



Prospects for Farmers' Support:  
Advisory Services in European AKIS

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

March 2014

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This project has received funding from the European Union's Seventh Framework Programme for research, technological development and demonstration under grant agreement no 311994

Please reference this report as follows:

Baptista, A.; Cristovão, A.; Koehnen, T.; Madureira, L.; Pires, M. (2014): AKIS and advisory services in Portugal. Report for the AKIS inventory (WP3) of the PRO AKIS project. Online resource: [www.proakis.eu/publicationsandevents/pubs](http://www.proakis.eu/publicationsandevents/pubs)

## Executive summary

The main aim of the report is to provide a comprehensive description of the Agricultural Knowledge and Information System (AKIS) in Portugal, 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 was then integrated in the reports.

In the last 30 years, Portuguese agriculture and rural areas have faced a significant reorganisation both at social and economic levels, including a sharp reduction in the number of farms and a significant decrease and ageing of the population. The changes that occurred during this period favoured the emergence of new stakeholders, using innovation to meet their needs, and the development of new networks (between farmers, farmers and institutions, farmers and consumers), modifying the pre-existent relationships among the actors, both at local and national levels.

Currently the Portuguese AKIS is characterised by the large number and diversity of actors, as well as the organisational fragmentation and relatively low weight and absence of coordination by the State, particularly in the case of advisory services, an activity that tends to be performed by many farmer-based organisations. The other AKIS actors are within colleges of agriculture (regional universities and poly technical institutions), national governmental research centres, consulting agencies and even remnants of the public agricultural advisory services being the regional agricultural directorates.

The interactions between the farmers and the farmer advisory service (FAS) is strong while the agricultural research sub-system is weakly connected to the farmers. In addition, the linkages to agricultural research sub-system and FAS sub-system is also weak. In general, the Portuguese FAS has limited dialogue to the other AKIS actors.

## Contents

Executive summary .....	3
List of Acronyms .....	5
List of Figures .....	5
List of Tables .....	5
1. Main structural characteristics of agricultural sector in Portugal .....	6
2. Characteristics of AKIS .....	7
2.1 AKIS description .....	7
2.2 AKIS diagram .....	9
3. History of the advisory system .....	11
4. The Agricultural Advisory Service(s) .....	13
4.1 Overview of all service suppliers .....	13
4.2 Public policy, funding schemes and financing mechanisms .....	20
4.3 Methods and Human Resources .....	21
4.4 Client and topics/content .....	21
4.5 Linkages with other AKIS actors .....	21
4.6 Programming and planning of advisory work .....	22
5. Characteristics of Farm Advisory System (EC reg) .....	23
5.1 Organisations forming FAS .....	23
5.2 Evaluation of implementation of FAS .....	23
6. Summary and Conclusions .....	25
6.1 Summary and conclusions on section 1–3 .....	25
6.2 Summary and conclusions on section 4–5 .....	26
7. Acknowledgement of partners, information sources and reflection on methodology .....	28
8. References .....	29
9. Appendices .....	31
9.1 List of interviewed partners .....	31
9.2 AKIS institutions .....	31

## List of Acronyms

<b>Acronym</b>	<b>Explanation</b>
AGROBIO	Portuguese Association of Organic Agriculture
AJAP	Association of Young Farmers of Portugal
AKIS	Agricultural Knowledge and Information/ Innovation Systems
ATEVA	Technical Association of Winegrowers of Alentejo
CAP	Confederation of Portuguese Farmers
CNA	National Confederation of Agriculture
CNJ	National Federation of Young Farmers and Rural Development
CONFAGRI	National Confederation of Agriculture Cooperatives and Farm Credit Cooperatives
EU	European Union
FAS	Farm Advisory System
FATA	Federation of Agriculture of Trás-os-Montes and Alto Douro
FORESTIS	Portuguese Forestry Association
GDP	Gross Domestic Product
GPP	Office of Planning and Policy
IFAP	Financial Institute of Agriculture and Fisheries
INIA	National Institute for Agricultural Research
INRB	National Institute of Biological Resources
IPIMAR	National Institute for Ocean Resources Research
LAG	Local Action Group
LDAs	Local Development Associations
LEADER	Common Initiative for Rural Development
LNIV	National Institute for Veterinary Medicine Research
MAMAOT	Ministry of Agriculture, Ocean, Environment and Spatial Planning
NGO	Non-Government Organisation
OECD	Organisation for Economic Cooperation and Development
PROAGRI	National Agricultural Investment Program
PROAKIS	Prospects for Farmers' Support: Advisory Services in European AKIS
UAA	Utilized Agricultural Area
UTAD	University of Trás-os-montes e Alto Douro

## List of Figures

Figure 1: Overview of AKIS actors in Portugal .....	9
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## List of Tables

Table 1: Overview of organisations creating the AKIS .....	10
Table 2: Interviewed partners by PROAKIS Portuguese team.....	31
Table 3: AKIS institution in Portugal .....	31

## 1. Main structural characteristics of agricultural sector in Portugal

The population in Portugal is about 10.5 million people. In 2010, Portugal had 305,270 farms or agricultural holdings and the contribution to gross domestic product (GDP) was 1.3% with the agricultural sector contributing 10% to the national employment not including those employed in the agricultural industry. Nevertheless, since 2000 the number of agricultural holdings decreased by a little more than 25% in ten years. Also, 71% of the managers for these agricultural holdings are aged 55 or older and women account for about 30% of the farm managers in Portugal. However, the average farmer is 63 years old and has completed the 1<sup>st</sup> cycle of basic education and works exclusively in the agricultural sector.

The utilized agricultural area (UAA) makes up about 40% of the Portuguese territory that includes arable land, and land under permanent grassland and crops, while 50% of the agricultural holdings in 2010 were less than 2 hectares. The average UAA per holding increased from 9 to 12 hectares from 2000 to 2010 and is connected to the dramatic decrease of farmers and then absorption of the smaller farm units with other holdings.

The harvested production of the main arable crops in tons in 2010 would be maize (747); rice (182); wheat (54); barley (31) and rye (17). There has been a reduction in the production of these main crops as the arable area decreased by 33% from 2000 to 2010. This is a reduction in the area planted by cereals for example, wheat declined from 74,000 hectares to 11,000. However, the cereal yield in the last 10 years increased to 3.3 tons per hectare from 2.8 tons in 2000. The production of vegetables and fruit in the unit of tons is tomatoes (1245); apples (247); oranges (213); carrots (85) onions (39) and peaches (35). The UAA for arable land is 30.6%. Permanent crops such as nut trees, citrus and vineyards represent 19% of UAA and have decreased by 3% since 2000. Permanent grasslands (49.6% of UAA) have increased by 28% during 2000 and 2010 by replacing some of the area for arable land. The livestock unit numbers in 2010 are represented by cattle (1,029,900); sheep (222,000); goats (42,100); pigs (458,100) and poultry (403,100). Milk production is 12, 278 tons. The diversity within the productive sector is supported by a total UAA in Portugal of 3,668,150 hectares. The organic area of production is 5.8% of the total UAA and 10% of the arable land. In 2010, the Portuguese agricultural holdings contributed to 43 kilotons of ammonia emission that decreased in the last 10 years by -16.7%. The concern for biodiversity is reflected in these changes in emissions and a greater area involved in organic farming.

The family farm labour force in Portugal for 2010 was 657,800, while the non-family labour force was 50,300 farm labourers. On the farm labour contribution is 70% family, such as spouse, sons, daughters and relatives. Over 20% of the farm operators in Portugal have another gainful income activity. The number of holdings that receive direct payment in 2010 was 228,512 that include 75% of the total number of farms or holdings in Portugal.

## 2. Characteristics of AKIS

### 2.1 KIS description

The Portuguese AKIS involves a set of actors performing a variety of functions, namely: policymaking; regulation, monitoring and evaluation; research; education; training; information, extension and consultancy work.

These actors are both public and private, and the former may or may not have profit making objectives. The public actors are mostly linked to such areas as policymaking, regulation and monitoring, research, information, education and training. The non-profit actors are farmers' organisations of different types that, besides lobbying and policy related and administrative roles, are involved in training, information transfer and extension. The private actors can be linked to industries providing farm equipment and inputs, or consultancy firms, usually small, delivering services in such areas as project development (and farm investment plans), farm accountancy, and training.

The policymaking and regulation sub-system is represented by the Agricultural Ministry Services, presently the Ministry of Agriculture, Ocean, Environment and Spatial Planning (MAMAOT), that includes the Secretaries of State for (1) Agriculture, (2) Forestry and Rural Development, (3) Ocean, (4) Environment and Spatial Planning, and (5) Food and Agribusiness Research, in a very complex structure with central and regional services. The policy brain of the Ministry is the Office of Planning and Policy, or GPP for short, and their mission is to support the definition of strategic guidelines, priorities and policy objectives of the MAMAOT and coordinate, monitor and evaluate their implementation and ensure its representation at the European Union (EU) and international levels.

