveyed farm.

RESEARCH RESULTS

The analyzed farm is located in the village of Brzeźno, in the Lubiszyn commune, in the Gorzów County of the Lubuskie Voivodeship. The village is located 22 km north-west of Gorzów Wielkopolski, three kilometres from Lubiszyn.

The Lubuskie Voivodeship is not an agricultural region. It has poor soils and the fewest farms in the country - about 20 thousand with a total area of 446.5 thousand hectares. For years, the desired low percentage of people working in this branch of the economy has been maintained. In Lubsko, it was 10.5 in 2020, compared to the national average of 15.1 [13].

In the Lubuskie Voivodeship in the Gorzów County, in terms of the occupied area, farms from 5 ha to 20 ha dominate. The predominant structure of sowing is made up of cereals and rapeseed. As for the livestock population, cattle dominate. The agriculture of the Lubuskie Voivodeship is specific due to the location of the region, it lies in the central-western part of the country and borders Germany from the west. The proximity of the border is conducive to trade cooperation, and Germany is an attractive market for agricultural and food products. The location of the region and its climatic conditions - the Lubuskie Voivodeship is considered one of the warmest regions of Polish, are important advantages of this area. The specificity of agriculture in the Lubuskie Voivodeship is also determined by the specific structure of the area in terms of the directions of use. Despite the small area (4.5% of the area of Polish), the Lubuskie Voivodeship is distinguished by the highest forest cover in the country. Forest land and trees occupy 51% of the area of the province. High forest cover is a big challenge for agriculture, agricultural land located in the immediate vicinity of forests is exposed to frequent damage caused by feeding on forest animals' fields. The proximity of forests and high forest cover is associated with low

soil quality. In the Lubuskie Voivodeship, soils of inferior production quality of class IV, V and VI predominate, about 44% of the total are soils of class V and VI. Light and very light soils predominate, which are characterized by high susceptibility to acidification. The analysis of statistical data shows that the number of farms in the Lubuskie Voivodeship is decreasing, while their average area is increasing. The structure of farms is changing. The number of low-scale farms with an area of 0-15 hectares of agricultural land is decreasing, while farms with more than 50 hectares are showing an upward trend. The above process is slow, still in the Lubuskie Voivodeship the majority of farms are small entities - 74% are in the range of 1-20 ha. In the Lubuskie Voivodeship, the Lubuskie Agricultural Advisory Centre in Kalsk with district branches, including the District Agricultural Advisory Team in Gorzów, operates dynamically [13].

The farm analyzed in this article is run by a 47-year-old man and his 44-year-old wife. The household consists of a family of five, spouses, three children aged 21, 19 and 13. The owners of the farm have a secondary education in agriculture, the eldest daughter is a student, the younger sons are secondary and elementary school students, respectively. The size of the farm and its ownership structure - 37 hectares of ownership + 13 hectares leased. 6 hectares are pastures, another 6 hectares are forests (wooded area). Class V and VI soils predominate, a small area is occupied by soils of quality class IV. The farm specializes in crop production – the owners mainly grow cereals, rye and corn for fodder – and for 9 years it has been using the support of precision agriculture – they carry out pest monitoring. On the basis of the collected data, they select plant protection products and biological methods of combating undesirable organisms.

Holstein-Friesian dairy cows are bred on the farm – 17 dairy cows and calves. Cows are provided with proper welfare and live in a freestall barn. Installations for watering and feeding cattle are installed, as well as stations for marking, identifying and solving health problems. There is also a separate space where it is possible to safely farrowing and rearing calves. Milk production is carried out in accordance with current regulations. It is registered with the veterinary office. The animals have the required markings and appropriate documentation. The barn is ventilated, the animals are regularly inspected. Vaccinations are carried out on the characterised farm, and there is a quick response to possible health problems. Proper supplementation is implemented under the guidance of a veterinarian, the breeder has extensive knowledge about the care of animals, which allows him to meet the restrictive standards that apply to the quality of milk. Despite the high costs of dairy farming, the farmers on the farm in question emphasise that they obtain satisfactory profits. The technical equipment of the farm consists of three tractors, a round baler, forage/meadow, hay and harvesting equipment. Owners use computer programs to register animals, collect data on their births, and sell. They sell milk to the MlekPol dairy in Bydgoszcz.

When asked about management issues, the owner of the surveyed farm pointed to internal and external problems that affect the level of organization and effectiveness of managing his farm. Among the internal problems are:

- Overinvestment of the farm – too many devices for breeding dairy cows.
- The acquired knowledge does not always translate into agricultural practice and the results achieved.
- Lack of consistency in pursuing the set goals.
- Lack of extensive knowledge in the field of farm management, especially in the area of accounting.
- Lack of strategic and tactical planning capabilities.
- Lack of ideas for the development of the farm.
- Little activity in the search for new solutions, fear of change.

