



AKIS and advisory services in Bulgaria Report for the AKIS inventory (WP3) of the PRO AKIS project

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Executive summary

The main aim of the report is to provide a comprehensive description of the Agricultural Knowledge and Information System (AKIS) in the Republic of Ireland, with a particular focus on agricultural advisory services. The description includes history, policy, funding, advisory methods and a section on how the Farm Advisory System (FAS) was implemented.

This report represents an output of the PRO AKIS project (Prospects for Farmers' Support: Advisory Services in the European Agricultural Knowledge and Information Systems'). It is one of 27 country reports that were produced in 2013 by project partners and subcontractors for compiling an inventory of Agricultural Knowledge and Information Systems. AKIS describe the exchange of knowledge and supporting services between many diverse actors from the first, second or third sector in rural areas. AKIS provide farmers with relevant knowledge and networks around innovations in agriculture. Findings from the 27 country reports were presented at three regional workshops across Europe in February and March 2014, discussed with stakeholders and experts, and feedback integrated in the reports.

The agricultural sector in Bulgaria is characterised by one of the highest proportions of many small-scale farmers with plots under 2 ha, around 83% of total agricultural holdings, who cultivate 4% of farmland in the country and small number of large-scale farmers with over 50 ha - around 2%, who cultivate over 80% of total farmland. The average age of young farmers is around 7%, between 35 and 64 years is 56%, and over 65 years old is 37%. Cattle, goat and sheep are dominant in the livestock sector and increase during 2011 and 2012, with crops occupying around 29% of the farmed area.

In Bulgaria, AKIS is represented by different institutions: (1) public sector – Ministry of Agriculture and Food with its secondary structures, including National Agricultural Advisory Service (NAAS); (2) private advisory sector, independent advisors, international trade organizations, regional suppliers; (3) farm-based organisations (co-operatives and few producer groups), (4) educational and research organisations and (5) non-government organisations – professional association and foundations.

The farm advisory services in Bulgaria are currently delivered by the NAAS and private advisory organisations. The NAAS has been established since 1999 with the Act regulating the activities of the National Centre for Agricultural Science to provide the farmers with information, specialized extension and consultancy services to ensure effective and competitive agriculture. Since the start of the Rural Development Programme (2007-2013) the NAAS has been chosen as a single advisory provider by MAF to assist setting up young, small scale and substance farmers.

Private advisory companies and individual consultants are, mostly, established by experts, who have worked in the public sector. They provide the same services to farmers like in the NAAS, preparing applications for rural development measures, but for better working conditions and salaries. International and regional trade suppliers provide extension services related to plant protection, machinery and seed use, while professional associations provide knowledge and information to farmers in diverse business activities related to their farming.

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List of Acronyms

Acronym	Explanation				
AICs	Agro-Industrial Complexes				
AKIS	Agricultural Knowledge and Information Systems				
AMS	Agricultural Municipal Services				
CAP	Common Agricultural Policy				
CFP	Common Fisheries Policy				
ESU	European size units				
FAS	Farm Advisory System				
FBO	Farmer-Based Organisation				
IPA	Institute of Public Administration				
LSU	Livestock unit				
MAF	Ministry of Agriculture and Food				
NAAS	National Agricultural Advisory Services				
NGOs	Non-government organizations				
PA	Paying Agency				
PGs/POs	Producer Groups				
RAAS	Regional Agricultural Advisory Services				
RDP	Rural Development Programme				
RPA	Regional Paying Agencies				
SFA	State Fund Agriculture				
UAA	Utilised Agricultural Area				
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1. Main structural characteristics of agricultural sector of the ${\it country}^1$

Bulgaria is located in South-East Europe. The country is divided into 6 planning regions (NUTS 2), 28 administrative regions (NUTS 3) and 264 municipalities (LAU 1). The population of the country, in 2012, was 7 327 224. The percentage of rural areas in Bulgaria is 81% of the whole territory (RDP 2007). In 2009, agricultural land in the rural area was 46.33% of land area (World Bank, 2009). The agricultural sector is one of the main sectors in the country, where 73% of the total arable land is privately owned, 22% is owned by municipalities and 5% is state property (RDP, 2007). Agriculture's contribution to employment in Bulgaria is 5.6% for 2011 (MAF, 2013). GDP per capita for Bulgaria is 5 400 EUR per inhabitant (Eurostat, 2012).

In Bulgaria the land used for agricultural purposes was 5 486 572 ha in 2011, accounting for around 50% of the territory of the country (MAF 2013). The *Utilized Agricultural Area (UAA)* is composed of arable land, perennial crops, permanent grassland, family gardens and greenhouse area. In 2011, it was 5 087 948 ha or 45.8% of the territory of the country. *Arable land*, for the same year was 3 227 237 ha or 63.4% of the UAA and around 29% of total territory of the country. The total number of *agricultural holdings* is 357 074, which cultivates 3 616 965 ha with an *average UAA per holding* of around 10.1 ha.

Distribution of the holdings is following: agricultural holdings under 2 ha are 308 110; between 2 ha and 20 ha are 47 940; between 20 and 50 ha are 6010; and over 50 ha are 8420. Therefore, in Bulgaria there is a strong polarization: there are many small-scale farmers with under 2 ha, 83.16% of the total agricultural holdings, who cultivate only around 4% of total UAA and a small number of large-scale farmers with over 50 ha, 2.27% who cultivate 83.27% of UAA. The number of holdings by age of manager is as follows: there are 25 540 under 35 years old; 206 790 between 35 and 64 years; and 138 160 over 65 years. In 2012 the number of agricultural holdings, receiving direct payments were 83 823, (a total of 3 602 887 ha) and State Fund Agriculture (SFA) transferred to them 841 592 302 BGN (SFA 2013).

In 2010, *family labour* was 92.23% (681 500 persons) of the total labour in the agricultural sector, while regular non family labour was 57 400 persons. Labour directly employed by the farms was 406 500 people. Their number has decreased by over 51% in the last decade. Employed persons in agriculture according to Annual Work Unit (AWU) are 394 100; where employed women are 158 400, or 40.19% of the total. Employers and own-account workers on private farms in agriculture according to AWU are 343 100 and employees hired on the basis of contracts are 51 000 (MAF, Report 2011). In 2012 the output value at production price of agricultural industry was 4 354,12 million EUR. For 2012 the gross value added of agricultural industry for production value at production price was 1 613,84 million EUR.

In 2011, the arable area with *cereal crop* (including rice) was 1 768 700 ha with production of 7 520 400 tones. The average cereal yield was 4,25 tones/ha for 2011 and this decreased for

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¹ The information in this section is based on Eurostat website (provided by leader of WP3) and World Bank report, 2009, and also national sources such as MAF reports, 2011-2013; information of the State Fund of Agriculture website; National Rural Development Programme from 2007, National Statistical Book and agricultural census collected in 2010 by Agrostatistic Department at MAF.

2012. In 2011, production of vegetables is 132 000 tones and almost the same as 2012 while production of fruits and vineyard increased by around 7% compared to the previous year. In 2010, the number of livestock units (LSU) by type of livestock was 1 149 000. The cattle population, goat population and sheep population increases during the next two years- 2011 and 2012. The pig population, poultry and other LSU decreased in 2011 and 2012. In 2012, cows' milk production and drinking milk increased compared with previous years, while cattle meat, pig meat, sheep meat and goat meat were almost the same. Number of certified registered organic holdings for 2010 in Bulgaria was 170 (0.05% of the total number of holdings) on the certified organic area of 4 010 ha (0,09% of the total UAA). Producer groups are not common in Bulgaria. There are only 2 for fruit and vegetables in the country. The use of fertilizer for 2009 was 169.60 kg/ha. Ammonia emissions for Bulgaria in 1990 are 106 kilotons, and for 2010 - 36 kilotons. The ammonia emissions decreased by 65.8% in the last 10 years. The area under management practices potentially supporting biodiversity (EEA) was 0.2 in 2005 and 0.5 in 2010. The Gross Nitrogen Balance for period 2000-2008 (kg Nitrogen per ha agricultural land) was 67.3 on average.