Monitoring and evaluation functions are a responsibility of the regional services of MAMAOT, the so called Regional Directorates for Agriculture and Fisheries, that serve as operational services to the Ministry with assigned missions in other areas, mostly with administrative characteristics, but also in the fields of information and extension.

The research sub-system comprises of two major types of public institutions: the Universities and Polytechnic Institutes that are part of the higher education system, under the Ministry of Science and Higher Education; and the National Institute of Biological Resources (INBR), under the Ministry of Agriculture (MAMAOT). In the higher education institutions research is developed by 15 Research Centres, spread throughout the country. The INBR includes three Institutes dealing respectively with Agriculture (INIA), Veterinary Medicine (LNIV) and Ocean Resources (IPIMAR). INIA comprises of 12 specialized units, mostly located in the southern region of Portugal, and LNIV three units, two in the south and one in the north. Besides research, these two Institutes provide a variety of laboratory services, as well as informational ones through different sorts of publications.

Agricultural research conducted by the above-mentioned State Institutes and research units has been sharply reduced in the last 20 years, either by non-renewal of its staff, or by merging or closure of department services. For instance, the network of experimental farms has declined sharply in recent decades. In general, the policy of agricultural research has focused on the transfer of this function to universities. In this circumstance, the mentioned State Institutes are

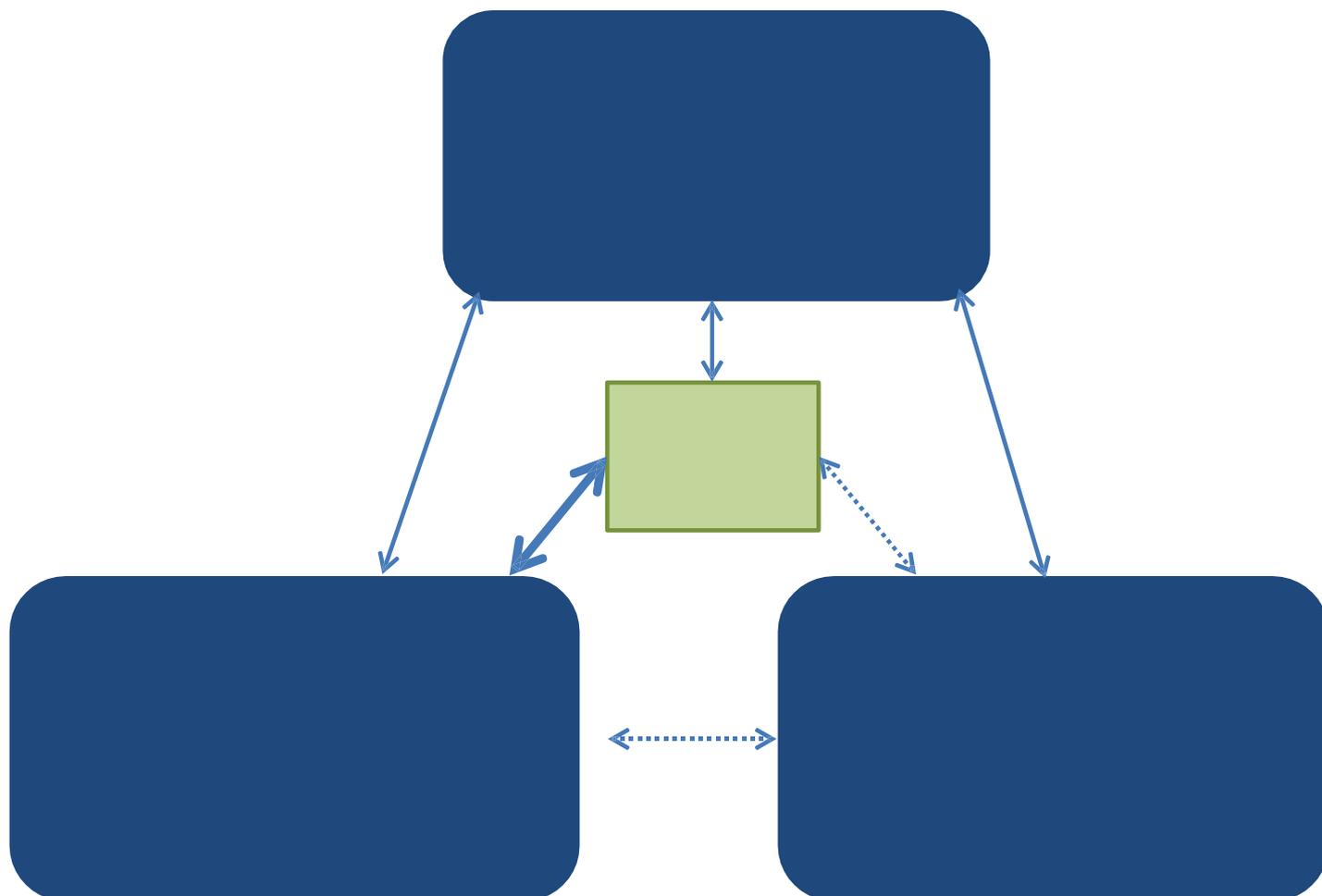
today very fragile, with models of organisation and funding in constant change and lack of clear objectives.

The agricultural education sub-system is under the public sector. Higher education is run by the Universities and Polytechnic Institutes, representing a set of 14 institutions, and is implemented through graduate and post-graduate courses (masters' and PhD's). In this picture we have mostly Agriculture Institutes and Schools (14) but also Veterinary Medicine Faculties (3), as well as others, which play a significant role, in fields such as Life Sciences, Economics and Social Sciences.

Also in the education sub-system, it is important to mention the public secondary and vocational education courses that are offered by a set of 20 schools. This vocational system has been assessed for their importance for farmer preparation and quality of training (Koehnen, 1994). These courses can be basic, professional or specialized and cover a vast set of topics: horticulture, agricultural production, animal production, forestry and natural resources, farm management and rural tourism. The specialized courses are usually operated in partnership and under the responsibility of a Polytechnic Agricultural School.

Training, information, extension and consultancy tasks are today mostly in the hands of farmers' organisations. The transfer of these functions from the State to these organisations started in the early 1990s, as we will see in the history section of this report. Today, a small set of major national organisations, comprising of a network of local and regional entities have structures and human resources dedicated to these fields of the AKIS. However, as we will see, training is their key area of intervention, along with a range of others tasks in such areas as farm investment plans and management of Common Agricultural Policy related farm subventions.

## 2.2 KIS diagram



**Figure 1: Overview of AKIS actors in Portugal**

Source: Baptista, A.; Cristovão, A.; Koehnen, T.; Madureira, L.; Pires, M. (2014): AKIS and advisory services in Portugal. Report for the AKIS inventory (WP3) of the PRO AKIS project. Online resource: [www.proakis.eu/publicationsandevents/pubs](http://www.proakis.eu/publicationsandevents/pubs)

**Table 1: Overview of organisations creating the AKIS**

Provision of service				Source of financing								
Status of the organisation	Type of organisation	Number of organisations	Number of advisors	Public funds			Farmers			Private	NGO	Other (specify)
				EU funds	National funds	Regional funds	Farmers' levies	Farmers' contribution	Billing services	Other products (inputs, outputs)	foundation	
Public sector	Advisory department of the Ministry of agriculture	2	-	X	X							
	Local/regional agencies	7		X	X							
	Other (specify)											
Research and Education	University	17		X	X							
	Research Institute	15		X	X							
	Other education bodies: Public Secondary and Vocational Educational Courses	18		X	X							
Private sector	Upstream industries	NA										
	Downstream industries	NA										
	Independent consultant	NA										
	Private agricultural advice company	NA										
	Farmers' owned advice company	NA										
	Other (specify)											
Farmer based organisations	Farmers' cooperative	56	595	X	X			X				
	Chambers of agriculture											
	Farmers' circles/groups											
	Farmers' Associations & others	106		X	X			X		X		
NGO												

### 3. History of the advisory system

In general, in Portugal, the practice of public agricultural extension has been sporadic and mostly disorganised. Until the mid 1970s the major programs gave emphasis to information and demonstration campaigns and the transmission of technological messages not adapted to the local social and economic circumstances (OECD, 1980: 161). The services reached few farmers and the field workers were simultaneously engaged in a variety of regulatory functions. Madureira (1980, 1-2), as well as Teixeira (1980, 4), pointed out that the technical assistance initiatives lacked consistency and continuity, and were based on government policy problems, not on problems identified or demanded by farmers. Besides, the central services were overemphasized and the contact with the farming communities was rather limited.

The Revolution of April 1974, and the new democratic orientation of the State opened up the possibility of trying out new paths and models. Throughout 1975, 1976 and 1977 various laws were approved leading to major changes: regionalization through the creation of Regional Agricultural Services; and launching of extension, through the new Rural Extension Services. A General Directorate of Rural Extension, a central level department, was also created. Its main objectives were to support the rural extension services, at the regional and local levels, in the organisation, planning, training, and evaluation tasks.

