



Prospects for Farmers' Support:  
Advisory Services in European AKIS

**AKIS and advisory services in the Republic of Ireland**  
**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 the Republic of Ireland is characterised by one of the highest proportions of family farms in Europe, producing mostly commodity products for export. The average age of farmers is lower than in most European countries. Dairy, beef and sheep are dominant in the livestock sector, with crops occupying less than 10% of the farmed area.

The Republic of Ireland is unique in having a substantial component of its AKIS within a single organisation (Teagasc, the Agriculture and Food Development Authority). Teagasc undertakes activities in research, extension services and education. Teagasc comprises seven research centres (with three demonstration farms), 51 local advisory offices, about 90 farmer-run demonstration farms (so-called BETTER farms and Monitor Farms), and 800 discussion groups with about 12,000 members. There has been a move from individual extension to group extension methods. Teagasc activities are complemented by private agricultural consultants and veterinarians, private research entities, universities and Institutes of Technology, government departments, various public agencies and numerous other actors.

Ireland has retained a strong, largely publicly funded advisory service based on a model of recovering 33 per cent of its cost from farmers. Teagasc is the national body providing advisory services through its 250 field advisors. Public funded and private funded services coexist. There is a recognition that Government no longer needs to provide the sole source of finance for all of the services offered by a public advisory service, but it does need to support the provision of public goods which otherwise would not be provided due to market failures.

The range of AKIS actors works well to ensure that research is conducted along the spectrum from basic to applied research. Noteworthy are the Joint Industry Programmes (with common agreed objectives) that are important for increasing the relevance and impact of advisory programmes. Overall, some linkages in the AKIS are strong, while there is scope for improvement for others (e.g. Teagasc advisors and external advisors)

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## List of Acronyms

<b>Acronym</b>	<b>Explanation</b>
ACOT	The Agricultural Training Council
ADE	Analysis for Economic Decisions
AEOS	Agri-Environment Options Scheme
AKIS	Agricultural Knowledge and Information/ Innovation Systems
AWUs	Annual Work Unit(s)
BTAP	Beef Technology Adaption Programme
CEB	County Enterprise Boards
DAFM	Department of Agriculture, Food and the Marine
DEP	Dairy Efficiency Programme
DGs	Discussion Groups
FAS	Farm Advisory System
FETAC	Further Education and Training Awards Council
FIRM	Food Institutional Research Measure
FIS	Food Innovation System
GAEC	Good Agricultural and Environmental Conditions
ICOS	Irish Co-operative Organisation Society
LEADER	Links Between Activities Developing the Rural Economy
LFA	Less Favoured Areas
MOU	Memorandums of Understanding
NFC	Teagasc National Food Centre
NGO	Non-Government Organisation
PROAKIS	Prospects for Farmers' Support: Advisory Services in European AKIS
REPS	Rural Environment Protection Scheme
SMRs	Statutory Management Requirements
STAP	Sheep Technology Adoption Programme
UAA	Utilised Agricultural Area

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## 1. Main structural characteristics of agricultural sector

The Republic of Ireland (Eire, about five-sixths of the island of Ireland) has a population of 4.6 million (M) and a total area of 7.3 Mha, of which the farmed area (UAA) in 2012 was 4.5 Mha. Of this, crops occupied 0.4 Mha (about 40% barley, 20% wheat), grass for grazing and/or silage 3.5 Mha, and rough grazing 0.5 Mha<sup>1</sup>. In addition, a further 0.5 Mha, nearly all in the west, is “commonage”, mostly rough grazing<sup>2</sup>.

In 2010<sup>3</sup>, there were about 140,000 farms (nearly all “family farms”), with an average size of 33 ha. There were 6.6M cattle including 1.1M dairy cows (total down 10% since 2000), 5.1M sheep (-33%), 1.5M pigs (-12%) and 11.0M poultry (-21%). Agricultural labour<sup>4</sup> was 168,000 AWUs, down slightly from 2000 despite a slight rise in the number of persons involved (nearly all holders and family). The average age of farm holders was 54 years (13% of farmers under 35 years old, 46% between 35 and 55, 21% between 55 and 65, and 20% over 65; see EU Agri-Mapping Project (2007)), and 54% described farming as their sole occupation. Only 31% of farm managers had undertaken some type of formal training, but this was higher (about 50%) for younger farmers and on farms over 50 ha.

In 2012<sup>5</sup>, total agricultural output was (provisionally) €6,900M, with intermediate consumption at €5,200M (€1,400M feeding stuffs, €1,100M forage plants). Net subsidies were €1,600M, of which single payments were €1,300M, REPS (the main agri-environmental scheme) payments €250M, and LFA payments €245M. Factor income in 2011 was €2,600M<sup>6</sup>. When other sources of farm family income, such as pensions and social welfare, are included, just 30% of farm families rely on farming as their sole source of income. However, farming remains a critical source of income on a large number of part-time farms and the maximisation of farm income through improved technology and quality production is a key national objective.