2. Characteristics of AKIS

The Agricultural Knowledge and Information System (AKIS) are systematic links between farmers and institutions to transfer agricultural knowledge and information. In Bulgaria, AKIS is represented by different institutions from the public (MAF with its secondary structures) and the private sector (private advisory services, independent advisors, international trade organisations, regional suppliers), farm organisations (cooperatives and few producer groups), research and education organisations, and non-government organisations (professional organisations and foundations). In the first part of chapter 2, a short description of the AKIS actors will be presented and in the second one, the linkages between them will be discussed.

2.1 AKIS description

Bulgarian farmers need access to appropriate knowledge and information to make their decisions. However, existing agricultural extension and education services are sometimes unresponsive to farmers' needs and their staff are not always equipped to face the quick political and economic changes in the country. The effort of the state extension system during recent years is to improve internal and external communications, technology development (innovative IT use), to upgrade the human resource development and to provide various training courses to farmers. Although, the private sector and NGOs keep their officers up to date with new information and new innovative agricultural technologies, they also often provide regular trainings for their experts and farmers. The AKIS in Bulgaria is constituted by the following actors in public sector, private advisory sector, research and education, farmer based organisations and NGOs.

PUBLIC SECTOR includes following institutions responsible for capacity development in the agricultural sector:

Ministry of Agriculture and Food (MAF) is the main state administrative organisation. It has general administration and 11 specialized administration units that mainly work for implementing national policy and Common Agricultural Policy (CAP). The MAF has strong linkages with its secondary administrative organisations as Regional Directorates "Agriculture", National Agricultural Advisory Services, State Fund of Agriculture and Agricultural Academy, etc. and also with farm organizations and NGOs and weaker linkage with the universities and private sectors.

28 Regional Directorates "Agriculture" are specialized territorial administration units and secondary administrators at the MAF. The Regional Directorates "Agriculture" are coordinated by the General Directorate "Agriculture and Land Tenure". Their aims are to implement state policy in the field of agriculture, to provide information to the farmers, to coordinate and supervise municipal agricultural offices, to provide statistical data and annual reports of the agriculture and forestry in the regional levels, to create system for registered farms for direct payments, to register farmers, etc. In addition, the Directorates conduct explanatory and consultancy activities and provide specialized assistance to farmers by organizing meetings and seminars in the municipal level. Frequently, Regional Directorates may provide information (book/brochures) sent by MAF; monitor some of the farmers advised by regional advisors;

provide the agricultural producers; and advisors with necessary professional information through training and seminars organised by them or regional agricultural advisory services.

234 Agricultural Municipal Services (AMS) are under the direct supervision of the Regional Directorates "Agriculture". The main functions of these services are to maintain the map of restituted farmland and forest and its registers, to make registration of agricultural tenants and producers and, also, to register beneficiaries of direct payment for single area. The interviewed expert opinion is that "they, often, act as mediators for transferring information and knowledge to the agricultural producers".

National Agricultural Advisory Services (NAAS) is the secondary administrator at the MAF. The main office are legal entities funded with headquarters in Sofia and 27 regional offices in the country. The NAAS provides consulting services and technical assistance to farmers for implementing efficient and competitive agricultural practices in Bulgaria. The main mission of the NAAS is supporting the implementation of the state policy in the agricultural sector and achieving the MAF priorities and objectives for implementation of efficient and competitive agriculture in Bulgaria. Also, NAAS offers qualitative advisory services to farmers, information, and training and technical assistance. There are two administrative units in the NAAS – general administration for "administrative, financial, information services and human resources" and specialized administration for "Extension services". In the Directorate "Extension services", Department "Activities coordination", Department "National and European Programs", "Analytical laboratory" and 27 regional offices are included. The budget of the Directorate includes: subsidy; own revenues; donations; grants; revenue of training and information activities; consulting services and funds received by international projects and programs. In 2007, Centre for Vocational Education at NAAS was established. Its aim was to provide a wide range of long and short term training activities in agriculture (in-depth theoretical and practical knowledge) to farmers and to make them acquainted with the latest development in agriculture science.

27 Regional Agricultural Advisory Services (RAAS) in NAAS system are organised and managed by Directorate "Extension services" in 27 regional (territorial) offices. They employ agricultural engineers, agro-economists or agronomists, and until now were responsible for writing applications for RDP measures and business plans for farmers and advising them on agricultural technologies. Also, regional offices support the transfer and application of scientific and practical achievements in the field of agriculture; providing specialised consulting in the field of agriculture; organising and conducting training for farmers; assisting by providing information; and providing a set of advisory services to individuals under the conditions and requirements of the RDP Measures. The regional offices, often, cooperate with government and non-government organizations in the field of agriculture for information, knowledge and organization of the common events.

State Fund Agriculture (SFA) – **Paying Agency (PA)** was created in 1998 under the Agricultural Producers Support Act and provides financial support to farmers under state aid programmes, pre-accession program SAPARD Programme, Common Agricultural Policy (CAP) and Common Fisheries Policy (CFP) of the European Union, including Rural Development Programme. The SFA is accredited by the European Commission as Paying Agency (PA). The

State Fund Agriculture is managed by Managing Board of 11 members under the Chairmanship of the Minister of Agriculture, and the operational management is carried out by the Executive Director. The structure of the Fund includes Headquarters and 28 Regional Paying Agencies. The SFA-PA provides financial support from the Euro-funds to agricultural producers through four types of instruments: – first direct payments with attached complimentary national payments; second - agricultural market support mechanisms; third - the Rural Development Programme measures and fourth - the Fisheries Programme. Also, SFA provides financial aid for agricultural producers under state aid schemes with resources from the national budget by short-term and long-term instruments. The short-term financial instruments are applied for financial support and stimulation of the production of specific agricultural products (grain, vegetables, milk, etc.). The long-term financial instruments are for over a one year period to stimulate the investment process in agriculture.

28 Regional Paying Agencies (RPA) are under the management of the SFA-PA. At the regional level, there are 28 RPA and 11 district paying offices for Implementation of Support Scheme & Measures in the sector "Contracting" and approval of payments created by sector "Payment authorization". The same sectors exist in the central level. At the regional level, there are, also, 11 Regional Technical Inspectorate. There is an expert committee to ensure transparency of the approved projects by the PA. Within the expert committee representatives of the Paying Agency, MAF, other ministries and non-government organisations (professional associations and foundations) are employed.

AGRICULTURAL RESEARCH AND EDUCATION includes the Agricultural Academy with their Regional Research Institutes and Experimental Stations and Universities.

Agricultural Academy is an organisation for research, service and support activities in the field of agriculture, animal husbandry and food industry. Its main activities are related to the state agricultural policy. It has 25 Regional Scientific Institutes and 21 Experimental Filed Stations. Regional Scientific Institutes provide and transfer the technologies to farmers. They have production activities in their stations and provide individual and group consultations to agricultural producers. According to an interviewed expert "they still struggle to link their research outputs to small and middle agricultural producers, and currently mainly large producers benefit from these outputs. However, the positive point is that they organise many training courses and seminars to advisors and agricultural producers, and develop materials and provide service as soil-, water analysis and feed analysis to the public". The budget of research institutes includes state subsidy; revenue from research projects; revenue from advisory services; revenue from intellectual products; and others.

The universities mainly provide education and training to students at Bachelor, Master and Doctoral levels. There are 5 universities in Bulgaria: Agricultural University, Trakia University, University of Forestry, Ruse University; and University of Food Technology. They offer agricultural knowledge and education in the field of crop and animal production, plant protection, farm machinery, agro-ecology, agricultural economics, food technologies, etc. However, the Agricultural University and Trakia University are the main essential source of graduates that continue to work within the structures of the MAF (Regional Directorate "Agriculture", MAS, RAAS, SFA-PA, RPA) and the research institutes. Often, the students of

those two universities have their internships in the MAF and their regional and municipal structures.

PRIVATE ADVISORY SECTOR includes private advisory companies, independent consultants, international trade organisations and regional suppliers.