The first organised extension programmes, planned along the lines of the Training & Visit System, were initiated in 1978/79. However, these programmes were only implemented in some sub-regions of the country (Cristóvão, 1986). In 1982 the National Institute for Agricultural Research was transformed into the National Institute for Agricultural Research & Extension, in order to better link both subsystems, but the experience was short lived. In 1983 the Programmes to Support Regional Agricultural Development, included initiatives in the fields of extension and professional training (Cristóvão, 1985). Universities such as University of Trás-os-montes e Alto Douro (UTAD) played a role in up-grading the qualifications of public extension staff in the late 1980s and early 1990s and a study associated to this programmes identified competencies for their training (Koehnen and Cristóvão, 1993).

In January 1986 Portugal became a member of the EEC and in 1990 a major programmes - PROAGRI - was launched, with the objective of strengthening the capabilities of farmers' organisations in the areas of management and technical support to members and non-members. PROAGRI reflected the prevailing privatisation views. It is important to stress that cooperatives and farmers' associations were frequently weak, in both organisational and financial terms. On the other hand, the transfer of functions to such organisations was not accompanied by changes in extension practices, and the top-down and linear perspectives of the State services remained dominant.

The existence of public agricultural extension after PROAGRI is questionable. In the mid 1990s the government created 300 new "Agricultural Zones" and the so called "family technicians": each municipality corresponded to an "Agricultural Zone", and each "Zone" had a team of agents, of whom a number of farm families was assigned, in order to allow a more personalized contact. The emphasis was placed on information, particularly on Common Agricultural Policy measures and policies, and practices tended to be quite bureaucratic. After this period and in spite of this measure, technical support for agricultural development became a

function of many institutions and services, especially cooperatives and farmers' associations, in a more or less fragmented and dispersed fashion, the exception being the existence of networks or some form of articulation and coordination between them (Cristóvão, 1999).

## 4. The Agricultural Advisory Service(s)

### 4.1 overview of all service suppliers

#### **Public agricultural services**

The policy of the Ministry of Agriculture over the past two or three decades has been characterised by the transfer of various functions to farmers' associations and other private organisations, including technical advice, preparation of agricultural investment projects, access to different subsidies, training and information exchange.

Currently the Ministry of Agriculture, Ocean, Environment and Spatial Planning includes the Secretaries of State for Agriculture, Forestry and Rural Development, Ocean, Environment and Spatial Planning, and Food and Agribusiness Research, in a very complex structure with central and regional services.

The five Regional Directorates for Agriculture and Fisheries are the closest operational services to farmers and agricultural development agents. According to the law, these services should “Encourage actions and intervention projects in the rural areas and programmes or plans of integrated rural development, and support farmers and their associations, as well as rural populations” (Decreto-Lei no. 7/2012, de 17 de Janeiro). However, today their major functions have to do with policy monitoring and evaluation, production of statistical data, reception, review, approval, monitoring and validation of investment projects supported by public funds, implementation of regulatory actions, coordination of licensing processes, and implementation at the regional level of the policy orientations in such areas as forestry and natural resources management.

Each Regional Directorate has a variable number of sub-regional delegations, composed of nuclei (a set of municipalities) and local technical teams (at municipal level). For instance, in the Northern Region there are 6 delegations, 26 nuclei and 47 local technical teams. In the past, the regional services were present in all municipalities, but today, given a sharp reduction of human resources – from about 2000 people in 2007 to less than 750 in 2013 - most local teams operate on an itinerant fashion, visiting each municipality only once or twice a week.

In Alentejo, Southern Portugal, the four sub-regional delegations are called Regional Services and have eight poles and offices in some municipalities. The agents are involved in routine work and give some occasional technical support. In the three regional experimentation centres "field days" are held four or five times per year, to present some technical innovations to potential users, with the contribution of higher education institutions, research centres and farmers' organisations. These centres develop several experimental and demonstration projects in the areas of agriculture, olive groves, vineyards and extensive livestock production, in collaboration with several research bodies and other institutions.

In the field visits the local agents use office facilities provided by the municipal governments, cooperatives, associations, training centres, schools and other public services and organisations. In these visits, the agents receive people who present, for instance, technical or commercialisation related problems or pose questions regarding the available policy instruments or agricultural investments. The advice is provided free of charge.

In some cases, as illustrated by the Northern Regional Directorate, the services cooperate with the municipalities, which today are very active in the promotion of rural development initiatives, like farmers' markets, box schemes, community gardens and land banks. Additionally, the Regional Directorates provide a number of services in areas such as soils and plant analysis, animal health, public hygiene, pest management, some of which are subject to payment. All Directorates have webpages on which extensive information concerning their areas of intervention is available.

Each Directorate is a case, but globally the regional services tend to be quite removed from the field and only occasionally perform advisory related functions. Their training activities were transferred to farmers' organisations and the training centres tend to be underused, information is mostly available through the internet, local agents also visit the municipalities on a rotational basis, generally to answer questions raised by farmers, and farm experimentation and demonstration activities are scarce. In general, the regional agricultural technicians have fewer staff than six years ago, while performing, above all, desk-type policy related functions linked to investment projects supported by public funds, and a variety of other regulatory actions.

### **Farmers' organisations**

In the agriculture sector, in Portugal, there are three major umbrella farm based organisations: the Confederation of Portuguese Farmers (CAP), the National Confederation of Agriculture (CNA), and the National Confederation of Agriculture Cooperatives and Farm Credit Cooperatives (CONFAGRI). The latter, unlike the two initial, includes exclusively cooperatives. These organisations have lobbying as a major function, but their affiliated organisations (associations and cooperatives) perform a variety tasks in the territories where they are located, some of which are connected to AKIS.

#### Confederation of Portuguese Farmers (CAP)

According to the information in the CAP website, this is a socio-professional organisation, created in November 1975, that contains over 300 organisations nationwide, including federations, wine cooperatives, regional associations, sectorial associations and other cooperatives. It maintains permanent contacts with their affiliates through national and regional meetings, by identifying needs and problems of national agriculture and forwarding the same to technical analysis and specialized studies. The CAP aims to defend the interests of Portuguese agriculture in the country and abroad, safeguarding the economic components of the activity in the promotion of a dignified quality of life for all farmers who wish to continue their activity. It works to warn and engage the Government in achieving critical infrastructures, defending an agricultural policy that respects the integration of Portugal in the European Union and a healthy and proper participation in the Single Market.

As a representative of the socio-professional agricultural associations, the organisation has the status of Partner in the national Social and Economic Council – Permanent Commission for Social Dialogue. It is also represented in many other consultative bodies of different public authorities. The CAP has a permanent delegation in Brussels and participates in all Agricultural Committees, Advisory Groups and other European organisations (COPA, GEOPA, USSE, CEPF, FIPA, EESC, etc.)

Among the various specialized technical services provided by CAP to farmers, two deserve to be mentioned: training, with three Agricultural Training Centers already established; and direct aid to agricultural holdings, provided through a network of 15 Rural Information Centers, covering all the country. The organisation publishes a monthly magazine devoted to agricultural policy, agricultural economics and current technical issues (“Farmer Magazine”).

In general, the following services are provided: training (the organisation is accredited in all areas: diagnosis, planning, design, organisation and promotion, development/implementation, monitoring, evaluation and other interventions); application for farm subsidies; Farm Advisory Services; livestock management (personalized telephone information service); “Visto by CAP” (a new consulting service in the food safety area, fully geared for producers and processors of food in rural areas, helping them to meet the legal requirements in this area, particularly in the application of the principles of hazard analysis and critical control point - HACCP); demonstrations and applied research projects; and young farmers contests.

It is important to mention that the advisory tasks are exclusively performed by the affiliated organisations, at the regional and local levels, using different approaches and methods, with training and information as the most crucial. Most information initiatives have to do with the EU policy and agricultural investment projects.

A leader of a Farm Management Centre affiliated with this confederation was interviewed. It is a nonprofit organisation operating with mixed funding, mostly private (60%), with the remaining coming from the State and the EU. It has four advisors, three with college degrees. All advisors have more than 12 years experience and are certified in cross compliance and advisory topics. The advisory services are charged to farmers, per hour of service or according to packages. Most work is done individually, especially through farm visits and occasionally by telephone. The organisation serves about 1,000 farms, mostly small ones with an average of 5 ha, and deals more often with plant and animal production questions, followed by stable design, bookkeeping, taxes, cross compliance and rural development/rural tourism. Agricultural accounting, taxes and farm management are considered important topics to meet the challenges of CAP 2013-2020. The university is classified as the main knowledge source and cooperation partner. The Centre has a strategic annual plan developed internally, keeps records of advisory work, and has incentives to reward the performance of advisors.

#### National Confederation of Agriculture (CNA)

The National Confederation of Agriculture (CNA) was established in 1978, in Coimbra. Its programmatic basis is the "Carta da Lavoura Portuguesa", which defines it as "the organised expression of family farms." Among other principles, it assumes the "current concerns about the construction of an agriculture that meets the quality requirements of products, environmental protection, preservation of rural areas, concerns for health and work, and the enhancement of the income and quality of life for Portuguese farmers".

