ADVISORY SERVICES IN AGRICULTURAL SYSTEM OF KNOWLEDGE AND INFORMATION IN POLAND¹

Jozef Kania*, Krystyna Vinohradnik**, Agnieszka Tworzyk*
*University of Agriculture in Krakow, ** State Higher Vocational School in Tarnow

Key words: agricultural advisory services, type of organization, structure of management, financing schemes, AKIS stakeholders

Abstract

The main goal of the paper was analysis and evaluation of the Polish public advisory system and the process of its restructuring, as well as its role in Agricultural Knowledge and Information System. The base materials for analysis are: data of survey, which was conducted among 16 Provincial Advisory Centres (ODR) at the turn of 2012 and 2013, results of discussion panel of 16 ODR directors and the results of earlier research done by authors. The first part contains the overview of the development of the agricultural advisory system in Poland from the very beginning till 2013, its organizational structure as well as the structure of AKIS. The second part describes the financing mechanisms and funding schemes to cover advisory work, and the last part presents AKIS stakeholders in Poland. The agricultural advisory system in Poland is decentralized. This fragmented structure of advisory services has more disadvantages than advantages. Despite significant contribution of advisory systems in the implementation of the CAP instruments in 2007-2013, in the opinion of most ODR directors (2 of 16 persons) the effectiveness of advisory services would be greater if they were subordinated to the Ministry of Agriculture and Rural Development which allocates budgetary grant to advisory units, and almost everyone (15 of 16 persons) see the need for a central coordination unit of activity of 16 units of agricultural advisory services in our country.

1. Introduction

In Poland, agriculture is one of the branches of the national economy, which are the basis of life and maintenance of the population. It produces about 90% of food products and raw materials for food processing. The appropriate level of agricultural development is one of the pillars of the development of the whole economy. Its condition and development depend on three groups of factors. The first group of these are internal factors – land, labour, capital – which are the production base of each farm. The second group includes agricultural environmental factors, which include economic policy, including broader agricultural policy, the level of economic development, the development of technical and social infrastructure in the country, the state and the development of education and science, including agricultural research and innovation. Finally, the third group of social and political factors that largely affect the attitudes and behaviour of farmers and professional activity, is the expressed attitude to the farmers and the prospects for the development of this sector of the economy, and through the creation of opinion have also some influence on the perception of agriculture and farmers from other professional groups. The role of advisory in the development of agricultural sector and rural areas is significant.

The main goal of the paper is analysis and evaluation of Polish public advisory system and the process of its restructuring, as well as its role in Agricultural Knowledge and Information System. The base materials for analysis are: results of survey, which were conducted among 16 Provincial Advisory Centres in turn of 2012 and 2013; results of discussion panel of 16 ODR directors and the results of earlier research done by authors. In our analysis we could not describe in detail the projects and advisory tasks performed by chambers of agriculture and private advisory entities, because we have not received from them the particulars contained in the questionnaire.

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2. Overview of development of agricultural advisory system

The agricultural advisory system has existed in Poland for more than 100 years. It is estimated that agricultural advisory organizations in Poland developed simultaneously with agricultural education. The origins of the advisory organizations date back to the second half of the nineteenth century. The first agricultural instructor was hired by the Great Poland Agricultural Society in 1883. At the same period, the first farmer groups were organised, which became the bases for agricultural extension and its development. Until the First World War, the main goal of advisory service was agricultural education and development of rural population (especially farmers). Between the First and the Second World War it was possible to observe a rapid development of forms, methods and topics of advisory services. The advisors were mainly employed in Agricultural Associations, Agricultural Chambers, Farmer Groups and Industrial Processing Units, as well as the so called teams for adoption to agriculture (developed in 1926). The development of agricultural advisory service in this period is strongly connected with the system of social agronomy, whose philosophy was education of farmers and work on social and economic fields in rural areas, based on initiative of farmers organizations, supported by experts in advisory work. During this activity one of the most important role of the advisors was implementation of good practices in farms and in rural areas [Wawrzyniak 1991].