Private advisory companies in Bulgaria have started their extension services in agriculture during the PHARA and SAPARD programs. They, mainly provide information and prepare applications to their clients for different measures of the RDP and the operational programmes. During 2008, private advisory companies participated in a short training course, that introduced the RDP, organised by MAF. After the training a list of private advisory companies was created. Over 540 advisory companies were included in this list. Nowadays, some of them are not really functioning as advisors. According to one interviewed expert from private advisory company "those companies, which work successfully, are important providers of information and knowledge to farmers and to farm organisations, they work closely with professional associations and with their members".

The independent consultants are mostly people, who are former experts from RAAS or educated persons, who work mainly with small scale farmers. Their prepare applications mostly for the measures (112, 121 and 141) of the RDP (2007-2013). Mostly, their clients are famers, who they know personally and are recommended by people who have already used their services.

International trade organisations are important providers of information regarding new technologies and marketing of the agricultural sector. These organisations are mainly seed companies, plant protection companies, machinery dealers, etc. Their extension services to farmers mainly relate to plant protection, machinery use and agricultural production.

Regional suppliers (trade organisations) are mostly input suppliers with well-established networks with farmers. The owners and sellers should have high agricultural education with specialisation in "Plant protection". The reason is that they should be capable of, and usually providing, advice on plant protection, sanitary and soil fertility measures at each particular situation in the farm. Such local trade organisations are agri-chemical shops and distributors, who work mostly with farmers on regional level. They benefit from well-developed chemicals industry in the country.

FARMER BASED ORGANISATIONS are represented by cooperatives and two producer groups:

Production **cooperatives** are common structures in the country. Although they hold bad reputation and skepticism by most farmers, there are still around 1200 registered cooperatives, of which only 420 are active at present. They work the land of their members. Often, their annual income does allow them to re-invest in machinery and equipments, to use new seeds, varieties, to restore livestock stables, etc.

Producer groups are still not common in Bulgaria. So far, in the country, there are only two producer groups for fruit and vegetables recognised for the last 5 years and that received financial support by the European Agricultural Guarantee Fund. Each group has four members – both small and large agricultural producers. Their main objectives and activities are (1)

marketing and the sale of fruits and vegetables by member producers; (2) collection and analysis of information for the produce and sold produce with regard to area, varieties, quality class, quantity, yields and sales; (3) planning and adapting vegetable and fruit production, control on the production quality in compliance with general European rules, regular updates to members about all applicable standards and regulatory changes affecting the production of fruits and vegetables; (4) advising the members on their production through joint work with specialised trade organisations, institutions and private advisors, etc. These producer groups are private with mixed funding, 75% of the funds are paid by SFA-PA (50% from EU funds and 25% state funds) while the rest is self-funding. They work intensively with public sector (MAF and SFA-PA), private advisory services and private companies providing inputs.

NON-GOVERNMENT ORGANISATIONS (NGOs) are also not common in Bulgarian agriculture but where they do exist they are well-known among agricultural producers as organisations working professionally with them. They, usually, keep their employers up to date with the new innovations, methods and knowledge related to the agricultural production and all state and EU programmes running in the country. They organise practical training courses for their employers, partners (e.g. RAAS advisors) and interested farmers, agronomists, etc. NGOs in Bulgarian agricultural sectors include professional farmer organisations and a few other foundations.

The **professional farmer organisations** amount to 22 and their names and websites, officially, are posted in the MAF's website². These organisations represent different sectors (e.g. milk, meat, fruits, vegetables, crop productions, etc.). Their aims are to protect the members' interests, to provide assistance to their activities and to resolve the actual problems of their members in the field of the agriculture. They have effective partnership with all institutions and organisations related to the agricultural sector. Actively, they work at developing the sectors they are involved in, suggesting decisions for the present problems and contributing with ideas for improvements. The associations work closely with the MAF. They are included in the preparation, implementation, monitoring and evaluation of the measures in the RDP 2007-2013. Also, the professional organisations participate in several national and international projects for the exchange of experience. They organise specialised courses for their members and also take part in training courses that cover specific and important topics related to the innovation and forthcoming changes in the agriculture.

The **foundations** in agricultural sector in Bulgaria are non-profit organisations too. There are not so many in the country. Mostly, they work for supporting and helping small scale farmers, landless and poor Roma families (e.g. Land-source of income) and specific sectors such as organic farming (e.g. Agrolink, Bioselena). They focus their activities on consulting their target groups, creation and realisation projects that support small-scale farmers. They educate and technical consult agricultural best practice in areas with a mixed ethnic groups, and also, organise workshops and seminars - bringing together policy makers and practitioners at the local, national and international levels.

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² In the MAF's website is posted the name of NGOs in agriculture. However, there is a list of professional organizations in agriculture registered until 31.07.2013. The number of those professional organizations in the list is 49.

2.2 AKIS diagram

There are two diagrams presenting AKIS in Bulgaria. The first diagram (Figure 1) shows general system of AKIS in the country, while the second diagram (Figure 2) present types of advice provided to farmers by different AKIS actors. Detailed discussion of the both diagrams for the linkages among actors are presented in section 4.5.

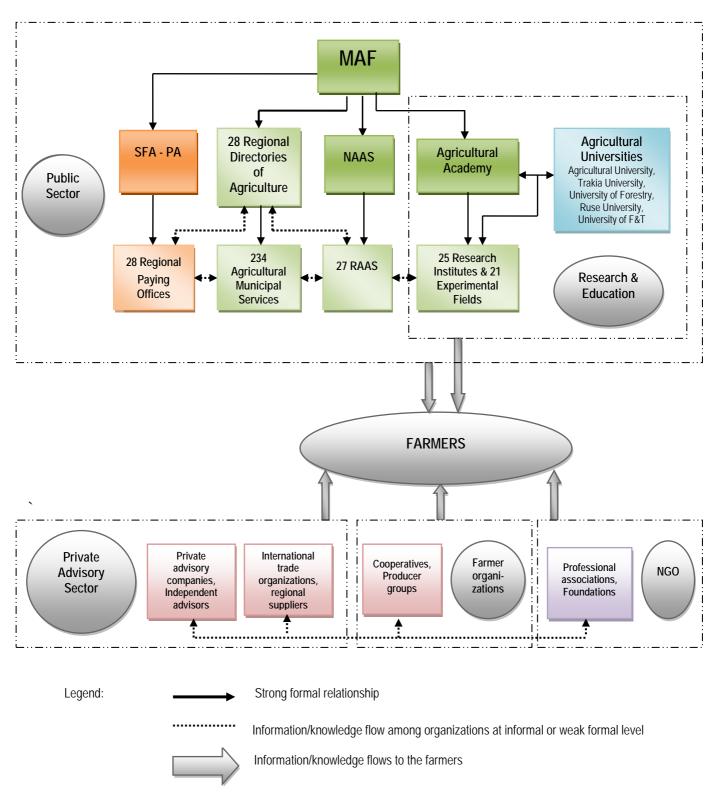


Figure 1. Agricultural Knowledge and Information System (AKIS) in Bulgaria

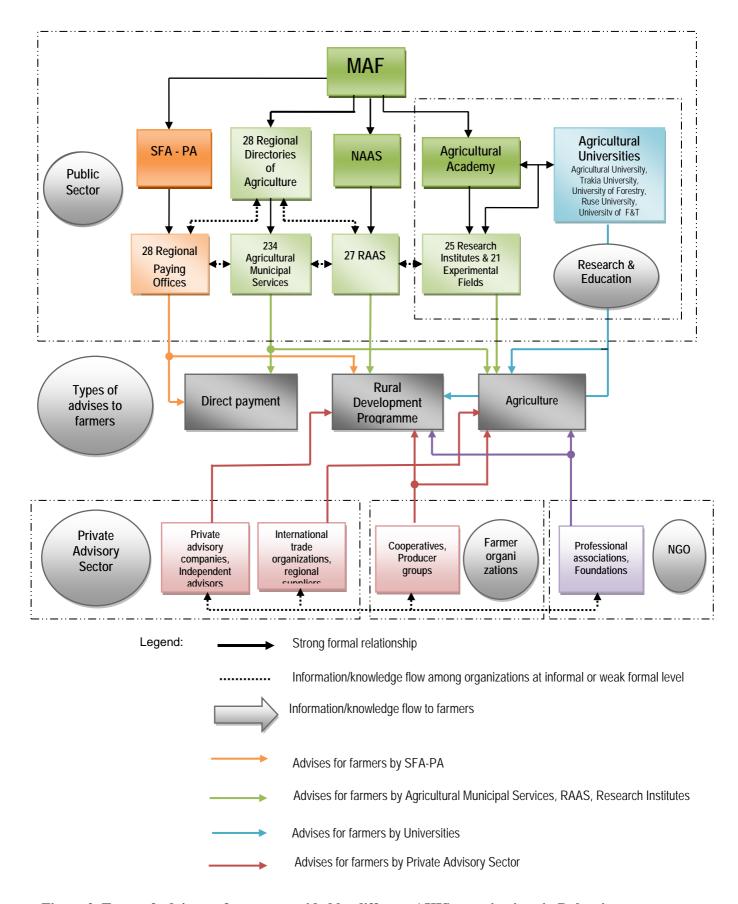


Figure 2. Types of advises to farmers provided by different AKIS organizations in Bulgaria