The CNA is primarily composed of farmers associations although it also involves other associations focused on the broader context of rural development (a total of about 80). With the mission of defending the social and professional interests of farmers, it develops the provision of a wide range of technical services and participates in various consultative organisms, such as the

Economic and Social Council which is the major one. Among the services developed by the CNA and associated organisations are: training (North, Central and Alentejo Regions); National Animal Identification and Registration (a network of service centers throughout the country applying rules for identification, registration and movement of bovine, sheep, goats, swine and equine); support to applications for subsidies and information (legislation, manuals, leaflets and posters, also available online).

As in the case of the Confederation of Portuguese Farmers, most advisory and training tasks are performed by the affiliated organisations, at the local and regional levels. The central body of CNA has a very light structure and most technicians are based in the local and regional associations. Training is the main activity of the organisation (about 50% of staff activities), followed by a variety of tasks related to CAP programmes and instruments (30-40%), and farmer advisory services is minimum (only 10%). Funding is mostly public and the interviewed leader stressed that the organisation has no permanent human resources which limits its intervention.

#### National Confederation of Agriculture Cooperatives and Farm Credit Cooperatives (CONFAGRI)

Established in 1985, with the aim of contributing to the growth and development of a balanced and effective Cooperative Sector, the CONFAGRI is the structure representing agricultural cooperatives in Portugal. It has about 500 affiliated agricultural cooperatives and agricultural credit cooperatives, organised in Federations and other structures, representing an annual turnover well in excess of 7,500 million euros. In fact, the cooperatives are responsible for a significant part of the processing and marketing of agricultural products, and the Agricultural Credit sector is the leading financial group acting in the Portuguese rural world. The economic importance and role of cooperatives is evident in different sectors, such as wine, milk and olive oil. In the case of wine, for example, the cooperative sector, in 2010/2011, was responsible for 43% of the production.

In June 1996, a new model was implemented for collecting applications for income support, resulting from the CAP reform, which, in some areas, came under the sole responsibility of the major agricultural organisations. Since then, the Confederation and its affiliates accounted for over 50% of the applications submitted by farmers for income support, in activities such as arable crops and animal production, among others.

CONFAGRI signed a protocol with the Ministry of Agriculture, which gave the Confederation the management of the Vocational Training Centre for Farmers in Viseu, with a view to conducting professional training for farmers, cooperative managers and technicians. It promotes actions primarily intended for managers and technicians of Agricultural Cooperatives and Agricultural Credit Cooperatives.

The Confederation has established several protocols with Agriculture Ministry services, in order to perform various functions, from training and providing information, to management of applications for income support and other tasks related with the Common Agriculture Policy programmes and measures.

At the individual level, agricultural cooperatives play multiple roles, and some of them have technical teams to provide support and advice to farmers. The dynamism of cooperatives is variable, but many continue to have an important role in the system of information and advice to farmers. Once again, the economic importance and role of cooperatives is evident in different sectors, such as wine, milk and olive oil. In the case of wine, for example, the cooperative sector, in 2010/2011, was responsible for 43% of the production.

#### Other farmer based organisations

Besides these major national level farmer based organisations that bind a number of other numerous associations and cooperatives as its members, there are a very large number of other autonomous organisations that develop various support services to farmers, including training, information transfer and advice, at different territorial scales. Some are national and more generalist, like the Association of Young Farmers of Portugal (AJAP), the National Federation of Young Farmers and Rural Development (CNJ); others are more specialized, like the Portuguese Association of Organic Agriculture (AGROBIO) or the Portuguese Forestry Association (FORESTIS); and still others have a regional character, like the Federation of Agriculture of Trás-os-Montes and Alto Douro (FATA) or the Technical Association of Winegrowers of Alentejo (ATEVA).

It is important to underline the case of AJAP, a national association created in 1983 to represent young farmers at the national and international levels, and to support agricultural and rural development in different ways (informational, training, technical and legal support, access to CAP instruments, etc.). This organisation has only individual members but works closely with about 50 organisations (Associations, Cooperatives, Farm Management Centers), which serve as their extension arm. AJAP has 30 offices spread throughout the country and a total of 45 technicians who generally have a higher education degree in agriculture or animal production, some with a specialization in olive production, viticulture or horticulture. The staff is paid with public funds from various sources (Common Agricultural Policy measures, FAS, Rural Development Programme, Training Programmes) and concentrates most attention (about 55% of time) in advisory work, followed by project applications (25%), farm investment projects (15%) and training (5-10%), supporting a total of about 16 thousand farmers, mostly on an individual bases. This organisation presented a high number of applications to FAS, according to the interviewees or about 50% of the total, as he said mainly due to their close proximity to farmers.

#### Organic farming

Support to organic farming is quite scarce. The Ministry of Agriculture is practically absent in this field, being an exception, the case of the Autonomous Region of Madeira, where a specialized Technical Division of the Regional Agrarian Services was created 10 years ago, involving 25 staff members performing information, farmer advisory services, experimentation and administrative tasks. At the national level there is the Portuguese Association of Organic Agriculture (AGROBIO) that publishes a journal and promotes producer-consumers linkages, organic farmers' markets, annual fairs and information to consumers. Besides this, there is a small set of consultancy firms and independent consultants, and the occasional involvement of municipalities and development associations. Training in this field has been promoted by the above mentioned farm based organisations, as

well as by private ones. The interviewed consultant works with 20 to 25 farmers who pay a fixed amount to receive regular visits. This individual also manages a small firm that publishes the only technical magazine of organic farming in the country (“Segredo da Terra”), as well as the publication of manuals and brochures, and facilitates a community of experts in this field, who regularly meet to share experiences and knowledge.

### Overview

In general, the following conclusions can be drawn: 1) the three Confederations, as umbrella organisations, are active at the national and European levels, developing various lobbying functions, and organise and promote the delivery of a variety of services to their affiliates and farmers, some of which relate to AKIS; the interventions in the territory and at field level are held by its local and regional members; 2) there is a very large number of diverse organisations providing some kind of support and advice to farmers, in a very fragmented and not necessarily articulated fashion; 3) in many instances this work is primarily linked to the applications for grants and financial support available through the Common Agriculture Policy. As one of the interviewed public officers of the Agriculture Ministry, Northern Region Regional Directorate for Agriculture and Fisheries, said: “Farmers' organisations eventually fell into the administrative part, which is easier to do. The technical advice is little or none, they make subsidies and investment projects and very little more”. Other interviewees, such as the members of CNA and AJAP, corroborated this idea.

### **Private consultancy firms and services**

A great number and variety of private consultancy firms also provide advice and support to farmers. Many are linked to the agro-industrial and food distribution sectors, as well as to farm input and equipment companies (seeds, fertilizers, pesticides, machines, etc.), and have grown tremendously in recent decades, occupying the space and functions that the state has left open.

Many large companies, including multinationals, have commercial teams selling their products to farmers and farm businesses, and simultaneously giving technical advice. Some examples are companies selling phyto-pharmaceuticals, animal feed and food additives, agricultural equipment and machinery, animal health products, as well as laboratory networks in areas like hygiene and food quality. Also the large food distribution chains provide a kind of commodity extension system to farmers with whom they have supply contracts.

Besides these, there is a very high number of micro and small private consultancy firms that deliver various services for agriculture, scattered throughout the territory and developing activities such as consulting in specific areas (vineyards and wine, forestry, irrigation, environment, agro tourism, etc.), training, project planning and management, management and accounting, support for agricultural subsidies, marketing services, new technologies, etc. In the Douro region, for instance, there are private consulting firms with qualified technicians specialized in grape production, winemaking, and marketing studies.

Many small and medium agro-food industries have partnerships with universities and research centers to conduct applied research and experimentation in order to answer specific practical problems within their activity. Some large businesses have their own research and product

development departments and teams. It is, in most cases, applied research aimed at solving specific problems or developing a given product.

A small private consultancy firm, working at the regional and national levels, was contacted. This organisation relies on mixed funding, mostly private (75%), and the remaining from the State and the EU. It has four advisors, three with college degrees. All advisors have more than 12 years of experience and are certified in cross compliance and advisory topics. The advisory services are charged to farmers, per hour of service or according to packages. Most time is dedicated to direct contact with farmers and the work is done individually, especially through farm visits and to a less extent by telephone. The organisation serves about 260 farms, with areas between 50 and 100 ha, and deals more often with plant and animal production questions, followed by farm machinery and business diversification. Farm management is considered the decisive topic to meet the challenges of Common Agricultural Policy 2013-2020. The university is classified as the main knowledge source and cooperation partner. The Centre has a strategic annual plan developed internally, keeps records of advisory work, and has incentives to reward the performance of advisors.