After the Second World War, in parallel to changes in agricultural policy, changes occurred in the organizational forms of advisory service. However, the basic ideas and the goal of agricultural extension activity remain. The mile stone in process of creation the public advisory system was a decree (order), describing professional and social status of agricultural advisors, done in 1958 by Minister of Agriculture.

Around 1957, in parallel to development of the advisory system, the Agricultural Experimental Stations (one in each province) were established, which were gradually included in the advisory system in Poland and became national advisory units subordinate to the Ministry of Agriculture. In co-operation with research institutes and agricultural universities, the new technologies were implemented in Experimental Stations and adopted to local conditions.

The next period 1968-1975, in activity of Experimental Stations, proved very important in development of advisory system in Poland. In these years the advisors – specialists in narrow agricultural knowledge – were employed and sent to all districts to co-operate with district agronomists and advisors for animal production and other advisors employed in districts according to specific of local production.

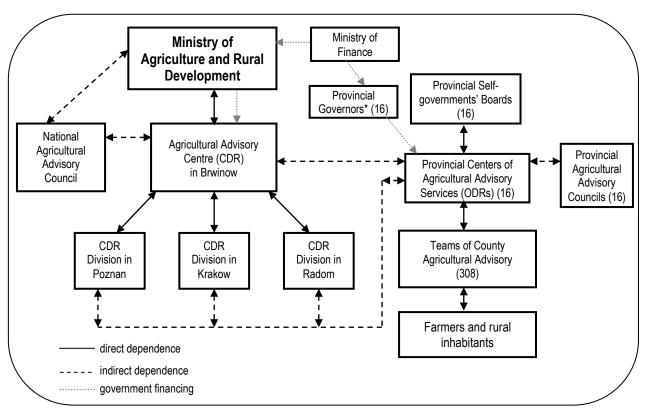
The next step in developing the advisory system took place in 1973, when teams of advisors were established in each district, and their goal was to deliver professional advisory services directly in farms. At that time the main role was played by individual and group advisory services, and organised model (exemplary) farms, which became examples to be followed by other farms. Greater emphasis was put on technical and technological advisory services. In 1975, with the change of administrative division, Regional Extension Centres (WOPR) were created. The basis for them were Agricultural Experimental Stations, agricultural professional schools and state farms.

With the introduction of market economy in Poland in 1989, the situation of advisory services changed. The Province Advisory Centres were subordinated to province governors. The basis of reorganization was the need to socialise advisory services and to adapt its functions, tasks and organization of the system to farmers' needs. The mile stone in development of advisory system was an Act on Agricultural Advisory, establish by Polish Parliament in October 1994 [Act... 2004]. According this law Provincial Advisory Centres (ODRs) providing advisory services received the official legal status. Since 1995 information services, part of the educational services and simple advices are still free of charge which means that they are covered by the state budget. The new Act introduced for the first time in Poland large list of paid advisory services. Price lists of this services are approved annually by the provincial self-governments boards with a positive opinion of provincial agricultural advisory councils.

The current organizational structure of agricultural advisory is shown in scheme 1. The Agricultural Advisory System in Poland is mainly created by the Agricultural Advisory Centre in Brwinow (CDR) with three divisions (in Krakow, Poznan and Radom) with the Minister of Agriculture and Rural Development as a supervisor responsible for the management and control of CDR - see the left part of scheme 1 and by 16 Provincial Advisory Centres with 308 counties teams of agricultural advisory under supervision and control of

Provincial Self-Governments Boards (see the right part of scheme 1)². They are partly funded by the Ministry of Finance via the Minister of Agriculture (CDR) or via Provincial Governors (ODRs).

The CDR plays mainly educational role for advisers and is financed by state budget only in approximately 50%. The CDR in Brwinow is associated with its own National Social Agricultural Advisory Council (11 members) and provincial ODRs are also associated with its own Social Agricultural Advisory Council (11 members), which is a consultative-advisory bodies respectively to the Minister or to the director of the ODR. It usually includes the representatives of the provincial parliament, the agricultural chamber, members of farmers' trade unions, 1 representative of scientific institution (university or research institute), as well as 2 representatives from secondary agricultural schools.