Table 1. Overview of organisations creating the AKIS

Provision of service			Source of financing									
Status of the	Type of organisation	Num-	Number		Public funds			Farmers		Private	NGO	Other
organisation		ber of orga- nisa- tions	of advisors	EU funds	National funds	Regional funds	Farmers' levies	Farmers' contribution	Billing services	Other products (inputs, outputs)	founda- tion	(specify)
Public	Ministry of agriculture and food	1	-		Х							
sector	Regional Directorates "Agriculture" Local/regional agencies	28	-		Х							
	Municipal Agricultural Services	234			Х							
	State Fund Agriculture – Paying Agency	1			Х							
	Regional Paying Agencies	28			Х							
	NAAS	1		Х	Х							
	RAAS	27		Х	Х							
Research	University	5		Х	Х					Х		
and Education	Research Institute (and also Experimental Fields)	25 (21)		Х	Х					Х		
Private sector	International trade organisations	-							Х	Х		
	Regional suppliers	-							Х	Х		
	Independent consultant	many							Х			
	Private agricultural advice company	many							Х			
Farmer based	Farmers' cooperative	1200							Х	Х		X ³
organisations	Producer groups	2		Х				Х	Х	Х		
NGO	Professional associations and foundations	22									Х	X ⁴

³ Membership ⁴ Membership

3. History of the advisory system

Before 1989, the Bulgarian agricultural knowledge system had a clear top-down structure. The agricultural sector was a part of the state-planned economy. It was large scale, modernised and organised into huge agricultural collective organisations, called Agro-Industrial Complexes -AICs (established in the 1968). The goal of these Complexes was to produce a small number of very large, horizontally integrated agricultural production units and to link these units vertically with enterprises in food processing industries (Boyd 1989). AICs were quite an important source of integration, knowledge creation, transfer and innovation. They were state funded and governed integrators into Bulgarian agricultural sectors (cereal production, animal husbandry, fruit and vegetable production, etc.) working with many enterprises and covering hundreds of thousands of hectares of farmland. These AICs organised input purchase and production, helped the knowledge dissemination and development. In addition, they provided different inputs and services to peasants such as seeds and equipment as well as processing of the products which had been produced on their private plots. Therefore, the agricultural consultancy activity was mostly informally organised and oriented to the technical aspects of production. Agricultural education (higher - universities and lower - professional agricultural schools) was governed by the Ministry of Agriculture until 1989. After reforms, higher education was transferred to the Ministry of Education, Youth and Science in Bulgaria while lower professional education in agriculture still belonged to MAF. Agricultural research was mainly carried out by universities and research institutes. Most of the research institutes dealing with agricultural issues were (and still are) part of the Agricultural Academy funded by MAF. Most of the research and knowledge were passed through the network of agricultural engineers/agronomists employed by the collective enterprises and state farms before 1989, and by the commercial farms nowadays.

After November 1989 until 2000, the socialistic regime came to an end and changes started. The objective of the agrarian policy was concentrated on land restitution under Bulgarian land law and privatization of the collective farm assets. The result of the reform was fragmented land in terms of ownership and the use and distraction of irrigation systems (Dirimanova, 2007). The newly established producer cooperatives were created on the basis of the formal AICs. The opportunities for established private farms were concerned with traditions, land fragmentation and a lack of resources. After the privatisation, Bulgaria farms were structured by three groups: small scale farmers operated by people close to retirement, cooperatives, most of them with bad financial situations and large commercial farms (Penov, 2002). At this time, there were a number of cooperatives that were used as demonstration farms, with an objective of establishing private extension services. Since the experiment was not successful, the government decided to establish a National System of Agricultural Extension with external financial assistance (FAO, 2005). In 1995, the National System of Agricultural Extension was created by agreement between the National Centre for Agricultural Sciences (former name of the Agricultural Academy) and the then Ministry of Agriculture and Food Industry. It was built with the technical and financial support of the PHARE Programme - Agriculture (in the framework of two projects) for the period 1995-1999.

After 2000, the state advisory body (National Agricultural Advisory Services - NAAS) in Bulgaria was officially founded. Capacity building of the NAAS experts was carried out since its

creation and continues intensively during PHARE projects. During these projects, intensive training of NAAS experts was conducted in order to meet the needs of farmers and to help them to learn the new duties linked to the CAP. Since 2000, the NAAS participated in several international projects, where some of them are designed to strengthen the capacity of the staff mainly in various aspects of the CAP: sustainable land management, rural development, development of organic farming, developing strategies and management of agricultural organizations, etc. After the Rural Development Programme (2007-2013) began to operate, NAAS started to provide services in the context of Measure 143 "Provision of farms advisory and extension services in Bulgaria and Romania". NAAS assists farmers with their applications for four measures (the setting up of young farmers, semi-subsistence farming, setting up producer groups and agro-environmental payments). Until the end of 2012 under RDP, the SAF-PA paid over 308 million BGN to the approved projects prepared by NAAS experts (NAAS report, 2012). At the same time, many private advisory companies and professional farm associations were established. Private advisory companies mainly provided extension services to farmers regarding RDP measures and covered all other measures that have not been prioritised by NAAS. Professional farm associations mostly provided consultations to famers regarding the legal framework in the sector, created links between their members and helped to find market for products produced by their members.

4. The Agricultural Advisory Service(s)

4.1 Overview of all service suppliers

The farm advisory services in Bulgaria are currently delivered by the National Agricultural Advisory Services. It was established at the end of 1999 with the Act regulating the activities of the National Centre for Agricultural Science. The staff of NAAS benefited from different 'twining projects' and programmes to prepare for the new duties linked to the CAP. The main mission of NAAS was to provide farmers "with up-to date information, specialised extension and consultancy services and expert support to ensure effective and competitive agriculture in line with EU standards" (RDP, 2007). In, 2012, according to the Interviewed Director of Extension Services, "the advisory services in NAAS were funded by state budget (52%) and EU funds (48%) and their overall approach is to advise the farmers regarding plant growing, animal breading, environmental protection and to financially support their activities from national and European funds".

Since the start of the Rural Development Programme (2007-2013), NAAS has been chosen as a single provider of advisory services by MAF in the context of measure 143, "Provision of agriculture advice and consultancy in agriculture in Bulgaria and Romania". This measure was specially designed for Bulgaria and Romania and covered assistance to farmers (mainly small and medium - scale farmers) with their applications and business plans for four development measures⁵. NAAS with its 27 regional offices were responsible for writing applications for development measures and business plans for farmers and advising them on different agricultural issues. Their experts also supported farmers in achieving cross-compliance requirements in terms of GAEC. Services delivered under measure 143 to farmers by regional offices were free of charge. During this period, many external experts have also been hired to support the writing of applications for rural development measures to manage the increased RAAS duties. NAAS has produced nearly 11000 projects for those measures until 2011⁶. However, up until 2011 only 20 to 25% of registered farmers have benefited from this assistance (Labar, et al, 2012). At this time, according to one interviewed expert "the regional offices of NAAS worked in close cooperation with the Regional Directorates "Agriculture", the regional office of SFA-PA, the local authorities and regional scientific institutes to support their advisory work".

