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**ANALYSIS OF AGRICULTURAL KNOWLEDGE AND INFORMATION SYSTEMS
IN BULGARIA AND ROMANIA
АНАЛИЗ НА ЗЕМЕДЕЛСКИТЕ ПОЗНАНИЯ И ИНФОРМАЦИОННИ СИСТЕМИ
В БЪЛГАРИЯ И РУМЪНИЯ**

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Abstract

The main aim of this paper is to provide a comprehensive description and comparative analysis of the Agricultural Knowledge and Information System (AKIS) in Bulgaria and Romania, with a particular focus on the agricultural advisory services. The main role of AKIS, in both countries, is to support the exchange of knowledge, information and services between many diverse public and private advisory organizations, on the one hand, and farmers on the other hand. AKIS's strengths and weaknesses were analyzed and compared in both countries by using descriptive and comparative approaches. The results showed similarities and differences of AKIS and FAS for supporting farmers in both countries.

Key words: AKIS, Farm Advisory System, comprehensive analysis, Bulgaria, Romania.

INTRODUCTION

In Bulgaria and Romania, it has been recognized that a competitive agricultural sector is linked in a great extent to the establishment of an efficient agricultural knowledge and information system (Dirimanova, 2013 and Rusu, 2013). AKIS links people and institutions to promote mutual learning and generate, share and utilize agriculture-related technology, knowledge and information. The system integrates farmers, agricultural educators, researchers and extensionists to harness knowledge and information from various sources for better farming and improved livelihoods (FAO and World Bank, 2003).

The Agricultural Knowledge and Information System (AKIS) is systematic links between farmers and institutions to transfer agricultural knowledge and information. In Bulgaria and Romania, different institutions from the public and the private sector - farm organisations, research and education organisations, and non-governmental organisations - represent AKIS.

AKIS describe the exchange of knowledge and supporting services between many diverse actors from the first, second or third sector in rural areas. In addition, AKIS provide farmers with relevant knowledge and networks regarding information and innovations in agriculture. Advisory services have the essential role to provide information and problem solving. However, in order for AKIS to function these

services can be provided by different actors, among them formal extension services, training and post-secondary education bodies, NGOs but also by members of public or research organizations.

The main aim of the paper is to provide a comprehensive description of AKIS, with a particular focus on agricultural advisory services, in both countries. In addition, it also compares the implementation of FAS in Bulgaria and Romania.

MATERIALS AND METHODS

Methodology of the paper was jointly established through a common guideline for expert interviews and a harmonized questionnaire under PRO AKIS Project. In order to characterize AKIS, first, the literature review regarding advisory systems in Bulgaria and Romania has been done, then AKIS and FAS has been analyzed and described for both countries and finally, a comparative approach has been used. Both studies were conducted by using qualitative method from May to September 2013. The data was collected from official authorities in both countries, for Bulgaria – the Ministry of Agriculture and Food (MAF) and for Romania - the Ministry of Agriculture and Rural Development (MARD) and from their secondary administrations. Then, interviews were conducted with experts on agricultural knowledge and information processes in politics, research, education, advisory and farmers' organizations, usually from the national level.

RESULTS AND DISCUSSION

AKIS is a systematic links among farmers and institutions to transfer agricultural knowledge and information. In Bulgaria and Romania, AKIS is represented by different institutions from the public sector, private advisory services (i.e. independent advisors, international trade organizations, and regional suppliers), farm organizations (cooperatives and few producer groups), research and education organizations, and non-governmental organizations. The AKIS integrates farmers, agricultural research, agricultural education, agricultural consultancy and the private sector, in order to best use the knowledge and information from various sources for the purpose of agriculture development. Each AKIS actor plays an important role in the existing interactions between themselves and farmers.

In *Bulgaria*, AKIS is represented by public sector - Ministry of Agriculture and Food with its secondary structures, by many private advisory companies, independent advisors, international trade organizations, regional suppliers, by farm based organizations (FBO), by 25 research and 5 education organizations, and by professional organizations and foundations (Figure 1).

The public advisory system is mainly provided by the *National Agricultural Advisory Services (NAAS)*. NAAS was established at the end of 1999 with the Act regulating the activities of the National Center for Agricultural Science. The main mission of NAAS was to provide farmers “with up-to date information, specialized extension and consultancy services and expert support to ensure effective and competitive agriculture in line with EU standards” (RDP, 2007). In, 2012, the NAAS was funded 52% by state budget and around 48% through Rural Development Programme (RDP). The staff of the NAAS benefited from different ‘twinning projects’ and programmes to prepare it for the new requirements linked to the Common Agricultural Policy (CAP).