^{*} From 2014 financing of Provincial Centres of Agricultural Advisory will be approved by the Minister of Agriculture

Scheme 1. Organization of Agricultural Extension in Poland (state in 2013)

Source: Kania J., Vinohradnik K., 2012. System of agricultural advisory in Poland

The Provincial Advisory Centres are decentralised organizations – 16 independent self-governmental provincial organizations subordinate to the Provincial Boards. The special act (from Oct. 22, 2004 and revised in 2009 and 2012) specifies the goals and tasks of the centres, their structure, as well as their method of administrative and financial management [Act... 2004]. Also, the Agricultural Advisory Centre has been defined in the Act as a state organizational unit with legal entity. Due to the commercialization advisory services and low financing of advisory units (approximately 50%) in our opinion this centre is already a 'semi-state' unit.

In each of the 16 provinces in Poland there is one provincial ODR. Its name contains the name of the province, e.g., Malopolska (Little Poland) ODR. In our opinion, the proper technical term for the Polish agricultural extension system is a 'semi-autonomous' or 'semi self governmental' entity, indicating that it is a self-governing provincial legal entity.

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² There is also agricultural advisory service for farmers provided by Agricultural Chambers (136 advisers), private consulting firms (185 including registered advisers) and numerous NGOs.

The most important factor for the advisory system to be efficient is advisory staff – good professionals, with extensive and thorough professional knowledge and good communication skills, knowing farmers' needs, being market-orientated and able to work with all stakeholders. Currently all ODRs employee 3454 advisors, of which 67.3% are field advisors, 19.6% subject matter specialists and 13.1% management staff. Most of them (90.1%) have university degree (advisors with only secondary education are older employees, but with very good experience and many certificates). The highest number of advisors is employed in Masovia (455) and Great Poland (372) provinces, in Lubelskie (293) and Podkarpackie (255). The smallest number was in Lubuskie (87), Opolskie (91), Slaskie (144) and West Pomerania (150) provinces. Since 2006, the number of full-time posts in provincial ODRs has declined (reduction by 18%). The reason of declining number of advisors can be due to very tight budget, limited year by year by the government, but also due to the fact that many advisors decided to open their own advisory practices. The advisory service as a profession is recognised by farmers and other stakeholders as a very important, trustworthy and responsible one.

Statistically, the number of farms (over 1 ha) per advisor is generally very high in Poland (approximately 393), and there is a certain variation between provincial ODRs in the number of advisors per farm (from 189 in West Pomerania up to 605 in Lublin) (Fig. 1). These holdings are also quite diverse in terms of average size of area e.g. 3.7 ha in Malopolska or 4.6 ha in Podkarpackie and 25.0 ha in Warmian-Mazurian, 21.6 ha in Kuiavian Pomeranian and 20.0 ha in Opolskie wherein the average size for Poland is 12.0 ha.

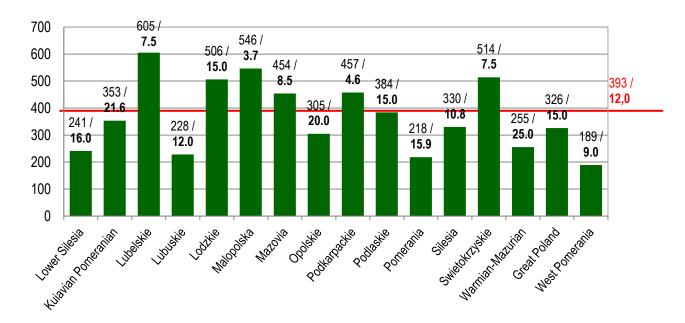


Fig. 1. Number of agricultural holdings with area (UAA) over 1 ha per 1 adviser and its average size (in hectares) in 2012 by provincial ODR

Source: own study

The responses of 103 advisors representing all the provinces show that on average there are 201 holdings working a year, which means that only one third of farms use different types of advisory support. The number of clients differs widely across provinces from 60 holdings in Podlaskie and 80 holdings in Opolskie up to 400 in Swietokrzyskie or 280 in Lubelskie.