### **Local development associations**

In the early 1990s, with the new EU promoted LEADER Initiative, new Local Development Associations (LDAs) were created in all rural areas. In the first phase (1991/92), in the case of Portugal, 19 LEADER regions were established, each one being managed by one such Association and animated by a technical team named Local Action Group (LAG). Presently, there are 53 regions and Associations (each one with a LAG), organised in a national Federation, called “Minha Terra” (My Land). These Associations are, in most cases, local alliances or partnerships, involving institutions from various sectors (agriculture, forestry, small and medium enterprises, tourism, education, etc.).

The activities of these organisations are quite diverse, with the major aim to “animate” rural territories and diversify the economy, promoting revitalization initiatives in many different domains. They represent one of the new faces of rural advisory service, more decentralized, with a wider focus, based on multidisciplinary teams and participatory methods. In this section an overview of these advisory service actors is presented, based on previous research and considering a sample of 17 out of the 53 LDAs (Cristóvão and Baptista, 2012). According to the President of the National Federation, these LDAs provide very little agricultural advice and have poor linkages with the research system. According to the strategic plan for 2014-20, the FMT wishes to be more involved in knowledge and innovation functions, including training, provision of information, and advisory work.

The creation of many LDAs resulted from the union of a group of people and organisations linked to rural areas. They decided to mobilize efforts to boost and integrate local resources thereby creating wealth and promoting social, cultural and economic development. The LDAs have as members, in general, a wide range of public and private entities based within their territories of action, including local governments (municipalities and parish councils), schools, natural parks, tourism offices, cooperatives, tourism associations, producers’ associations (agriculture, forestry, crafts), social welfare institutions, cultural and recreational associations, business associations, private businesses, individual persons, among many others. In many of

these associations local authorities have a key role, occupying, for example, leading positions in the Boards of Directors, Fiscal Council and General Assembly, but these are not the majority of the membership.

The primary mission of these Associations is the promotion of rural local development, to improve the living conditions of the population, including the social, cultural and economic circumstances of the concerned territories. To achieve this broad mission they have a wide range of specific objectives, such as: diversification and promotion of the local economic activity, notably by promoting local production systems, tourism and recreation; use and valorization of endogenous resources; protection of cultural, historical, architectural and environmental heritage; organisation of events with the purpose of spreading the traditions and products of their region; promotion of education and vocational training according to local needs and resources, targeting in particular the questions of employability and job creation; promotion of employment by supporting Small Medium Enterprises (SMEs), entrepreneurship and business development; and provision of social services to the elderly and fight against poverty and social exclusion.

The participants and recipients of the actions are also very different, depending on the characteristics of projects, and include farmers, artisans, unemployed men and women, entrepreneurs (trade, tourism, agro-industry, crafts), associations and other nonprofit organisations, and disadvantaged groups, such as minorities and isolated elderly people. In general, the activities and even the human resources of the LDAs were heavily formatted according to the national and EU programmes to which they apply for and within the framework of which they evolved and are operating.

The number of employees of these LDAs is relatively low, with an average of 16, ranging from 4 to 49. The number of employees is generally related to the number and diversity of activities. Regarding gender, there is a clear predominance of women (76%), which correspond, in general, to three in four employees. The education level of the employees of these LDAs is quite high, representing those who have a college degree, 81%. Of the remainder, only about 11% had schooling at or below the 9th grade. The analysis of the age of employees of LDAs shows that they are relatively young. The age group most represented is the one between 31 and 40 years, with 41%, then the group immediately below, between 19 and 30, with 35% of employees. Only 24% are over 41 years, and none have employees over the age of 65.

## **4.2 Public policy, funding schemes and financing mechanisms**

In Portugal there are remnants of the public extension service. The State initiated a process to transfer extension functions to farmers' organisations in the early 1990s and today a vast set of associations and cooperatives are involved in this area, coordinated or under umbrella organisations, with fragmentation and lack of national coordination as the two major weaknesses. Each organisation develops efforts to attract funding, through contracts with the government, training programmes supported by public money or charging for service delivery.

### **4.3 Methods and Human Resources**

Training is the main advisory service activity developed in Portugal. The major organisations - CAP, CONFAGRI and CNA, have training plans developed at the top level and implemented by the affiliated ones. Besides training, individual advisory methods tend to dominate, usually through office visits. Farmer meetings, seminars, workshops, and other group activities are promoted by most organisations, as well as by public services, including the Ministry offices, education and research institutions. Organisations like CAP, CONFAGRI, CNA and AJAP also publish magazines with technical and policy related articles, and keep web pages with general information. Some Regional Directorates, like the ones in Alentejo and Madeira, organise field demonstrations. It is impossible to provide a reliable accountability of human resources, given the high number and fragmentation of this field. AJAP alone has a staff of 45 in its different offices, all with access to a car and a mobile phone. CAP, CONFAGRI and CAN certainly represent a much higher number of human resources. CNA alone has a body of 21 people specialized in the training area. The local development associations linked to LEADER have an average number of 16 people, mostly women.

### **4.4 Client and topics/content**

Each organisation has a more or less defined target clientele. CNA, for instance, tends to work more closely with small, medium, subsistence, part-time and female farmers. CAP directs more attention to medium and large commercial farmers indirectly through their affiliates, and CONFAGRI to a very heterogeneous clientele, representing the associates of the Portuguese agricultural cooperatives, who generally tend to be small and medium farmers. None of the concerned organisations provides particular attention to farm employees, who tend to be an underestimated group. AJAP gives special attention to farmers between 18 and 40 years. The LEADER associations also work with a diverse clientele, including farmers, rural entrepreneurs, public institutions like local governments, other associations and cooperatives. Farmers' needs cover a wide range of subjects, from production to farm facilities and equipment, bookkeeping, cross compliance and business diversification. Environment and energy issues tend to attract less attention. The use of phyto-pharmaceuticals, taxes and new production areas (berries, mushrooms, honey) represent, according to CNA, some of the new knowledge demands.

### **4.5 Linkages with other AKIS actors**

The central offices of the national farm based organisations serve as back-offices to the affiliated ones, namely in terms of contract negotiation, programme planning and management. That is the case, for instance but not exclusively, of the training programmes that are planned and negotiated by the central offices with the ministries and after implemented in the training centres or by the local or regional organisations. CNA and AJAP have small back-office teams, and concentrate more resources in the member organisations. CONFAGRI and CAN, having more financial resources, have larger back-office teams. In general, the linkages between these organisations and research and education institutions tend to be poor. If it is true that cooperation with the universities exist, it usually involves sporadic projects with few organisations, and not a continued line of action. However, these national organisations tend to have a more or less intense relation with public authorities, in some instances characterised by cooperation (more

often in the case of CAP, CONFAGRI and AJAP) and in other instances by conflict (more often in the case of CNA), depending on the political distance to the government.

#### **4.6 Programming and planning of advisory work**

Programming and planning is generally focused in the major area of farmer advisory work, that is, training activities that are strictly managed and controlled internally and by the funding ministries. In general, there are no incentive programmes to reward the performance of advisors.

## **5. Characteristics of Farm Advisory System (EC reg)**

### **5.1 Organisations forming FAS**

This synthesis about the FAS in Portugal is based upon the implementation reports from 2010 and 2011 (DGADR, 2010 and 2011). This Service was constructed according to the EU policy (Regulation (EC) n° 73/2009). And, farmers' involvement is voluntary and contributes to greater awareness in the relationships that exist between the resource flows and agricultural processes and still abide by the standards and requirements related to the principle of conditionality.

The National Management Authority attached to the Ministry of Agriculture coordinates the SAA. There is also a special advisory committee whose function is to monitor and evaluate the service.

In the end of 2011, 150 organisations were recognized and active in the provision of FAS. The vast majority of these (140 or 82%) were integrated partnerships led by national and regional farmers organisations (CAP, CONFAGRI, CNA, FATA and CNJ). The remaining (AATM, AJAP, ANPEMA, ATEVA and ANCRA) are recognized individually. The human resources involved in the FAS, in late 2011, considering their functions, had the following breakdown: 28 coordinators, 138 technical agents, 488 field agents and 15 in different support capacity. The Service had front offices in 123 municipalities, about 44% of the total in Portugal excluding the islands, particularly in the northern region.

In 2011, the FAS saw an increase in demand, particularly due to (1) the possibility of funding, (2) the satisfaction of those involved and the recommendation by others, and (3) the additional efforts to inform farmers about it. However, the number of participant farmers is still very small, given the initial financial costs and the difficulties to demonstrate the advantages for the provided services. In 2010 and 2011 the total number of advisory contracts amounted to only 2375, but the number of advisory plans actually presented, up to the end of 2011, represented a little more than a quarter (654), meaning that many farmers end up not using the services. Until December 31, 2011, predominantly agricultural holdings (no livestock) were involved in the service.

### **5.2 Evaluation of implementation of FAS**

Several implementation problems are identified in the two consulted reports, namely: constraints in the definition of the conditionality norms; constant changes in the legislation; small size and fragmented structure of farms; and farmers' difficulties to comply with the proposed conditionality measures, particularly if investments are needed (DGADR, 2011 and 2012). The interviewed member of CNA also stressed the heavy EU bureaucracy, the bias towards medium and large farmers, the short period of intervention (only one year), and the fact that farmers need to advance the necessary funds. Similar aspects were underlined by AJAP, adding that farmers fear the reimbursement delays. The Confederation of Portuguese Farmers stressed in this regard that the model is better suited to medium and large farms and that conditionality is quite often difficult to implement. Besides, as also mentioned, it represents a lot of work for the field technicians and little benefit for the involved organisations.