Under price and efficiency pressures, use of fertiliser in Ireland decreased markedly after 2000, to a level of 86 kg/ha of N fertiliser on grassland (the main type and target, especially in dairying) in 2008<sup>7</sup>. Ammonia (NH<sub>3</sub>) emissions were unchanged between 1990 and 2010 (105 kilotonnes in 2010)<sup>8</sup> and the gross nitrogen balance slightly decreased from 216 kg N per ha agricultural land in 2001 to 205 kg in 2008<sup>9</sup>.

The recent Household Budget Survey (Government of Ireland, 2012) showed that almost 60% of farm household income comes from off-farm sources. Farm households had a weekly disposable income of €160 per household member compared with €149 for non-farm rural households and

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<sup>1</sup> <http://www.cso.ie/px/pxeirestat/Statire/SelectVarVal/Define.asp?maintable=AQA05>

<sup>2</sup> <http://www.cso.ie/en/media/csoie/releasespublications/documents/agriculture/2010/coapre2010.pdf>, p.11.

<sup>3</sup> <http://www.cso.ie/en/media/csoie/releasespublications/documents/agriculture/2010/coapre2010.pdf>.

<sup>4</sup> [http://www.cso.ie/en/media/csoie/releasespublications/documents/agriculture/2010/aglabinput\\_2010.pdf](http://www.cso.ie/en/media/csoie/releasespublications/documents/agriculture/2010/aglabinput_2010.pdf)

<sup>5</sup> [http://www.cso.ie/en/media/csoie/releasespublications/documents/agriculture/2012/oiadv\\_2012.pdf](http://www.cso.ie/en/media/csoie/releasespublications/documents/agriculture/2012/oiadv_2012.pdf)

<sup>6</sup> <http://www.ifa.ie/LinkClick.aspx?fileticket=fduGptijnhw%3D&tabid=586>

<sup>7</sup> S. T. J. Lalor, B. S. Coulter, G. Quinlan and L. Connolly (2010). A survey of fertilizer use from 2004-2008 for grassland and arable crops. Project Report RMIS 5943, Teagasc, Oak Park, Carlow, Co. Carlow, Ireland. 100pp. [http://www.teagasc.ie/publications/2010/13/13\\_Fert\\_Use\\_Survey\\_2008-Final.pdf](http://www.teagasc.ie/publications/2010/13/13_Fert_Use_Survey_2008-Final.pdf).

<sup>8</sup> [http://epp.eurostat.ec.europa.eu/statistics\\_explained/index.php/Agri-environmental\\_indicator\\_-\\_ammonia\\_emissions](http://epp.eurostat.ec.europa.eu/statistics_explained/index.php/Agri-environmental_indicator_-_ammonia_emissions)

<sup>9</sup> [http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=aei\\_pr\\_gnb&lang=en](http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=aei_pr_gnb&lang=en)

€195 for urban households. On 35% of farms, the farmer combines agriculture (predominantly cattle or sheep farming) with an off-farm job. On 48% of farms, the farmer and/or the spouse have an off-farm job.

## 2. AKIS Characteristics

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. More recently, it has also been referred to as Agricultural Knowledge and *Innovation* System.

Ireland is unique in having a substantial component of its AKIS within a single organisation (Teagasc). Teagasc undertakes activities in research, extension services, and education, as well as offering support structures, thereby spanning the various elements of an AKIS. The AKIS also embraces both national and international dimensions, and includes private research entities, private agricultural consultants and veterinarians, food processing companies and cooperatives, input supply and service companies (e.g. accounting and software), universities and Institutes of Technology, the Department of Agriculture, Food and the Marine (DAFM) and other government departments, public agencies such as Bord Bia, the Irish Cattle Breeding Federation, Animal Health Ireland, the Environment Protection Agency, and the agricultural media which is particularly strong in Ireland (Figure 1). A number of agencies and other bodies are involved in specific aspects of the AKIS (Table 1).