The specific nature of Polish agriculture has an impact on the main clients for ODRs advisors, which are small and medium commercial farms (related to the specific characteristics of Polish agriculture – fragmentation of farms, agrarian overpopulation, weak soil, poor use of production means) and farms provided by young farmers.

Looking at the main topics of advisory services, we can notice that there is no big difference between the groups of clients. The main topics of advisory services for medium commercial farms are:

plant production, animal production, accounting, taxes, cross-compliance and environment protection. For small commercial farms similar topics, excluding environment protection, but including rural development, are covered. For young farmers they are the four first topics and renewable energy.

The main methods used in advisory services are individual (56.2%). These relate to the preparation of business plans and the application forms for subsidies coming from different instruments of CAP under Rural Development Plan 2007-2013. Group methods are used in advisory work in 26.0% and mass communication – in 17.8% [Kania 2010].

Along with the progressive economic transformation processes came the increase in the range of farmer needs and varied tasks or advice. Especially, there was an increase in the need for advisory services in the field of economics, marketing, product promotion, preparation of the product for sale, organization and promotion of producer groups, and there were growing needs for advisory services in the field of environment protection, law and insurance. Advisors increasingly became involved in the development of business enterprises, design and preparation of loan applicants. In addition to individual advisory services, the range of group advisory methods expanded, study visits became more frequent, the number of target groups and producer groups increased [Drygas 2012, Kania and Vinohradnik 2012].

3. Financing mechanisms and funding schemes

With the changes caused by globalisation, we can observe rapid changes in the economic, social and political processes. Globalisation puts pressure on farmers to become more competitive, which requires increasing knowledge and skills, fast access to reliable information and innovation. All of this requires appropriate amount of funds. Increasingly, intervention of the public sector in agricultural expansion depends more and more strongly on the will of taxpayers, who – already satisfied with food security – are not favourable towards agricultural subsidies. It is clear that government subsidy extension will require innovative and stronger effectiveness of advisory work and drawing significant attention to tasks of extension work, which should implement innovations, meet current challenges and farmer needs.

In Poland, there is no special funding scheme to cover advisory work. In the last years, the majority of purpose subsidies to advisory services provided by Provincial Advisory Centres was covered by government. The amount of funding coming from other sources depends on a well-developed plan and the program of advisory services, the needs of farmers and rural residents, entrepreneurs, facing the challenges of today's market, and often also on the ability of ODRs to co-operate with local stakeholders and to compete with other professional advisory organizations in the competition for EU funds [Kania 2010].

The basic funding of advisory services provided by provincial advisory centres in 2012 were: subsidies from central state budget (56.2%), funds from other provincial units of public sector (15.2%), EU funds (1.2%), and from service takers – 25.0% (beneficiaries – farmers, businessmen and farmers' organizations) (fig. 2). The share of subsidies from state budget in the revenue structure of individual ODR (in 2012) is varied and ranges from 40% in Podlaskie province to 68% in Podkarpackie province. In terms of subsidies size per one adviser it is quite large variation of state budget subsidies, e.g. 33.9 thousand PLN in Podlaskie and 59.1 thousand PLN in Lubuskie, at average for 1 adviser of ODR 44.9 thousand PLN (10.7 thousand Euro). The financial support from the state budget therefore requires unification and departure from the old historical and political circumstances.