Since September 2011, measure 143 was replaced be measure 114- "Use of advisory services by farmers and forestry holders". Registered consultants⁷ which can provide advisory services under this measure are organisations such as NAAS, Agricultural Academy through their

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⁵ These measures were setting up of young farmers (measure 112), semi-subsistence farming (measure 141), setting up producer groups (measure 142) and agro-environmental payments (measure 214).

⁶ Since 2008-2011, NAAS has produced 10 977 projects as follows measure 112 "Setting up of young farmers" - 4406 projects; measure 214 "Environmental payments" – 2617 applications for support; measure 141 "Support for semi-subsistence farms undergoing restructuring" - 3927 projects; measure 121 "Modernization of agricultural holdings" – 27 projects and measure 311 "Diversification into non-agricultural activities" - 2 projects (NAAS report, 2011). The fact that NAAS already operates more than 12 years clearly shows that the Office has maintained its place as the supporting structure of the agricultural development.

⁷ The list of registered advisory organizations for measure 114 is officially published at the website of MAF at 19.11.2012.

regional scientific institutes, three universities⁸, one foundation and sixth private advisory companies and one private advisor for forestry holders. According to one interviewed expert in one of the Universities "the measure 114 started but it is not so popular among farmers and the interest for is low ... expectations is that in the near future farmers may become more active...". In 2012, after recognising NAAS as one of eligible consultants, their experts started actively to promote the measure 114 through seminars and cooperate with farmers to full out their applications.

Although public advisory services exist, private advisory services also emerged due to increasing need of the farms to gain support from them through rural development measures. Their activities vary from writing applications for financial support to technical assistance. These private services are used mainly by large scale farmers. Non-government organisations (farmer associations and foundations) at the national and regional levels advise their members on farming and participating in different development measures. Repeatedly, they provide information for private advisory companies that can support farmers to prepare their applications within RDP measures. Some members of farmers' associations participate in the Committees, which approve the applications to rural development measures. They are in contact with both stockholders and decision-makers and actively participate in monitoring the implementation of development of the measures. Cooperatives and producer groups also used private extension services for writing applications for RDP measures but received technical assistance and specialized agricultural consultations by regional suppliers. International trade organisations and regional suppliers, mainly, provide extension advices to farmers and farm organisations on issues related to agricultural production, plant protection and new machinery. They are important providers of new technologies and innovations for agricultural sectors. Scientific institutes and universities provide knowledge mainly through training courses and seminars to farmers. They actively participate in the implementation of measure 111 "Vocational training, information activities and dissemination of scientific knowledge" and provide training and seminar courses to farmers. NAAS also organise courses for farmers under measure 1119 and their staff.

4.2 Public policy, funding schemes and financing mechanisms

The main EU funding schemes for Bulgaria for the period 2007-2013 are: (1) the direct payments which are complimented by national payments, and (2), measures under the Rural Development Programme and the Fisheries Programme. All these programmes actively work for support farm productions and their activities.

Direct payments include single payment per hectare scheme, national animal supplements, agrienvironmental payments, payments to farmers in disadvantaged areas, support for producers of energy crops and support for producers of strawberries and raspberries intended for processing. The main beneficiaries are individuals and legal entities.

⁸ Universities that participate in the rural development measure 114 are Agricultural University of Plovdiv, Trakia University of Stara Zagora and Ruse University.

⁹ NAAS signed two contracts in May, 2011 with SFA-PA for measure 111 for educating the farmers. They educated 1460 farmers under first contract No 29/111/00169, while with second one with No 29/111/000173 educated 870 farmers (NAAS report, 2012).

The Rural Development Programme is aimed at the development of competitive agriculture and forestry, innovation in agri-food industry, preservation of natural resources and the environment and to promote employment opportunities and a better of quality of life in rural areas. The programme for rural development was officially approved on 19 February 2008 with the European Commission Decision № 755. The program budget for 2007-2013 amounts to 3 242 billion EUR, paid by EU funds and the state budget. The financial resource of the programme is distributed in priority areas ¹⁰, which are divided by concrete measures to financially support individual candidates. Managing the authority of the RDP is Directorate "Rural Development" at the Ministry of Agriculture and Food while SFA-PA through its 28 regional offices applies different measures for financial support. Eligible applicants under the programme are: farmers; forest owners and their associations, forest cooperatives, state forestry, micro processing forest products, national parks; producer organizations; enterprises in the food industry; enterprises in sectors other than agriculture, working in rural areas; municipalities in rural areas; nongovernmental organisations and community centres; local action groups.

Fishery Programme started in 2007. The main strategic objective of the programme is transforming the fisheries and aquaculture into a competitive, modern and dynamic sector and improving the quality of life in fishery areas. The programme budget is over 101 billion EUR, paid by European Fisheries Funds and state budget. The main beneficiaries are legal entities, sole proprietors, owners of fishing vessels, etc.

In Bulgaria, the *state aids* for supporting farmers include over 30 programmes. Some of them are target subsidies to support the nourishment of animals and birds from the national genetic fund and the controlled populations; target subsidies to support farmers who produce bee honey: target subsidies to support the breeding associations: target subsidies for use of irrigation by the rice producers, etc. There are also small programmes for purchasing forage for animals (i.e. stock-breeders, poultry-farmers and pig-breeders); credit schemes for long and short term investments for buying seeds, mineral fertilizers for productions, fodders, seedlings, etc¹¹. In the final interviews, the minister of the MAF reported that until the middle of 2013, 80% of the state aids were utilized by farmers for 22 schemes- 87% of the total budget of RDP were contracted and paid more than 55% of these funds¹².

4.3 Methods and Human Resources

The total number of the extension staff in the *public organisation of NAAS* in 2012 was 87 with average age between 31 and 50. The staff with university degrees are 99% and 62% are females. The distribution of staff activities in NAAS is 77% on advisory work, 18% on administration and management and 5% on work in the analytical laboratory. In NAAS, the number of certified advisors for cross-compliance is 82, while for land evaluation there are only 40 advisors. NAAS

¹⁰ Financial support under the RDP are grouped in four priority areas as follows: Axis 1 "Improving the competitiveness of the agricultural and forestry sectors" - 37% of the budget of the RDP; Axis 2 "Improving the environment and nature" - 24% of the budget; Axis 3 "Quality of life in rural areas and diversification of the rural economy" - 27% of the budget; and Axis 4: Leader - 2.5% of the budget.

¹¹ The list of those programs is published at the website of the State Fund "Agriculture".

¹² The article is published in Bulgarian, and presents the current situation of the spent state and EU funds for Bulgarian farmers. http://www.investor.bg/biudjet-i-finansi/333/a/usvoeni-sa-80-ot-parite-predvideni-v-nacionalniia-biudjet-za-zemedelieto,154165/

staff received their salary based on advisory packages funded by RDP measure 143 and their free of charge advice to farmers was financially supported by state budget. The average number of years for advisors working in the NAAS is 8, and the share of advisors with less than 3 years is 11% and with more than 12 years is 15% (until 30 April 2013). Time allocation of the advisory staff is as follows: management activities – 12.5%, information activities – 12.5%, education activities for clients – 10%, advisory services – 60% and improving of own knowledge and skills – 5%. The percentage of dominant working methods used by NAAS extension staff for farmers is 70% individual extension (one to one on the farm – 5%, one to one outside the farm – 50%, telephone helpdesk – 15%), 12% group extension (small group advice on the farm – 3% and small group advice outside the farm – 9%) and 18% on mass media extension (internet - 1%, advice via website tools – 5% and publications, radio and TV – 12%)¹³. The experts of the NAAS participate in media events (in radio, TV and local cableTV) in order to provide information to farmers regarding the RDP measures, cross-compliance and other issues. By the end of 2012, NAAS published 76 articles in the national and local press, produced 77 radio presentations and interviews and 53 TV presentations (NAAS report, 2012).

In 2012, the NAAS experts attended 14 courses ¹⁴ organised by other organisations and 5 courses ¹⁵ organised by their structure. The most attended training courses organised for the NAAS's staff are cross-compliance, implementation of RDP measure 141, dairy breeding, agrienvironmental topics and direct payments. These training courses for the staff were provided by universities, research institutes, public authorities and agricultural suppliers. Also, NAAS experts participated in various working groups, roundtable and other events of the MAF and other institutions. In November 2012, NAAS started a project for improving the administrative capacity of their staff. The project is supported by an operational programme "Administrative Capacity" and is for a period of one year. The main objectives of the project are improving the staff competence in the performance of their duties and increase their knowledge and skills to provide better public services; creating the effective teamwork and synchronising work among the staff; and improving the qualifications of employees through their involvement in training and educating the staff in a way that is consistent with the functions that they perform and their individual needs.