Farmers' organisations have been proposing measures to improve the performance of the FAS, as the following:

- to develop linkages between the concerned government bodies (DGADR, GPP and IFAP) and FAS organisations, through seminars and workshops in order to share pertinent information;
- to establish a Department with responsibility for gathering information relevant for improving the performance, efficiency and effectiveness of the FAS;
- to undertake the standardization of concepts and rules to follow in the implementation (which at this time are complex); and
- to improve the coordination between all entities involved in the sphere of conditionality in order to standardize and clarify concepts and rules, in particular between the structures of control and advice.

In general, the implementation of the FAS in Portugal shows that few organisations and farmers have been involved and the impacts of these advisory services are quite small.

## 6. Summary and Conclusions

### 6.1 Summary and conclusions on section 1-3

The provision of FAS has changed considerably in the last few decades, and is perhaps more relevant today than ever in the past. In the present context of changes, uncertainty and risks, many recent reflections, studies and policy documents have shown that a new agenda of critical agricultural and rural development issues needs to be urgently and appropriately addressed.

In general, in Portugal, the practice of agricultural extension was sporadic and mostly disorganised, and a technical assistance approach dominated. After a period of extension initiatives in the late 70's and early 80's, during which national, regional and local services were structured, technicians trained, and projects and actions developed, a decline period followed in the late 80's, characterised by national Extension Campaigns.

In 1990, a major programme - PROAGRI - was launched, reflecting the prevailing privatisation views, with the objective of strengthening the capabilities of farmers' organisations in the areas of management and advisory work. Meanwhile, the hundreds of agents in the public agricultural services at the regional and local levels were asked to perform administrative and regulatory tasks.

The existence of public agricultural extension after PROAGRI is questionable. After this period and in spite of this measure, technical support to agricultural development became a function of many institutions and services, especially cooperatives and farmers' associations, in a more or less fragmented and dispersed fashion, the exception being the existence of networks or some form of articulation and coordination.

The Portuguese AKIS involves a set of actors performing a variety of functions, namely: policymaking; regulation, monitoring and evaluation; research; education; training; information, advisory services and consultancy work. These actors are both public and private, and the former may or may not have profit making objectives. The public actors are mostly linked to such areas as policymaking, regulation and monitoring, research, informational, education and training. The non-profit actors are farmers' organisations of different types that, besides lobbying and policy concerns and administrative roles, are involved in training, information exchange and advisory services. The private actors can be linked to industries providing farm equipment's and inputs, or consultancy firms, usually small, delivering services in such areas as project development (and farm investment plans), farm accountancy and training.

With the future Common Agricultural Policy in mind, as well as, the challenges faced by farmers, farmer's organisations, the interviewed actors stressed the importance of: reinforcing the linkages with farmers, at the field level; giving more attention to advisory service work; developing the interaction and cooperation with research and education; qualifying the human resources; gaining financial sustainability; and having more active advisor role for public services, in order to serve more farmers.

## 6.2 Summary and conclusions on section 4–5

Today, public advisory services closely linked to agriculture are practically non-existent, and in the field we can find a complex patchwork of formal organisations of different types, with very heterogeneous philosophies, structures, capacities and domains of intervention, working to promote agricultural and rural development. This patchwork varies from region to region and place to place. This picture results from a variety of policies and programmes, mostly European, such as the LEADER Initiative at local development, and the Agro-Environmental measures of the Common Agricultural Policy, but also from the national Rural Development Programmes implemented in the last 27 years.

The key public services are the Regional Directorates. Each Directorate is a case, but globally the regional services tend to be quite removed from the field and only occasionally perform advisory related functions. In general, regional agricultural technicians, today in much less number than six year ago, perform, above all, desk-type policy related functions linked to investment projects supported by public funds, and a variety of other regulatory actions.

Three major umbrella organisations – CAP, CAN and CONFRAGI – represent the agricultural sector. Lobbying is one of their major functions and most advisory tasks are performed by the many affiliated organisations (associations and cooperatives), at the regional and local levels, using different approaches and methods, with training and information exchange the crucial ones. Generally speaking, there is a very large number of very diverse organisations providing some kind of support and advice to farmers, in a very fragmented and not necessarily articulated fashion. In many instances this work is primarily linked to the applications for grants and financial support available through the Common Agriculture Policy.

Following the EU policy, the Farm Advisory Services were implemented in Portugal. At the end of 2011, 150 organisations were recognized and active in the provision of FAS. The vast majority of the partnerships are led by national and regional farmers' organisations (CAP, CONFAGRI, CNA, FATA and CNJ), involving others as well, like AJAP. In general, the implementation of the FAS in Portugal shows that few organisations and farmers have been involved, and the impacts of these services are quite small.

In the early 90's, with the new EU promoted LEADER Initiative, new Local Development Associations (LDAs) were created in all rural areas. Presently, there are 53 Associations, organised in a national Federation, called "Minha Terra" (or My Land). These Associations are, in most cases, local alliances or partnerships, involving institutions from various sectors (agriculture, forestry, small and medium enterprises, tourism, education, etc.). The activities of these organisations are quite diverse, with the major aim to "animate" rural territories and diversify the economy, promoting revitalization initiatives in many different domains. They represent one of the new faces of rural advisory services, more decentralized, with a wider focus, based on multidisciplinary teams and participatory methods.

A great variety of private consultancy firms also provide advice and support to farmers. Many are linked to the agro-industrial and food sectors, as well as to farm input companies (seeds, fertilizers, pesticides, etc.), and have grown tremendously in the last decades, occupying the space and functions that the state has left open. Besides these, there is a very large number of

micro and small private consultancy firms that deliver various services for agriculture, scattered throughout the territory and developing activities such as consulting in specific areas, training, project planning and management, management and accounting, support for agricultural subsidies, marketing services, and acknowledging new technologies.

What results from this picture is a FAS sub-system of the Portuguese AKIS with a very large number of organisations involved, mostly private, poorly articulated, making it difficult to produce synergies. If it is a fact that the subsystem is pluralist in nature, given the inclusion of a great diversity of rural actors, it is also true that such atomization raises issues such as the lack of focus and coordination. Besides, in most (or all) cases these organisations perform a variety of tasks, such as administrative ones, related to the application for grants and financial support available through the Common Agriculture Policy, very often dominant, and advisory services restricted to training courses and provision of information.

Authors like Birner et al. (2006: 2) emphasize the benefits of pluralistic advisory services, particularly “their ability to overcome constraints, such as shortages in funding, staffing, and expertise, and to provide the necessary flexibility to tailor services to the needs of specific subsectors or regions”. However, the plurality of extension service configurations also raises a variety of questions, debates and tensions in different domains, such as: system coordination vs fragmentation; increased financial and administrative complexity; extension-research linkages; articulation between supply and demand; system quality control; monitoring and evaluation of programmes and staff; served and not-served territories and people; capacity building; and system financial sustainability (Alex and Rivera 2004; Desjeux 2009). These questions are certainly applicable to the Portuguese AKIS situation.

## 7. Acknowledgement of partners, information sources and reflection on methodology

The research was based on literature review, document analysis, and fieldwork. Fieldwork started in March 2013, using interviews with public services and private organisations, following a comprehensive interview guide and a questionnaire schedule. The guide<sup>1</sup> included the following topics: characteristics of agriculture in the surveyed country; characteristics of AKIS; history of advisory services; characteristics of the current organisation and managing structure of the main agricultural extension and advisory organisations; characteristics of the FAS; and conclusions and recommendations.

Interviews were done with representatives of the Regional Directorates for the Northern Region and Alentejo (southern Portugal) and with the person in charge of the FAS. On the one hand, the role of private organisations expanded considerably and interviews were held with representatives of the major national farm organisations (CAP, CNA and AJAP), and with the national Federation of LEADER associations, that promote local development activities in rural areas, aiming at the diversification of the economy. A Farm Management Centre (regional non-profit farmer based organisation), a private consultancy firm and an organic farming consultant were also interviewed.

In addition to the fieldwork, a literature and document search was also done (studies, reports, webpage materials, etc.), with the objective of identifying references on the history of extension services in Portugal, and information about the characteristics of AKIS organisations and the implementation and performance of the FAS in Portugal.

The major methodological difficulty had to do with the collection of quantitative data, giving the highly fragmented nature of the advisory services sub-system of the Portuguese AKIS, and the high number of organisation involved in advisory services delivery. In this circumstance, more attention was given to the qualitative characterisation of FAS.

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<sup>1</sup>Developed by the Polish partners from the University of Agriculture in Krakow, Poland.