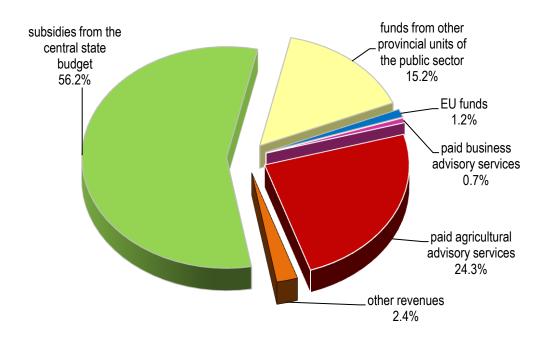


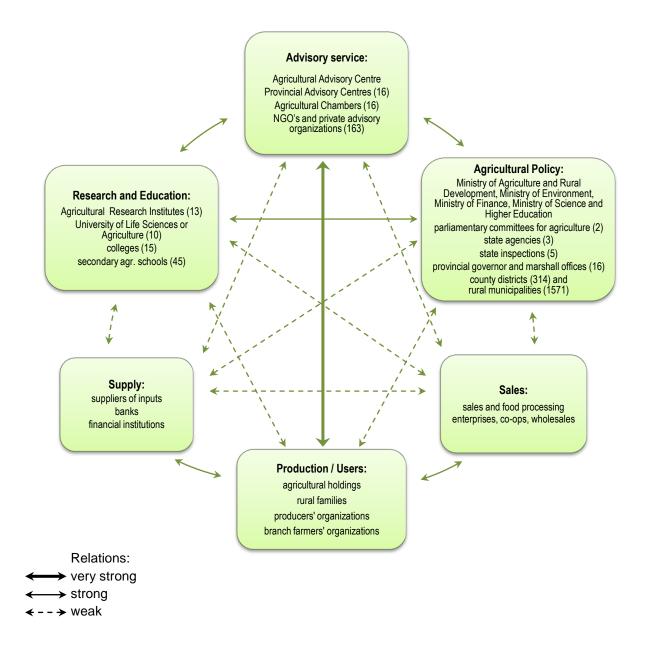
Fig. 2. Share of different sources of funding in total ODRs budget in 2012 Source: own study

4. The role of advisory services in Agricultural Knowledge and Information System

In the paper reflecting on AKIS [Dockes, Tisenkopfs, Bock 2011] we can find several definitions of AKIS. One of the formal definitions is: "AKIS is a set of agricultural organizations and/or persons, and the links and interactions between them, engaged in generation, transformation, transmission, storage, retrieval, integration, diffusion and utilization of knowledge and information, with the purpose of working synergistically to support decision making, problem solving and innovation in agriculture" (Röling and Engel, 1991). This concept emphasizes the process of knowledge generation and includes actors beyond the research, education and advice sectors. More recently, the AKIS concept has evolved as it has acquired a second meaning (innovation) and opening up AKIS to more public tasks and to the support of innovation (Klerkx and Leeuwis, 2009).

In the AKIS in Poland, as well as in other many countries, we can enumerate six main links (stakeholders): agricultural advisory organizations, research and education institutions, agricultural policy administration, sales enterprises, supply services and farmers (scheme 2).

Agricultural advisory service is represented by advisors who deal mainly with market information, promotion of agricultural, economics and organizational innovations, constant education and solving the problems of agricultural practice, sometimes in cooperation with representatives of science. This link is represented also by Agricultural Advisory Centre (CDR) in Brwinow (with divisions in Krakow, Poznan and Radom), 16 Provincial Advisory Centres (ODRs), 16 agricultural chambers (IR), 163 private advisory organizations and numerous NGO's which was created after 1989. They cover a wide spectrum of educational, environmental, ecological, developmental and cultural activities. Most NGOs work under operational programmes for Poland in projects financed by EU funds on rural, agricultural and non-agricultural development, implementing the extension or advisory type activities [Mickiewicz, Wawrzyniak 2013].



Scheme 2. Stakeholders and their relations in the Agricultural Knowledge and Information System in Poland

Source: Kania J., 2007. Doradztwo rolnicze w Polsce w swietle potrzeb i doswiadczen zagranicznych. Zeszyty Naukowe AR w Krakowie nr 440, Rozprawy z. 318. 201.

Scientists, lecturers and teachers deal with generating new knowledge to consistently strengthen the system in the scope of innovation, with analysis of efficiency of the applied production technologies, developing new management systems in particular links of AKIS, as well as comprehensive and specialist education of new staff for all AKIS links. There are 13 Agricultural research institutes, 10 University of Life Sciences or Agriculture, 15 Colleges and 45 Secondary Agricultural Schools.