Among the external problems are:

- High land prices.
- Low profitability of production and instability of sales markets.
- Lack of stable state policy in the field of agriculture, on agricultural markets.
- Extensive bureaucracy, complicated regulations.
- High costs of agricultural and livestock production.
- Without an agricultural advisor, it is very difficult to raise funds for the development and even survival of the farm.

In the farmer's opinion, the farm in question is properly managed, it brings income, one of the sons intends to stay there. The current owner, after conducting a SWAT analysis, pointed out his strengths, opportunities, weaknesses and threats.

SWOT analysis	
Strengths: – High quality products – Upward trend in productivity – Favourable natural conditions – Contracts for the sale of milk – Experience of working on the land and on the farm, in livestock – Implementation of precision farming components	Weaknesses: – Lack of conditions for the development of agritourism – Low quality classes – Lack of sufficient machines, high wear and tear on existing ones – Average condition of farm buildings, some of them in need of renovation
Opportunities: – Demand on milk – Support programmes and EU grants – Advisor support – Good veterinary care – The relatively young age of the farm owners – Farm size	Threats: – High-interest loans for the purchase of fertilizers – Volatile cereal prices – The unsettled situation caused by the war in Ukraine – Inflation

In order to investigate the role of agricultural advisory in the management of a selected farm, an interview was conducted with the farmer conducting it. It was asked what type of advisory body the farmer preferred. He pointed to the Agency for Restructuring and Modernisation of Agriculture, the Lubusz Agricultural Advisory Centre in Kalsk, and the District Agricultural Advisory Team in Gorzów.

Questions were asked about the farmer's interest in particular groups of advisory services. The farmer was most interested in advice allowing to obtain financial support from the Rural Development Programme (RDP), followed by technological and technical consultancy, then he pointed to economic and organizational consultancy, the scope of services related to non-agricultural entrepreneurship and marketing.

Questions were asked about the level of professionalism of the employees of agricultural advisory centres. The farmer expressed a very positive opinion about their skills and qualifications. He was satisfied with the level of their service. He emphasized their openness and willingness to solve problems.

The farmer was asked about the most awaited forms of assistance from counselling. He considered individual counselling, courses and trainings to be the most awaited. This is followed by specialist exhibitions and trade fairs.

The farmer was asked what kind of information he was and is interested in. He was most interested in information on technological and technical advances in agriculture. He is also interested in advice on biological progress (new plant varieties and animal breeds), which has a positive impact on the production and economic results of his company.

The farmer was asked about the payment for the services. The farmer declared that he was willing to pay only for such services that would give him specific financial results, especially services related to obtaining funds from the European Union. It is also ready to pay for specialized technology consulting.

CONCLUSIONS

The interview with the surveyed farmer shows that thanks to cooperation with various advisory entities, he gained:

- Increase knowledge of the impact of livestock equipment and construction on animal welfare and performance;
- knowledge of the settlement of milk quotas;
- knowledge of milk production quotas;
- improving qualifications in the field of animal production;
- raising the level of knowledge in the field of plant cultivation technology.

The surveyed farmer stated that without an efficient agricultural advisory system, it would be difficult for him to meet the new challenges. She particularly appreciates individual advice. This cooperation is a long process that involves defining a specific consulting problem, developing a plan and finally evaluating the implemented solution called a consulting program.

Advisor invited by the surveyed farmer:

- analysed the situation and identified the problems of his farm;
- set satisfactory and achievable objectives of the advisory work;
- search for optimal solutions on the farm;
- developed a plan for the implementation of the selected programme;
- monitor and evaluate the progress of the implementation of the programme;
- conducted a final assessment.

The advisory service in the examined farm was provided through a visit to the surveyed farmer, through direct contact with the farmer and familiarization with the actual state of the farm. Assistance in agricultural accounting was provided in the advisor's office. The farmer claimed that the advisor was very professional, he came to the appointments prepared and familiar with the subject.

Advisor:

- had information about the area where the farm of the surveyed farmer operates;
- have prepared forms to collect information about his farm;
- had information materials on the advisory services that were part of the proposed counselling programme.

Each visit was announced and the number of visits was satisfactory. The advisor informed the farmer that after the end of the advisory programme, the farmer would participate in an opinion poll on:

- the quality of the advisory services he wished to use;
- the advisers who performed these services.

Cooperation with the farmer was sometimes carried out by phone or e-mail. The advisor thoroughly analyzed the production and economic situation of the farm, collected information about the farm and the farmer. He also analyzed development opportunities. He was interested in the agricultural area of the farm, crop production, including the analysis of soil abundance, assessment of microclimate and water conditions on the farm, assessment of the possibility of introducing new crops and rotations, cultivation technology. He collected data on livestock production, herd turnover, quantity and quality of machinery and equipment on the farm. Listed and evaluated the main buildings and other structures on the farm, the need for construction/modernization/adaptation of buildings and/or structures. He was also interested in the location of the farm and whether the farm benefits from a variety of support. The advisor analyzed the economic size of the farm, conducted an analysis of the possibilities of development and specialization of the farm. On the basis of the collected material, he developed the scope of implementation of the advisory program, its schedule and methods of implementation. Cooperation with advisory entities ended with a report on the implementation of the advisory program.