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## 9. Appendices

### 9.1 List of interviewed partners

**Table 2: Interviewed partners by PROAKIS Portuguese team**

Name	Complete name	interviewed
CAP	Confederation of Portuguese Farmers	Technician (1)
CNA	National Confederation of Agriculture	Technician (2)
AJAP	Association of Young Farmers of Portugal	Executive Director (1)
FMT	National Federation of Local Development Association	President and executive director (2)
DRAPN	Regional Directorate of Agriculture North	Technicians (4)
DRAPAL	Regional Directorate of Agriculture Alentejo	Technician (1)
EDIBIO	Publishing firm in Organic Agriculture	Private consultancy (1)
AGRIREAL	Agrireal	Private consultancy (1)
CGACC	Centro de Gestão Agrária do Cima Corgo	Farmer based organisation (1)

### 9.2 AKIS institutions

**Table 3: AKIS institution in Portugal**

Name (in portuguese)	Name (in english)	Adress	Website
Universidade de Trás-os-Montes e Alto Douro - Escola de Ciências Agrárias e Veterinárias	University of Trás-os-Montes e Alto Douro – College of Agricultural and Veterinary Sciences	Apartado 1013 5001-801 VILA REAL	<a href="http://www.utad.pt">http://www.utad.pt</a>
Universidade de Évora - Escola de Ciências e Tecnologia	University of Évora - College of Science and Technology	Rua Romão Ramalho, n.º 59 7000-849 ÉVORA	<a href="http://www.uevora.pt/">http://www.uevora.pt/</a>
Universidade do Algarve - Faculdade de Ciências e Tecnologia	University of Algarve - Faculty of Science and Technology	Campus de Gambelas 8005-139 FARO	<a href="http://www.fct.ualg.pt/">http://www.fct.ualg.pt/</a>
Universidade dos Açores - Angra do Heroísmo	University of Açores - Angra do Heroísmo	Rua Capitão João D'Ávila Pido da Urze 9700- 042 ANGRA DO HEROÍSMO	<a href="http://www.dca.uac.pt">http://www.dca.uac.pt</a>
Universidade Técnica de Lisboa - Instituto Superior de Agronomia	Technical University of Lisbon –Institute of Agriculture	Tapada da Ajuda 1349-017 LISBOA	<a href="http://www.isa.utl.pt">http://www.isa.utl.pt</a>
Universidade Lusófona de Humanidades e Tecnologias	Lusophone University of Humanities and Technologies	Campo Grande, 376 1749-024 LISBOA	<a href="http://www.ulusofona.pt">http://www.ulusofona.pt</a>
Universidade da Madeira	University of Madeira	Colégio dos Jesuítas Largo do Município 9000-081 FUNCHAL	<a href="http://www.uma.pt">http://www.uma.pt</a>
Universidade Católica Portuguesa	Portuguese Catholic University	Palma de Cima 1649-023 LISBOA	<a href="http://www.ucp.pt/">http://www.ucp.pt/</a>
Universidade do Porto – Faculdade de Ciências	University of Porto - Faculty of Science	Rua do Campo Alegre, S/N 4169-007 PORTO	<a href="http://www.fc.up.pt">http://www.fc.up.pt</a>

Name (in portuguese)	Name (in english)	Adress	Website
Instituto Politécnico de Coimbra - Escola Superior Agrária de Coimbra	Polytechnic Institute of Coimbra - College of Agriculture (Coimbra)	Bencanta São Martinho do Bispo 3040-316 COIMBRA	<a href="http://www.esac.pt">http://www.esac.pt</a>
Instituto Politécnico de Beja - Escola Superior Agrária	Polytechnic Institute of Beja - College of Agriculture	Rua Pedro Soares, S/N Apartado 6155 7800-295 BEJA	<a href="http://www.ipbeja.pt">http://www.ipbeja.pt</a>
Instituto Politécnico de Castelo Branco - Escola Superior Agrária de Castelo Branco	Polytechnic Institute of Castelo Branco - College of Agriculture (Castelo Branco)	Quinta da Senhora de Mércules, Apartado 119 6001-909 CASTELO BRANCO	<a href="http://www.ipcb.pt/ESA">http://www.ipcb.pt/ESA</a>
Instituto Politécnico de Portalegre - Escola Superior Agrária	Polytechnic Institute of Portalegre - College of Agriculture (Elvas)	Av. 14 de Janeiro, S/N Apartado 254 7350-903 ELVAS	<a href="http://www.esaelvas.pt">http://www.esaelvas.pt</a>
Instituto Politécnico de Santarém - Escola Superior Agrária de Santarém	Polytechnic Institute of Santarém - College of Agriculture (Santarém)	S. Pedro, Apartado 310 2001-904 SANTARÉM	<a href="http://www.esa.ipsantarem.pt">http://www.esa.ipsantarem.pt</a>
Instituto Politécnico de Bragança - Escola Superior Agrária de Bragança	Polytechnic Institute of Bragança - School of Agriculture (Bragança)	Campus de Sta. Apolónia, Apartado 172 5301-855 BRAGANÇA	<a href="http://www.esa.ipb.pt/">http://www.esa.ipb.pt/</a>
Instituto Politécnico de Viana do Castelo - Escola Superior Agrária	Polytechnic Institute of Viana do Castelo - College of Agriculture	Refoios do Lima 4990-706 PONTE DE LIMA	<a href="http://www.esa.ipvc.pt">http://www.esa.ipvc.pt</a>
Instituto Politécnico de Viseu - Escola Superior Agrária de Viseu	Polytechnic Institute of Viseu - College of Agriculture (Viseu)	Quinta da Alagoa Estrada de Nelas 3500-606 VISEU	<a href="http://www.esav.ipv.pt">http://www.esav.ipv.pt</a>
Centro de Botânica Aplicada à Agricultura (CBAA/ISA)	Applied Botany Center for Agriculture (CBAA / ISA)	Tapada da Ajuda 1349-017 Lisboa	<a href="http://www.isa.utl.pt/cbaa/">http://www.isa.utl.pt/cbaa/</a>
Centro de Estudos em Ciências e Tecnologias Agrárias (CECTA/U. Algarve)	Agricultural Science and Technology Studies Center (CECTA / U. Algarve)	Campus de Gambelas 8005-139 FARO	<a href="http://www.ualg.pt/home/pt/content/centro-estudos-em-ciencias-tecnologias-agrarias">http://www.ualg.pt/home/pt/content/centro-estudos-em-ciencias-tecnologias-agrarias</a>
Centro de Ciência Animal e Veterinária (CECAV/UTAD)	Animal and Veterinary Sciences Center (CECAV / UTAD)	Quinta de Prados, Apartado 1013 5001-801 Vila Real	<a href="http://www.utad.pt/vPT/Area2/investigar/CECAV/Paginas/Homepage_cecav.aspx">http://www.utad.pt/vPT/Area2/investigar/CECAV/Paginas/Homepage_cecav.aspx</a>
Centro de Ecologia Aplicada "Professor Baeta Neves" (CEA/ISA)	Applied Ecology Center "Professor Baeta Neves" (CEA/ISA)	Tapada da Ajuda 1349-017 Lisboa	<a href="http://www.isa.utl.pt/ceabn/">http://www.isa.utl.pt/ceabn/</a>
Centro de Estudos Florestais (CEF/ISA)	Forest Studies Center (CEF/ISA)	Tapada da Ajuda 1349-017 Lisboa	<a href="http://www.isa.utl.pt/cef/">http://www.isa.utl.pt/cef/</a>
Instituto de Ciências e Tecnologias Agrárias e Agro-Alimentares (ICETA/UP)	Institute of Science and Technology Agricultural and Agri-Food (ICETA/UP)	Rua D. Manuel II Apartado 55142 4051-401 Porto	<a href="http://www.iceta.up.pt/">http://www.iceta.up.pt/</a>
Centro de Estudos de Engenharia Rural (CEER/ISA)	Center for the Study of Rural Engineering (CEER/ISA)	Tapada da Ajuda 1349-017 Lisboa	<a href="http://ceer.isa.utl.pt/cms/">http://ceer.isa.utl.pt/cms/</a>
Centro de Estudos de Recursos Naturais, Ambiente e Sociedade	Center for the Study of Natural Resources, Environment and Society	Quinta da Senhora de Mércules Apartado 119 6001-909 Castelo Branco	<a href="http://www.esac.pt/cernas/mapa_do_site.htm">http://www.esac.pt/cernas/mapa_do_site.htm</a>
Centro de Investigação de Montanha (CIMO/IPB)	Mountain Research Center (CIMO/IPB)	Campus de Santa Apolónia - Apartado 1172 5301-854 BRAGANÇA	<a href="http://www.cimo.esa.ipb.pt/porta/">http://www.cimo.esa.ipb.pt/porta/</a>
Centro de Investigação e de Tecnologias Agroambientais e Biológicas (CITAB/UTAD)	Centre for the Research and Technology of Agro-Environmental and Biological Sciences (CITAB/UTAD)	Quinta de Prados, Apartado 1013 5001-801 Vila Real	<a href="http://www.utad.citab.pt">http://www.utad.citab.pt</a>