Politicians, state and self-governmental administration officials and inspectors are responsible for the shape of agricultural policy, the binding law and exercising it in terms of quality, health, safety, environmental protection etc.: Ministry of Agriculture and Rural Development, Ministry of Environment, Ministry of Finance, Ministry of Science and Higher Education, 2 parliamentary committees for agriculture, 3 state agencies (Agency for Restructuring and Modernisations of Agriculture - ARiMR), Agricultural Market Agency - ARR), the Agricultural Property Agency - ANR), 5 state inspections, 16 provincial governors, 16 provincial marshals offices, 314 country districts and 1571 rural municipalities.

Sales/marketing is represented by natural and legal persons, producer organizations, enterprises, which purchase agricultural products, store, sort, process, transport and sell them in wholesale and retail sale.

Supply is represented by organizations or institutions, natural or legal persons, providing farmers with means of production and services, thus supplying them with fertilizers, pesticides, seeds, farm animals, machines, and also granting loans and credits and pay subsidies and donations.

The most important link within AKIS is primary production (end users). This is the core of the AKIS without which other links could not function in the long run. It is represented, above all, by farmers being owners or lessees of agricultural farms (1 506.6 thousand in 2010). The latter category of land users appeared along with implementation of market economy and restructuring of state agricultural farms. Farmers are perceived in the Polish rural advisory system, along with their families and the entire local community, as clients of rural advisory services. Many farmers work together in producers' groups (1306) and branch organizations (49) in 2013.

Each of these elements is more or less strongly related to others. Thus, every change in one link of the system causes particular effects in other links and vice versa. Therefore, advisory services cannot function all by themselves, separately from other links of the AKIS system.

The results of panel discussions held in 16 ODRs for the assessment of their cooperation with other stakeholders of AKIS are shown in table 1. We can note very good (11) and good (5) collaboration between ODRs and agricultural research institutes which are under the Ministry of Agriculture and Rural Development. Collaboration is not so good between advisory service and agricultural universities, which are under the Ministry of Science and Higher Education. Only four ODRs declared very good cooperation, seven – good, four – weak and one ODR does not collaborate with agricultural university. Evaluation of NGOs by ODRs is rather good, but one ODR sees them as competitors. The evaluation recognised as not fully good is cooperation of ODR advisors with suppliers (six indications) and processors or trades (three indications) what partially are perceived as competitors because they more often employ their own advisors. All ODRs see the new private consulting companies appearing on the market as their competitors.

Table 1. Collaboration and competing of agricultural advisory services (ODRs) with other stakeholders of AKIS in Poland (number of indications by 16 ODRs)

Organizations	Collaboration				
	very good (close)	good	weak	lack	Competition
Public research institutes	11	5	-	-	-
Agricultural universities	4	7	4	1	-
Government and self-government authority	9	6	1	-	-
Centres of knowledge, NGOs	2	11	2	1	1
Suppliers of agricultural inputs	1	7	4	4	6
Processors and traders	1	6	6	3	3
Private consulting firms	-	-	3	13	16

Source: own study

The agricultural advisory system in Poland is decentralized. Such a dispersed structure has both advantages and disadvantages. Arguments 'for' are: adapting the offer of advisory service to the needs of specific agriculture in each of the provinces and directing it to a specific audience. Arguments against decentralisation are: the fact that the dispersion of advisory units is not conducive to cooperation in improving the quality of services and the introduction of new standards, difficult management of units because someone else finances statutory activities, and another supervises the activities of the ODR, the level of state funding is highly diversified, professional development programs for advisors are

inconsistent. Thus, each individual creates their own reality, dependent on the will of the Regional Board. The change of government makes the advice from the people who it govern. Despite the positive assessment of advice on the implementation of CAP instruments in 2004-2006 and 2007-2013, in the opinion of the most directors of ODRs (12 of 16 persons) ODRs must subject themselves to the Ministry of Agriculture and almost all (15 of 16 persons) see the need for a central entity coordinating the activities of agricultural advisory services in our country.