In the *private sector*, extension staff numbers are small (often not more than 5 full-time employees) and when they need special advisory consultations they employ a person or persons part-time to provide such special services. Private advisory companies provide individual consolations on farm and telephone) and rarely use other methods. At the *Universities and*

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¹³ The information for NAAS staff and information for methods of advisory work was taken by PRO AKIS questionnaire, conducted with the NAAS expert in May, 2013.

¹⁴ Courses organized by other organizations are introduction to public administration - organized by the Institute of Public Administration (IPA) - 3 employees; create an environment for practical implementation of the law for E-Government - organized by IPA - 1 employee; spreadsheets with MS excel / basic course / organized by IPA - 3 employees; spreadsheets with MS excel / advanced / organized by IPA - 3 employees; Implementation of new regulations to manage and evaluate the performance of the state administration - organized by IPA - 1 employee; etc. (NAAS report, 2012, 43-44)

¹⁵ Courses organized by NAAS for their staff is with cooperation with Agricultural University of Plovdiv, Trakia University, St. Zagora and Agricultural Academy. Mainly, the courses organized for agronomists- and zoo engineers-experts are related to statutory management requirements and conditions for maintaining the land in good agricultural and environmental conditions and issues related to RDP measure 141 (NAAS report, 2012, 44-45).

Agricultural Academy, the staff involved in extension services provide consultations mostly to a large number of farmers (over 10-15 persons) through courses and individual consultations to clients who have specific needs.

4.4 Client and topics/content

The total number of farms covered by *public advisory bodies* is 37200 (August 2012 - April 2013) where the average number of farmers received annual extension services is 20 000. The major clients for NAAS are small-commercial farms, semi-subsistence farms (1-5 ha) and young farmers. They provide the following types of services to its clients: (1) vocation training, (2) extension activities focused on the providing and updating information for farmers, knowledge and experience exchange and others; (3) preparation of farmers' applications for the RDP and (4) technical assistance in crop and livestock production. Medium-commercial farms, subsistence farms, part-time farmers and female farmers are the main target group for NAAS and large-commercial farms and farm-employees are not targeted. Frequently delivered advisory topics by NAAS are rural development measure 121 and measure 141, cross-compliance and state schemes for financing and crediting the farmers. Followed by topics such as plant production, animal production, stable design, bookkeeping, environmental and contract agreement for farmland. Topics regarding the machinery, business diversification, processing and new products, and renewable energies are seldom provided. The main target groups of the NAAS look for advice on all agricultural topics except machinery.

The main clients of the *private advisory companies* are large and medium-commercial farms, but they also work with small-commercial farms, subsistence farms and female farmers. However, they do not work with semi-subsistence farmers, part-time farmers and young farmers. They deliver advice on plant and animal production, stable design, some of rural development measures and agri-environment programmes to their clients. They do not provide advice for cross-compliance, bookkeeping and business diversifications. The *universities and agricultural academy* provide technical assistance to farmers for crop and animal productions, machinery use and agri-environment issues and organise many specialised training courses for farmers. *International companies and regional trade organisations* provide specific advice to their clients on the topics related their specific products that farmers use in their crop and animal productions.

4.5 Linkages with other AKIS actors

All organisations involved in extension in the field of agriculture have to interact with MAF and SFA-PA for implementation of the RDP and other EU and state programmes. MAF as a front office together with its secondary structures (SFA-PA, NAAS, Regional Directorates "Agriculture", Agricultural Academy, etc.) is the main AKIS provider, while supporting function has its back offices at the regional and municipal levels (regional paying offices, RAAS, AMS, regional scientific institutes). *In the figure 1*, the AKIS organisations in Bulgaria are represented by four main sectors: public sector including research and education; private advisory sector presenting private advisory services, independent advisors, international trade organisations and regional suppliers; farmer based organisations - production cooperatives and

¹⁶ The information for clients and topics was taken by PRO AKIS questionnaire, conducted with the NAAS expert in May, 2013.

producer groups and non-government organisations including professional farm associations and foundations. There are four types of relationships defined in the figure: (1) between MAF and other public organisations (SFA-PA and NAAS) consisting of defining and delegating missions, training staff and providing resources, (2) between MAF (represented by its subordinated structures at regional and municipal levels) and farmers, (3) between MAF, SFA-PA and diverse extension services providers (private advisory sector, farmer based organizations, NGOs, universities and scientific institutes), and (4) between extension service providers and farmers. Principally, public organisations (SFA-PA, NAAS, universities and regional scientific institutes) are teamed up for many initiatives to distribute the knowledge and to provide the necessary information to the farmers. They have strong formal hierarchical relations with the MAF. Among them, the information and knowledge flow is formal. Scientific institutions and universities always work together to provide their scientific achievements to the farmers by organising training courses and seminars. In the private sector, the cooperation among the private extension service providers is not common practice. They do not work together and often distribute their services to the farmers separately. However, there is cooperation among private extension providers and professional farm organisations for clients and information.

The figure 2 presents the three types of advice that different AKIS organisations provide to the farmers: (1) direct payments, (2) RDP measures and other EU and state programmes and (3) technical assistance in the field of agriculture. SFA-PA and their regional offices, mostly, provide information regarding direct payments and development measures. The Regional Directorates "Agriculture" conduct explanatory and consultancy activities such as organising seminars and training courses for informing farmers for the new policies and supported agricultural programmes as well as issues related the agricultural sector. They distribute the newest information on all programmes and different events through their agricultural municipal offices ¹⁷. The regional offices of NAAS, on the one hand, are providers of information and knowledge to farmers on the development measures and on issues relating to agricultural production, and on the other hand, are recipients of the most relevant knowledge sources from universities, public research institutes and public authorities. Their sources of knowledge partially come from internet and non-government organisations but there are no sources of knowledge from private consultancies and private companies¹⁸. Scientific institutes and universities provide technical assistance on agricultural production, new technology and innovations, and also provide training courses and extension services to farmers under development measures 111 and 114. The private advisory sector offers information for some development measures, while only for issues in the field of agriculture international trade organisations, regional suppliers, cooperatives and producers groups. The NGOs advise and help

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¹⁷ According to the semi-structure interview conducted with the Director of Regional Directorate "Agriculture" in Plovdiv, "the Regional Directorates and their agricultural municipal offices are used by SFA-PA and NAAS as primary structure for transmitting information to the farmers. They distribute the information to farmers for forthcoming seminars and meetings through using their built boards or in front of the mayor buildings. However, they often cooperate with farmers to collect statistical information required by Agrostatistics and Strategies Directorate at the MAF."

¹⁸ Outcome from the conducted interview with NAAS expert who also added that "the NAAS cooperates with public authorities, universities, public research institute, private companies (providing inputs) and professional farm organizations, but there is no cooperation with private consultancies and private companies (processing agricultural products)"

their members on both agricultural production and participation in the rural development measures.

4.6 Programming and planning of advisory work

The NAAS keeps a record of advisors work of their staff through timesheets, financial indicators and farm performance evaluation. Since 2011 NAAS has started to operate an information system that connects all 27 RAAS with the central office under strict access rules, data sharing and security. There are three system modules – extension, training and administration. The extension module of the information system supports the exchange of extension information among central NAAS office and 27 regional offices and allows the daily monitoring of the staff in the regional offices. The training module serves the activities of the measure 111 for vocational training, information activities and dissemination of scientific knowledge. The administration module helps the administrative activities of the central NAAS office and regional offices and exchange of administration information between them. The NAAS also has an incentive programme for rewarding the performance of their advisors work as additional payments based on actual results and approved projects under the RDP. The NAAS is planning its work on the basis of an annual plan and programme for each RAAS. However, often the monthly schedule of RAAS is changed because of e.g. a new campaign for assisting applications to certain development measures, for visiting seminars or training courses, etc. Within the private extension providers, there is not so much information about the planning of their advisory work. So far, non-government organisations rely on external funding (international donors), and for that reason, do not have a sustainable strategy.