The private advisory sector was established during pre-accession period of the country in European Union. The main activity of the private consultancy firms has been to prepare applications for different types of European and State projects. In the case of large-scale projects, the private consultancy firms help the farmers with their expertise throughout the project period.

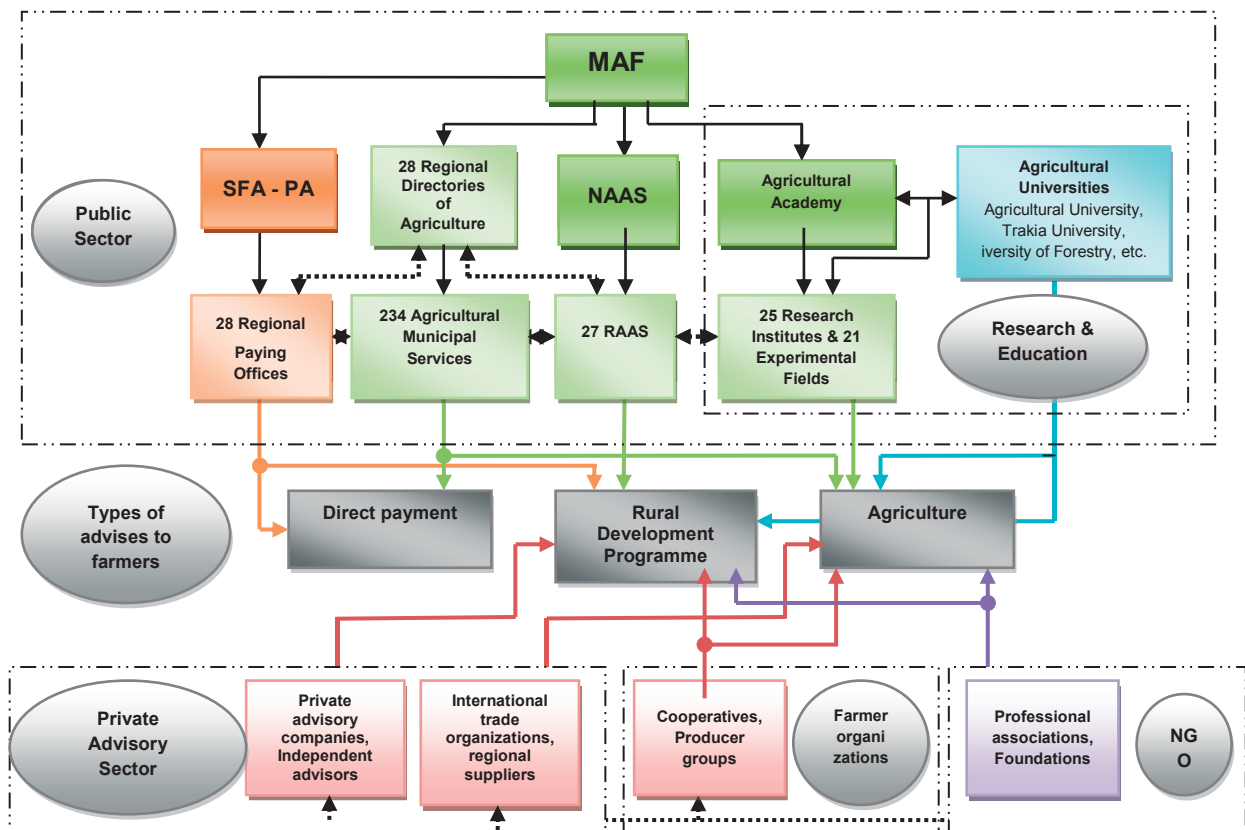


Fig. 1. Main Actors for AKIS and types of advises to farmers provided by different AKIS organizations in Bulgaria



In Bulgaria, FAS is organized by the state through the NAAS. The NAAS is the main manager and coordinator of the public advisory system in the country, while the MAF is the national authority responsible for certification and control of the FAS. However, FAS in Bulgaria is not fully complemented by the private sector. For instance, the existing non-government farm advisory organization and other potential consultancy players are not supported in term of increasing their professional knowledge (regarding cross-compliance standards). Therefore, public advisory system compare with private advisory sector is prepared for providing a wide range of services related to agricultural production, cross-compliance, management, environment, quality labels, etc.