Name (in portuguese)	Name (in english)	Adress	Website
Centro de Investigação e Tecnologia Agrária dos Açores (CITA_A-Açores)	Center for the Research of Agricultural and Technology of the Azores (CITA_A-Açores)	Rua Capitão João d'Ávila – Pico da Urze 9700-042 Angra do Heroísmo	<a href="http://www.angra.uac.pt/dca/CI TAA.asp">http://www.angra.uac.pt/dca/CI TAA.asp</a>
Centro de investigação Interdisciplinar em Ciência Animal (CIISA/UTL)	Centre for Interdisciplinary Research in Animal Science (CIISA/UTL)	Avenida da Universidade Técnica 1300-477 Lisboa	<a href="http://www.fmv.utl.pt/ciisa.php">http://www.fmv.utl.pt/ciisa.php</a>
Centro de Pedologia (CP/ISA)	Pedology Center (CP/ISA)	Tapada da Ajuda 1349-017 Lisboa	<a href="http://www.isa.utl.pt/cped/">http://www.isa.utl.pt/cped/</a>
Instituto de Ciências Agrárias Mediterrânicas (ICAM/EU)	Institute of Mediterranean Agricultural Sciences (ICAM/EU)	Universidade de Évora - Pólo da Mitra Apartado 94 7002-554 ÉVORA	<a href="http://www.icam.uevora.pt/">http://www.icam.uevora.pt/</a>
Química Ambiental (QA/ISA)	Environmental Chemistry (QA/ISA)	Tapada da Ajuda 1349-017 Lisboa	<a href="http://www.isa.utl.pt/dqaa/uiqa">http://www.isa.utl.pt/dqaa/uiqa</a>
Confederação dos Agricultores de Portugal (CAP)	Portuguese Farmers Confederation (CAP)	R. Mestre Lima de Freitas, nº 1 1549-012 Lisboa	<a href="http://www.cap.pt">www.cap.pt</a>
Confederação Nacional da Agricultura (CNA)	National Agricultural Confederation (CNA)	Rua do Brasil, n.º 155 3030-175 Coimbra	<a href="http://www.cna.pt">www.cna.pt</a>
Confederação Nacional das Cooperativas Agrícolas e do Crédito Agrícola de Portugal (CONFAGRI)	National Confederation of Agricultural Cooperatives and Agricultural Credit of Portugal (CONFAGRI)	Rua Maria Andrade, 13 1199-013 Lisboa	<a href="http://www.confagri.pt">www.confagri.pt</a>
Associação dos Jovens Agricultores de Portugal	Portuguese Association of Young Farmers	Rua D. Pedro V, 108 – 2º Andar 1269-128 Lisboa	<a href="http://ajap.pt">ajap.pt</a>
Federação Minha Terra	Minha Terra Federation	Rua Bartolomeu Dias, 172D - 1º esq. 1400-031 LISBOA	<a href="http://www.minhaterra.pt">www.minhaterra.pt</a>
Agrireal – Consultoria, Produção e Comercialização, Lda	Agrireal - Consulting, Production and Marketing Ltd	Rua Visconde de Carnaxide, nº65, Bloco A, R/C Fração CD nº 43 5000-568 Vila Real	<a href="http://www.agrireal.pt">www.agrireal.pt</a>
Escola Profissional Agrícola Afonso Duarte	Secondary and Vocational School Afonso Duarte	Largo da Feira 3140 – 852 MONTEMOR O VELHO	<a href="http://www.epaad.no.sapo.pt">www.epaad.no.sapo.pt</a>
Escola Profissional de Desenvolvimento Rural de Abrantes	Secondary and Vocational School of Rural Development (Abrantes)	Casal da Murteira 2200-681 MOURISCAS	<a href="http://www.epdra.pt">www.epdra.pt</a>
Escola Profissional de Desenvolvimento Rural de Alter do Chão	Secondary and Vocational School of Rural Development (Alter do Chão)	Coudelaria de Alter - Coutado do Arneiro Apartado 20 7440 - 999 ALTER DO CHÃO	<a href="http://epdrac.drealentejo.pt/">http://epdrac.drealentejo.pt/</a>
Escola Profissional de Desenvolvimento Rural de Serpa	Secondary and Vocational School of Rural Development (Serpa)	Herdade da Bemposta Apartado 26 7830-909 SERPA	<a href="http://www.epdrs.pt">www.epdrs.pt</a>
Escola Profissional do Algarve- Associação de Ensino EPAALG	Secondary and Vocational School of Algarve – teaching Association EPAALG	Largo da Fonte - Apartado 7 8375-101 S. BARTOLOMEU DE MESSINES	<a href="http://www.geocities.com/epaalg">www.geocities.com/epaalg</a>
Escola Profissional Agrícola Conde de São Bento	Secondary and Vocational School of Agriculture - Conde de São Bento	Largo Abade Pedrosa, 1 4780 SANTO TIRSO	<a href="http://www.esec-conde-s-bento.rcts.pt">www.esec-conde-s-bento.rcts.pt</a>
Escola Profissional Agrícola da Paiã	Secondary and Vocational School of Agriculture - Paiã	Rua da Escola Agrícola - 1675 – 623 PONTINHA	<a href="http://www.epadd-paia.pt">www.epadd-paia.pt</a>

Name (in portuguese)	Name (in english)	Adress	Website
Escola Profissional Agrícola de Fermil de Basto	Secondary and Vocational School of Agriculture - Fermil de Basto	Souto Grande - Molares 4890 – 414 MOLARES	<a href="http://www.ep-agricola-fermil-basto.rcts.pt">www.ep-agricola-fermil-basto.rcts.pt</a>
Escola Profissional Agrícola do Rodo	Secondary and Vocational School of Agriculture - Rodo	Quinta do Rodo - Godim 5050-000 RÉGUA	<a href="http://www.ep-agricola-rodo.rcts.pt">www.ep-agricola-rodo.rcts.pt</a>
Escola Profissional Agrícola Fernando Barros Leal	Secondary and Vocational School of Agriculture - Fernando Barros Leal	Quinta da Fonte Portela 2565 – 711 RUNA	<a href="http://www.ep-agricola-torres-vedras.rcts.pt">www.ep-agricola-torres-vedras.rcts.pt</a>
Escola Profissional Agrícola Quinta da Lageosa	Secondary and Vocational School of Agriculture - Quinta da Lageosa	Qta da Lageosa Apartado 32 6254 – 909 BELMONTE	<a href="http://www.prof2000.pt/users/epaql">www.prof2000.pt/users/epaql</a>
Escola Profissional de Agricultura e de Desenvolvimento Rural de Ponte de Lima	Secondary and Vocational School of Rural Development (Ponte de Lima)	Quinta do Cruzeiro Arca Apt. 51 4994 – 909 PONTE DE LIMA	<a href="http://www.eppl.rcts.pt">www.eppl.rcts.pt</a>
Escola Profissional de Agricultura e Desenvolvimento Rural de Carvalhais / Mirandela	Secondary and Vocational School of Agriculture and Rural Development - Carvalhais / Mirandela	Carvalhais 5370 MIRANDELA	<a href="http://www.ep-agricultura-carvalhais.rcts.pt">www.ep-agricultura-carvalhais.rcts.pt</a>
Escola Profissional de Agricultura e Desenvolvimento Rural de Cister / Alcobaça	Secondary and Vocational School of Agriculture and Rural Development - Cister / Alcobaça	Estrada de Rio Maio - Apartado 211 2460 – 997 ALCOBAÇA	<a href="http://www.ep-agricultura-cister.rcts.pt">www.ep-agricultura-cister.rcts.pt</a>
Escola Profissional de Agricultura e Desenvolvimento Rural de Grândola	Secondary and Vocational School of Agriculture and Rural Development - Grândola	Av. António Inácio Cruz 7570 – 185 GRANDOLA	<a href="http://www.ep-agricola-grandola.rcts.pt">www.ep-agricola-grandola.rcts.pt</a>
Escola Profissional de Agricultura e Desenvolvimento Rural de Marco de Canaveses	Secondary and Vocational School of Agriculture and Rural Development - Marco de Canaveses	Rosém Apartado 90 4625 – 389 MARCO DE CANAVESES	<a href="http://www.ep-agricultura-m-canaveses.rcts.pt">www.ep-agricultura-m-canaveses.rcts.pt</a>
Escola Profissional de Agricultura e Desenvolvimento Rural de Vagos	Secondary and Vocational School of Agriculture and Rural Development - Vagos	Estrada Florestal Gafanha da Boa Hora Apartado 60 3840 – 254 VAGOS	<a href="http://www.epav.rcts.pt">www.epav.rcts.pt</a>
Escola Agrícola Dom Carlos I (Vendas Novas)	Secondary and Vocational School of Agriculture Dom Carlos I (Vendas Novas)	Quinta Pessegueiro, Vendas Novas 7080-031 VENDAS NOVAS	<a href="http://www.escolaagricolavendasnovas.com">www.escolaagricolavendasnovas.com</a>