5. Characteristics of the Farm Advisory System in Bulgaria

In Bulgaria, the Farm Advisory System (FAS) is organised by the state through 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 the certification and control of the FAS. In recent years FAS has contributed to the successful implementation of CAP. In 2012, The NAAS staff attended a training course for cross-compliance on the topic "Statutory management requirements and conditions for GAEC" conducted by Centre for Vocabulary Education of NAAS. The main course topics were introduction to the system of cross-compliance; the compulsory requirements for environmental management; the management of public and animal health; animal welfare; maintaining the land in good agricultural and environmental conditions¹⁹. However, farm advisory system in Bulgaria is not fully complemented by the private sector. For instance, the existing non-government farm advisory organisation and other potential consultancy players are not supported in term of increasing their professional knowledge (regarding cross-compliance standards).

The Bulgarian public advisory system is considered to be able to provide a wide range of services related to agricultural production, cross-compliance, management, environment, quality labels, etc. However, in recent years, NAAS staff numbers at the regional offices were reduced and this affected their ability to meet farmers' needs. In order to function successfully, the regional offices should include at least team with 3 experts (agronomist, zoo-engineer and agricultural economist), but in some regional offices only two representatives are employed.

The main suggestion for Bulgaria, according to the FAS report in 2009, is to set-up a network at the European level among NAAS and other FAS authorised organisations for sharing experiences and information (for instance, on tools and methods). In addition, the FAS report suggested using international experiences and the educational institutions of other EU member states for additional education of agricultural advisors.

¹⁹ Lectures of the course were provided by Agricultural University of Ploydiv, Trakia University of Stara Zagora and Bulgaria Agency for Food Safety.

6. Summary and Conclusions

AKIS in Bulgaria is represented by the public authority (MAF), public extension system (NAAS), agricultural scientific institutes and universities, including private advisory companies and non-government organisations. The public extension system supports and facilitates people engaged in agricultural production to solve problems and obtain information, skills and technologies. Since the start of the RDP in 2007, NAAS was the only beneficiary for measure 143, which provided assistance to small and medium-sized farmers in its application for two measures of RDP while private advisory companies provided extension services to other measures (mainly measure 121). At this time a number of meetings and trainings were organised to inform farmers at the regional and municipal levels. After such a big campaign (even, using the TV and radio), thousands of farmers applied to the programme with the expectation to receive financial support for improving their facilities and productions. This process of implementation of the rural development measures (assisting farmers to benefit from them) 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.

This study presents clear linkages among various AKIS players at the different levels of the current Bulgarian advisory system. There are several linkages between various AKIS actors²⁰ at different levels:

- Between MAF and other public organisations (NAAS and SFA-PA) consisting of defining
 and delegating missions, training staff and providing resources. They need to work together
 across different levels. 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;
- Between MAF and educational and research organisations (universities and regional scientific institutes with Agricultural Academy) 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 students and future agricultural experts;
- Between MAF, SFA-PA and diverse extension services providers (private advisory sector, farmer based organisations and NGOs). Public authorities need to be more transparent and to provide information related to changes in legislation. NGOs as well as private extension providers, in the past, had to change the project application due to unexpected changes in administrative documents;
- Between public and private extension services providers and farmers. This link is so
 important for both actors. Farmers need support and the extension providers need to provide
 it before and during the application process and to continue working with them and
 afterwards. During the conducted interviews with public and private extension experts, they

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 $^{^{20}}$ Some of linkages between various AKIS stakeholders was indentifies also in the Analytical Report by Director of the NAAS, July 2011

said that "application documents and procedures for the rural development measures were too complicated for farmers to prepare them without advisory help. Therefore, they expect, in the new programme period (2013-2020), simplified regulations for application procedures and a quick evaluation process".

- Between MAF and NGOs (professional farm organizations and foundations). The non-government organisations closely work with the MAF. Their members participated in the preparation, implementation, monitoring and evaluation of the rural development measures for period 2007-2013. Also, the professional farm organisations closely work with private extension providers and their members, usually, use their services.
- Between international and regional suppliers and farmers. Their advisory services to farmers mainly relate to plant protection, machinery and seed use and agricultural production.

Key outcomes of advisory system in Bulgaria:

- Public extension service provider (NAAS) offers advisory services to farmers, up to date information, training and technical assistance. Their officers have direct access to the latest information and instructions of application procedures and requirements of the RDP measures. The assistance is free of charge. The capacity of human resource management in the NAAS is limited. The reason is that, even the extension experts may upgrade their technical skills and knowledge through attending training courses and seminars, participating in conferences or through the Internet, however, they do not have management skills (such as team building, delegation, setting and monitoring objectives, etc.) and knowledge skills about new technologies and methods of farming (part of the experts are aged agronomists, who have only good knowledge and skills on traditional methods of farming). In some cases, the lack of finance constrains RAAS experts to visit farmers. This restricts experts to develop an opinion based on the real facts of each particular farm's situation. NAAS has restricted the number of people working in the regional offices, and therefore, they cannot support all farmers. If they keep a minimum staff of three experts in the regional offices this will allow the opportunity to provide full professional advisory packages to the farmers. The lack of cooperation among public advisory bodies and private extension companies also constrains farmers when choosing which extension services they can trust. Such shortcomings have to be taken into consideration when designing the future FAS in Bulgaria. The provision of advisory services should continue in the country and it should be one of the priorities at the EU level.
- All universities, which provide agricultural education, and regional research institutes, which belong to the Agricultural Academy, offer education and knowledge under measure 111 and advisory services under measures 114. On the one hand, they cooperate with other public organisations at the national and regional levels. On the other hand their academic staff often participate as lecturers in different NAAS organised seminars and courses.
- Private advisory companies in Bulgaria are, mostly, established by experts, who have
 previously worked in the public sector. There are two types of people in their staff, young
 educated people and experienced employees, coming from the NAAS or other public
 institutions. They provide the same services like in their formal organisations (for instance,

preparing applications to their clients for different development measures and other national and international programs), but for better working conditions and salaries. Individual consultants are educated people working part-time or full-time preparing applications for some development measures for small-scale farmers. International and regional trade suppliers have well-established networks among them and provide extension services to the farmers related to plant protection, machinery and seed use and agricultural production.

- The main problems of the cooperatives are the low incomes of their productions, which constrain them from re-investing in new machinery, buying new seeds and restoring their farms. Producer groups are not common in Bulgaria. The existing producer groups for fruit and vegetables in the country have the advantage of being able to use the information and knowledge from the best private advisory companies, the full support of advisers from the MAF and SFA-PA and the experience of the other producer groups in Europe. The main problem that they face is the lack of experience of the management staff (for instance, difficulties for reporting the costs spent by their members).
- NGOs in Bulgaria are known among farmers as professional and efficient extension providers. They are included in the consultation process during the design, monitoring and control of RDP measures (2007-2013) and actively participate in preparing the new programming period (2014-2020). The positive points of NGOs are their motivated experts, who keep personal working connections with local communities and farmers, provide knowledge and information to farmers and involve farmers in diverse business activities related to their farming. The weaknesses of NGOs are that they do not have relations with public extension providers, there is no coordination or little information exchange among different non-government organisations and they do not have clear strategy. NGOs and their farmer-members rarely ask about training and information from the MAF and NAAS²¹, the reason is that these organisations represent different agricultural sectors and MAF and the public extension providers are confused as to which organisations to invite to the events.
- The Farm Advisory System is represented by the NAAS. The range of advice and services that the FAS provides in Bulgaria mainly covers development measures. The costs for consulting activities are around 20-25% covered from the total number of registered farmers due to a lack of sufficient funding and administrative staff. Unfortunately, the private advisory sector in Bulgaria is not included in FAS and during the conducted interviews with private advisors, they did not know a lot about the system.