The other AKIS actors in the system prove mostly specific knowledge to their clients, for instance the research and education organizations provided NAAS with experts and training; the private sector provide specific knowledge and services; FBO provides production knowledge while non-governmental organizations provide more advisory and marketing knowledge.

AKIS in Bulgaria is represented by public extension system, which supports and facilitates agricultural producers to solve problems and obtain information, skills and technologies. Since the start of the RDP in 2007, NAAS was the only beneficiary for rural development measure, which provided assistance to small and medium-sized farmers. At that time a number of meetings and trainings were organised to inform farmers at the regional and municipal levels.

After such a big campaign thousands of farmers applied to the RDP with the expectation to receive financial support for improving their facilities and productions. This process of implementation of the rural development measures was complicated for the Bulgarian public and private extension systems. The identified problematic issues were insufficient staff members, a lack of skills and expertise, unclear tasks and responsibilities, and low accessibility for the most vulnerable farmers. These issues need to be taken into consideration for the forthcoming programming period of 2014-2020. There are several linkages between various AKIS actors at different levels in Bulgaria:

First, between MAF and other public organisations consisting of defining and delegating missions, training staff and providing resources. Often the central level tries to retain control over

local decisions and this may decrease the quality of services delivered by public advisory providers to farmers;

Second, between NAAS and educational and research organisations are still weak, but they may benefit from working together and synchronising their activities through doing actual and concrete agricultural research and formally agreed training of the future agricultural experts;

Third, public authorities need to be more transparent and to provide information related to changes in legislation to the NGOs and private extension providers. In the past, they had to change the project application due to unexpected changes in administrative documents;

Fourth, between public and private extension providers and farmers. This link is important for both actors. Farmers need support and information, the extension providers need farmers to whom to provide information during the application process and with whom to continue work in the future.

In *Romania*, it has been recognized that a competitive agricultural sector is also linked to a great extent to the existence of an efficient AKIS (Figure 2). Connecting institutions and people, AKIS was established in the country in order to promote mutual learning and to generate the utilization of agricultural technologies, knowledge and information on a participatory basis. The system integrates farmers, 17 agricultural research institutes, agricultural high schools and universities, which covered entire country, agricultural consultancy and the private sector, in order to best use the knowledge and information from various sources for the purpose of agriculture development.

Each AKIS subsystem is in its turn part of more general systems, such as the education system, science policy, agricultural and rural development policy etc. The government's policies regulate each subsystem and play an important role in the existing interactions between subsystems.

In *Romania*, the public advisory system has a pyramid-like structure and is coordinated from the technical-methodological point of view by MARD, through the Consultancy, Extension and Vocational Training Department (CEVTD). At county level, there are *County Agricultural Chambers* (CAC) under the subordination of county councils and the theoretical-methodological coordination of CEVTDs. At the level of communes, there are *Local Agricultural Consultancy Centers* (LACC) under the subordination of CACs.