Conclusions

The common trend in Poland which started in January 1, 1995 is charging fees for most advisory services, and the financial burden is transferred to the producers. In Poland, we can observe, year after year, less financial support from the state budget for agricultural advisory services and the necessity to look for other sources of funds (i.e., commercial services with marketing approach, EU funds). It is expected that farmers in our country will pay for most services received from advisory staff. The problem is that owners of small farms, which dominate in Poland, might not afford such services.

The main advisory organisations in Poland are Provincial Advisory Centres. Currently, they employ 3454 well-prepared advisors, recognised by farmers and other AKIS stakeholders as very important for agriculture and rural development. The effects of their work are satisfactory, but the ODRs performing tasks of national agricultural policy and regional and local development should therefore receive financial subsidies from the budget of national and local government units. These effects are appreciated by farmers. In their opinion, advisors are qualified and more reliable than private companies competing for market advisory services.

The agricultural advisory system in Poland is decentralized. This fragmented structure of advisory services has more disadvantages than advantages. Despite significant contribution of advisory services in the implementation of the CAP instruments in 2007-2013, most directors of ODRs (12 of 16 people) is of the opinion that the effectiveness of advisory services would be greater if they were subordinated to the Ministry of Agriculture and Rural Development, which allocates budgetary grants to advisory units, and almost all (15 out of 16) see the need for a central coordination unit for activity of 16 agricultural advisory services units in our country.

In Poland, there is still no well-functioning system of Agricultural Knowledge and Information. Despite the existence of most of the institutions and organizations that make up AKIS, the lack of mutual relations of actual interaction prevents them from functioning as a system. This also leads to the fact that agricultural knowledge is often developed in isolation from the needs and expectations of its customers. Therefore, the effects of functioning of various institutions and organizations, which operate most often in a scattered way or total isolation, often dealing only with studies, are worse than it would be expected given the size and the quality of the possessed intellectual potential.

Bibliography

Act on Agricultural Advisory Bodies, established by Polish Parliament on October 22, 2004 (Journal of Laws, No. 251, item 2507).

Dockès, A., Tisenkopfs, T. & Bock, B. B. (2011). WP1: Reflection paper on AKIS. Brussels, Standing Committee on Agricultural Research: Collaborative Working Group "Agricultural Knowledge and Innovation Systems".

Drygas M. (2012). Instytucje w procesie wspierania przemian polskiej wsi i rolnictwa z funduszy unijnych, IRWiR, Warszawa 236.

Kania J. (2007). Doradztwo rolnicze w Polsce w swietle potrzeb i doswiadczen zagranicznych. Zeszyty Naukowe AR w Krakowie nr 440, Rozprawy z. 318. 201.

Kania J. (2010). Organization of Agricultural Extension in Poland. www.worldwide-extension.org/europe/poland

Kania J., Vinohradnik K. (2012). System of agricultural advisory in Poland [In:] Agricultural Extension in EU countries, Scientific monograph on the ground on Erasmus Intensive Programme: Agricultural Extension in EU countries, code 12203-0902. Zemedelska Universita, Nitra, Slovakia.

Leeuwis, C., & Ban, A. v. d. (2004). Communication for rural innovation: rethinking agricultural extension. Oxford Blackwell Science.

Mickiewicz A., Wawrzyniak B. (2013). Funkcjonowanie akredytowanych podmiotow doradczych w rolnictwie. Zagadnienia Doradztwa Rolniczego nr 1/71, Centrum Doradztwa Rolniczego, Stowarzyszenie Ekonomistow Rolnictwa i Agrobiznesu SERIA, Poznan.

Röling, N. G., & Engel, P. G. H. (1991). IT from a knowledge system perspective: concepts and issues. Paper presented at the European Seminar on Knowledge Management and Information Technology, Wageningen

Wawrzyniak B. (1991). Doradztwo rolnicze, part I. Rozwoj sluzby doradczej w Polsce. WTN, Wlocławek