At the present, the MAF is in the process of preparing for the new rural development programme for the period 2014-2020. The programme focuses on six topics: (1) stimulating knowledge transfer and innovation in agriculture, forestry and rural areas; (2) increasing competitiveness of all types of agriculture and enhancing farm viability; (3) stimulating good organisation of food chain and risk management in agriculture; (4) protecting and enhancing ecosystems dependent on agriculture and forestry; (5) supporting a move toward a low carbon and sustainable climate changes in agriculture and forestry and (6) promoting the social inclusion, reducing poverty and economic development in rural area. In the new programming period, the main attention is on

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²¹ This conclusion was pointed out by the Director of the NAAS in the Analytical Report for Bulgaria (2011).

forested areas such as the creation of woodland, agro-forestry system, protection and restoration of damage to forests, investment in new technologies for forestry and processing and marketing of forest products. Another focus of the new programme is to increase the training of the farmers and young entrepreneurs through various programmes on knowledge transfer such as seminars, training courses and different demonstrative activities to farmers on innovations in agriculture. Also, a new element in the programming period is that all investments in physical assets will be covered by one measure. This will help farmers to increase their value added in the farms through well-planned and applicable projects. The expectation for the new programming period (2014-2020) is that it could be a good continuation of the previous RDP (2007-2013).

7. Methodological reflections and acknowledgements

The quality and comprehensiveness of the information provided by this country report for Bulgaria is based on 10 semi-structured interviews with experts from different key organisations (MAF, NAAS, AA, Regional Directorate "Agriculture" of Plovdiv, Agricultural University, two producer groups and one foundation) and interviews conducted with different extension providers. The main difficulties during the survey were gathering contact data, collecting data about human resources and financial issues, lack of willingness of private extension providers to participate in the survey and the low rate of responses to the sent questionnaires. Many of the received questionnaires arrived to us after several phone calls to the responders or were conducted on the phone. The main information sources for writing this country report are national reports provided by the MAF and NAAS, semi-structured interviews with experts, international reports for Bulgaria and a few articles.

I would like to say a special gratitude to my colleague, Dr. Boryana Ivanova, of the Agricultural University, who has done wonderful work sending and collecting questionnaires to all the extension providers and participating carrying out some of the semi-structure interviews with the experts. Also, I am grateful to all experts who participate in the semi-structured interviews and those who responded to the questionnaires.

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 $FAS: \underline{http://ec.europa.eu/agriculture/direct-support/cross-compliance/farm-advisory-\underline{system/index_en.htm}$

MAF: http://www.mzh.government.bg/mzh/Home.aspx

SFA: http://www.dfz.bg/en/certificates_en/

NAAS: http://www.naas.government.bg/en

NSI: http://www.nsi.bg/

9. Appendices

9.1. List of AKIS institutions (names, address, website)

Name of institutions	Address	Website	Status (public/R&E/ private/FBO/NGO)*
Ministry of Agriculture and Food (MAF) with 28 Regional Directorates and 234 Agricultural Municipal Services	55, Hristo Botev Blvd., 1040 Sofia, Bulgaria	http://www.mzh.government.bg/MZH/en/Home.as px	Public
National Agricultural Advisory Services (NAAS) with 27 regional offices	7, Shosse Bankya 1331 Sofia, Bulgaria	http://www.naas.government.bg/en	Public
State Fund Agriculture (SFA) – Paying Agency (PA) – 28 regional offices	136, "Tsar Boris III, 1618 Sofia, Bulgaria	http://www.dfz.bg/en	Public
Agricultural Academy – including 28 scientific institutes	30 Suhodolska str, Sofia 1373	http://www.agriacad.bg/	R&E
Agricultural University	12, Mendeleev str., 4000 Plovdiv, Bulgaria	http://www.au-plovdiv.bg/	R&E
Trakia University, (Advisory Service for animal breading in Trakia University)	Student's campus, 6000 Stara Zagora, Bulgaria	http://www.uni-sz.bg/index.php?q=engl http://virtru2.uni-sz.bg/extension/	R&E
University of Forestry	10 Kliment Ohridsky Blvd., Sofia 1756, Bulgaria	http://www.ltu.bg/a	R&E
Ruse University, Agrarian and Industrial Faculty	8, "Studentska" St, 7017 Ruse, Bulgaria	http://www.uni-ruse.bg/en/ru.php	R&E
University of Food Technologies	26 Maritsa Blvd, 4000 Plovdiv	http://uft-plovdiv.bg/index.php	R&E
Private advisory sector	Many private companies, individual consultants, etc		Private
Cooperatives	Around 1200	-	FBO
Fruit Logistic - Fruktiera -producer group	82, Hristo Botev blv., fl. 6, office 601	www.fruktiera.com	FBO
Semele - producer group	82, Hristo Botev blv., fl. 6, office 601	www.semele.eu	FBO
22 professional orga	anisations and website of the MAF)		NGO

9.2. List of semi-structured interview partners

No	Name of interview partners	Organization
1.	Dr. Eng. Maya Ninova	State expert of the Rural Development Directorate at the Ministry of Agriculture and Food
2.	Dimitar Vanchev	Director of the General Directorate "Extension services" at NAAS
3.	Prof. Valentin Bachvarov	Main scientific secretary to Agricultural Academy at MAF
4.	Eng. Elena Dimova	Director Directorate "Administrative and legal, financial and economic activities and human resources" to Regional Directorate "Agriculture", Plovdiv
5.	Assoc. Prof. Dr. Ivan Penov	Foundation "Land – source of income", Plovdiv
6.	Assoc. Prof. Dr. Tonya Georgieva	Director of Center for Vocabulary Education at the Agricultural University
7.	Anglel Angelov	Managing Director of private advisory agency – Bultrade Euro Consult Ltd, Plovdiv
8.	Siviya Russo	Regional representative for Plovdiv and Pazadzhik to the Bulgarian Association for Agricultural Producers
9.	Rosica Bouklieva	Marketing manager of Semele producer group for fruit and vegetables and
10.	Konstantina Semerdzhieva	Marketing manager of Fruit Logistic producer group for fruit and vegetables, Plovdiv

9.3. List of partners for conducted questionnaires (addressees, status)

No	Name of institutions/organizations/individuals	Address	Status (public/R&E/ private/FBO/NGO) *
1.	National Agricultural Advisory Services (NAAS)	7, Shosse Bankya, 1331 Sofia, Bulgaria	Public
2.	Regional Agricultural Advisory Services - Plovdiv	122 Maritsa Bul., 1th Floor, Plovdiv 4000, Bulgaria	Public
3.	Fruit Growing Institute	12, Ostromila, 4004, Plovdiv, Bulgaria	R&E
4.	Institute of Vegetable "Maritza"	32, Brezovsko shoce str., 4003 Plovdiv, Bulgaria	R&E
5.	Agricultural University	12, Mendeleev str., 4000 Plovdiv, Bulgaria	R&E
6.	University of Forestry	10 Kliment Ohridsky Blvd., Sofia 1756, Bulgaria	R&E
7.	Trakia University, (Advisory Service for animal breading in Trakia University)	Student's campus, 6000 Stara Zagora, Bulgaria	R&E
8.	"KK Gajdarski i sin" Ltd.	1, Vasil Levski str., floor 11, room 1105, Pleven, 5800, Bulgaria	Private
9.	"Dansi Food" Ltd.	8 December str, bl. 23, floor 1, Sofia	Private
10.	Bultrade Euro Consult Ltd. – private advisory company	86 Kapitan Raycho Str., 4000 Plovdiv	Private
11.	Krum Hristov	Private individual consultant	Private
12.	Agricultural Cooperative "Edisnstvo"	Located at the formal state cooperative, in village Kostievo	FBO
13.	Agricultural Cooperative "Rodopi"	1a, Edelvais str.,located at the formal state cooperative in village Kuklen	FBO
14.	Fruit Logistic -Fruktiera -producer group	82, Hristo Botev blv., fl. 6, office 601, Plovdiv	FBO

15.	Semele - producer group	82, Hristo Botev blv., fl. 6, office 601, Plovdiv	FBO
16.	Land source of Income Foundation	122 Maritsa Bul., 5th Floor, Room 25, 4000 Plovdiv	NGO
17.	Bioselena	41a, Shipka str., Sofia	NGO
18.	Union of Grain Producers - Plovdiv	92, Ivan Vazov str., 4000 Plovdiv	NGO