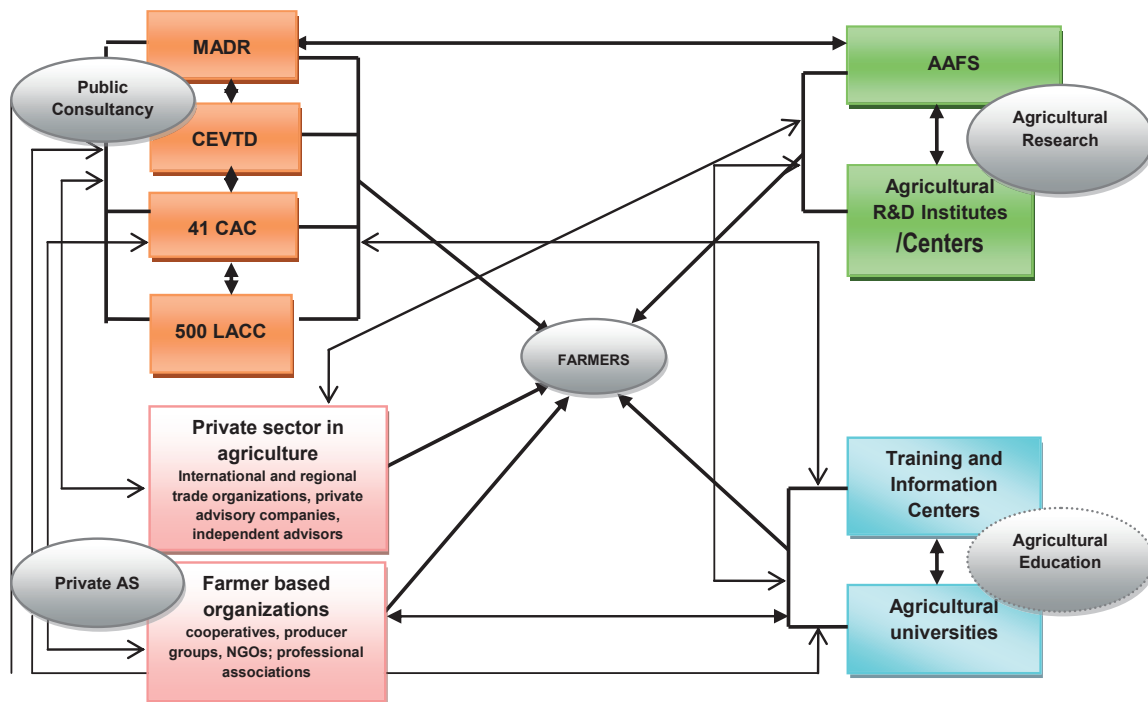


Fig. 2. Main Actors for AKIS in Romania

The main objectives targeted by this service is to provide support to the rural population by extension and technical assistance actions, support for accessing the structural funds, promotion of association forms, managerial consultancy, information, vocational training and refresher courses, providing information flows in both directions and specialized technical, economic and legislative databases. The main beneficiaries of the public advisory services are the farmers and/or the rural population in the sector of agricultural/non-agricultural services.

The consultancy activity in the private sector, in Romania, experienced an increasing trend, mainly as a response to the financing possibilities provided through European programs. In almost all cases, this type of consultancy supposes drawing up the financial applications for different types of projects. Although the establishment of FAS is an important component that stipulated the CAP reform, this has not yet been established in Romania.

In Romania, AKIS bears the imprint of its history. This suffered successive modifications in order to face the new challenges and realities. There are no coherent policies targeting AKIS, and its subsystems are largely under the influence of certain sectoral policies. The current

system is inefficient in assisting the farmers: the existing subsystems – research, consultancy and agricultural education are weakly prepared to support Romania’s approach to implementing the CAP 2014-2020. There is a limited integration of the consultancy, agricultural research and agricultural education activities. Furthermore, there is a lack of collaboration between farmers and the staff of the three subsystems, and this leads to farmers’ lack of confidence in the activity performed by these subsystems.

Throughout the period of transition and integration of Romania’s agriculture and rural area into the EU structures, the place and position of the agricultural advisory services have experienced difficulties. Even now, the situation of the public advisory service is quite uncertain.

The policy makers in Romania must not neglect that there is no progress in agriculture in the missing of a competitive advisory service. This will have the mission to respond in the best way to farmers’ needs and to gain their confidence. The quality and constancy of services should be supported by agricultural policy measures.

The AKIS in both countries may become strong, once the authority understands the needs of such system to support and facilitate their farmers.



CONCLUSIONS

On the base of the comparative analysis, we can conclude some similarities and differences in Bulgaria and Romania. The *similarities* of advisory services in above countries are:

First, in the both countries, there is public advisory system coordinated and monitored by their respective ministry of agriculture.

Second, private advisory sector in both countries are mainly located in urban areas, supporting farmers in preparing applications for rural development measures and often hardly support farmers with specific farm advises and knowledge.

Third, the research and education organizations facilitated public advisory sectors in the countries with experts and provide training for farmers.

Fourth, the budget for wages and the budget for the technical endowment are inadequate and it is impossible to attract and maintain qualified staff. The financial resources for the material endowment are low and constrain the consultants' mobility to the farms. It leads to consultants' isolation in terms of information and communication.

Fifth, often the consultants with competent and experience who work in public advisory sector migrated to the private system.

The main *differences* are the followings:

First, the Bulgarian state advisory provider has its own structure and received funds not only by the state but also by the RDP. In Romanian case, the activity of state advisory provider is mostly funded by the state budget and their own incomes.

Second, FAS have been already established in Bulgaria rather than in Romania. Although, FAS in Bulgaria was implemented only in NAAS, in the private advisory sector it was not recognized yet.

Third, the information flow to farmers, in Bulgaria, is better organized than in Romania. There are clear channels from where they can obtain information for different payments and rural development measures.

In Bulgaria and Romania public advisory sectors exist and the state needs fully to support educated and experienced advisory experts. Otherwise, they easily can move to the private sector, which happened in practice. Farmers need to

have a place where they can get information for next programming period of the RDP and get specialized training courses related to their productions.

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