Among the motives for using advisory institutions, the owner of the farm in question indicates:

- interest in the European Union's financial assistance and, consequently, in the preparation of appropriate proposals;
- the opportunity to improve the level of knowledge and skills;
- acquiring new markets, supply chains, new contractors;
- estimating the profitability of production and intended modernization/innovation.

The owners of the farm in question expect information from the advisors in the following areas:

- the possibility of using the European Union's aid funds;
- conditions for obtaining direct payments;
- directions of the most profitable crop and animal production;
- new breeds of animals and varieties of plants;
- modern plant protection products and their application.

The interview with farm owners shows that they prefer the following forms of support in order to improve their knowledge and skills necessary to carry out agricultural production:

- individual counselling;
- participation in exhibitions, shows, fairs;
- participation in demonstrations of experimental fields and agricultural machinery;
- pilot projects carried out on selected farms;
- courses, trainings, seminars in the traditional form;
- study trips;
- group counselling;
- websites;
- social media.

On an ongoing basis, the owner, while running his farm, used:

- production and economic analysis of your farm;
- tips on direct sales from the farm;
- assistance in searching for a program and filling in the application form for funding;
- support for adapting the farm to health and safety requirements;
- advising on the purchase of new machines and technologies;
- keep accounts on your farm;

- legal aid;
- adapting the farm to environmental requirements.

The interviews show that the owner of the farm uses modern technologies, they are looking for information on the Internet about:

- the possibility of selling agricultural products;
- varieties of plants and animal breeds;
- the use of means of production;
- opportunities for financial support for farmers;
- possibilities of repairs of agricultural machinery and equipment;
- threats to agriculture;
- the possibility of purchasing agricultural inputs;
- new solutions/results of scientific research in agriculture.

Conversations with the owner show that he uses the services of the Agency for Restructuring and Modernisation of Agriculture in Bydgoszcz. In 2012, thanks to the support of the employees of the Armed Forces and Rural Development Agency in Bydgoszcz, they obtained funds from the RDP 2007-2013 programme. The RDP programme was the first EU aid programme for agriculture implemented by ARMA after Polish's accession to the European Union. Within the framework of the RDP 2007-2013, the Agency provided financial support for:

- improving the competitiveness of the agricultural and forestry sector;
- improving the environment and rural areas;
- improving the quality of life in rural areas and diversifying the rural economy;
- activation of local communities.

The owners of the farm obtained funds for the modernization of their farm, afforestation of agricultural land. They purchased a tractor and a baler and increased the wooded area.

Between 2013 and 2020, the owner of the farm in question, with the support of advisors from the Agency for Restructuring and Modernisation of Agriculture in Bydgoszcz, benefited from Direct Payments - the main instrument of support for farmers' income in the European Union. As part of the Rural Development Programme for 2014-2020, they obtained funds to continue the process of modernization of their farm as part of the following objectives:

- Increase farm viability and competitiveness of all types of agriculture in all regions and promote innovative farm technologies and sustainable forest management.
- Supporting the organisation of the food chain, including the processing and marketing of agricultural products, animal welfare and risk management in agriculture.

The farmer is a member of the Polish Federation of Cattle Breeders and Milk Producers. For many years, she has been using the help of a breeding advisor, whose task is to help breeders in their daily breeding work. The PFHBiPM breeding advisor has been and still is coming to the described farm, has access to up-to-date information contained in the PFHBiPM ICT system about cows in the herd, such as: breed of bred animals, entry in the book, breeding values, genetic balance. On the basis of this information, together with the breeder, they determine the breeding goal, deadlines, and ways to achieve it. Some services are subject to a fee, such as the selection of bulls for the herd using the Doko program.

The surveyed farmer uses the services of various advisory entities, most often it was and still is public consultancy, which is provided by ODR and ARMA advisors. According to the interview, the farmer also takes advice from representatives of companies

supplying means of agricultural production and cow breeding. He was rarely supported by employees from private advisory entities and Chambers of Agriculture. In the opinion of farmers, the level of services provided by all advisory entities was satisfactory and was assessed very positively. According to the farmer, the thematic scope of advisory services should focus on such issues as: analysis of the production and economic situation of a given farm, assistance in finding an action programme from which farmers could receive financial support for development, conducting direct sales from the farm, as well as support in the preparation of the application form.

Agricultural consulting in the management of the farm in question has made it possible and still allows for a rapid transfer of innovations to agricultural practice, as well as facilitating and facilitating problem solving. The advisors who provided training, information and advisory services on the farm contributed to the improvement of the farmer's income level; competitiveness of his holding; sustainable development; improve the level of knowledge and professional skills of the farmer and his family.

According to the surveyed farmer, the current situation of Polish agriculture requires continuous support from both state and private advice.

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