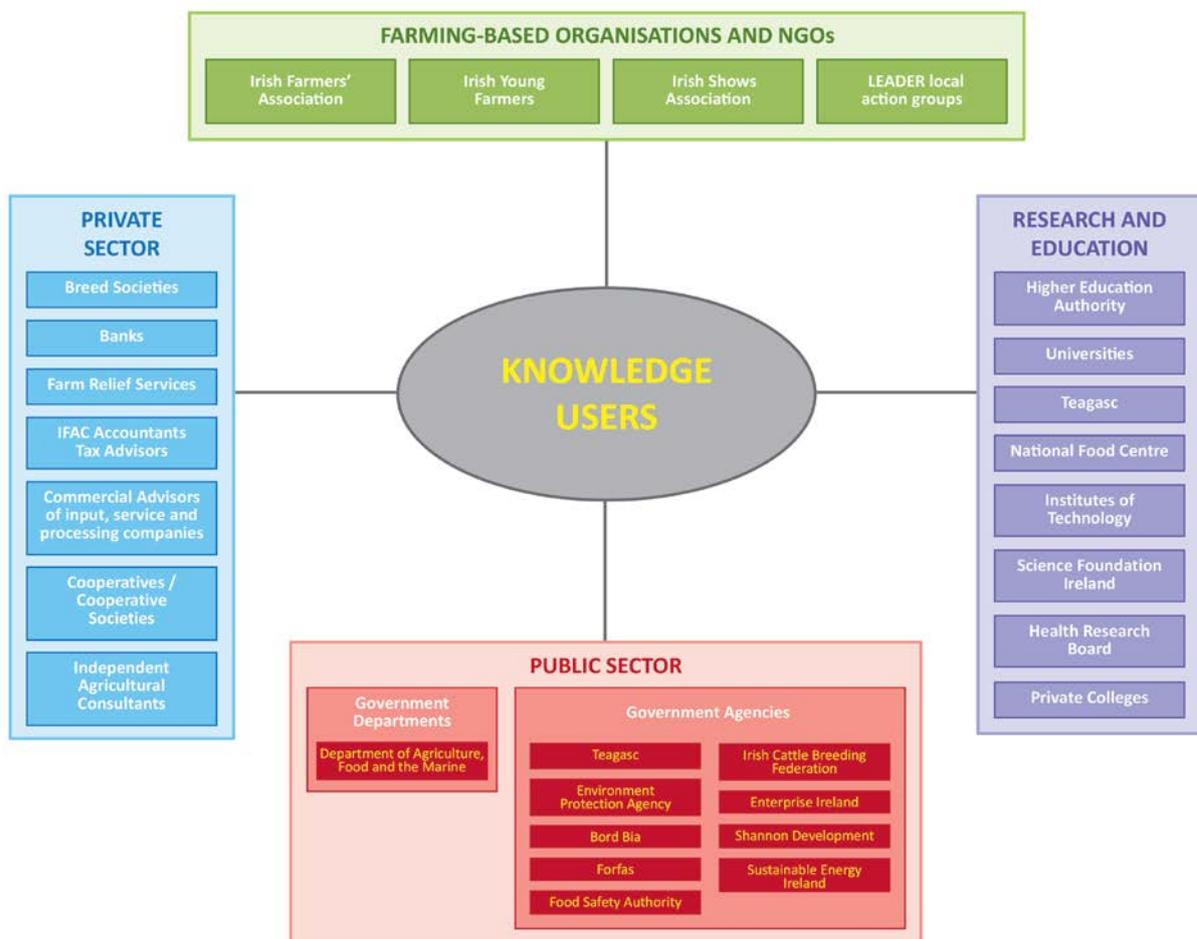


Figure 1: Overview of AKIS actors in the Republic of Ireland

Teagasc (in the Irish Gaelic language, “*instruction*” or “*doctrine*”), or the Agriculture and Food Development Authority, operates a “*three-legged stool*” of Research, Extension (Advice) and Education for its “Stakeholders” (Boyle, 2012). It has:

- 7 research centres (with three research demonstration farms Curtins, Derrypatrick, Athenry)
- 51 advisory offices
- about 90 “BETTER” and Monitor Farms, i.e. farmer-run demonstration farms<sup>10</sup>
- 12,000 discussion group members organised in 800 groups
- 45,000 clients (figures provided by T. Kelly, pers. comm.).

The demonstration farms, monitor farms and discussion groups do not appear as farmer-based organisations in Figure 1 because Teagasc sees them as methods rather than organisations in the strict sense.

According to the Teagasc website ([www.teagasc.ie/aboutus/](http://www.teagasc.ie/aboutus/)):

*Teagasc is the national body providing integrated research, advisory and training services to the agriculture and food industry and rural communities. It was established in September 1988 under the Agriculture (Research, Training and Advice) Act, 1988. The organisation is funded by State Grant-in-Aid; the National Development Plan 2007 to 2013; fees for research, advisory and training services; income from national and EU competitive research programmes; and revenue from farming activities and commodity levies.*

The Teagasc Board is appointed by the Minister for Agriculture, Food and the Marine, and has representatives from the farming organisations (4) and rural youth organisation, the food industry (1), universities (1), the Department of Agriculture, Food and the Marine, and Teagasc staff. The organisation has an annual operating budget in excess of €160 million. Around 75% of Teagasc's yearly budget comes from the Irish exchequer and EU funding, with the balance generated from earned income. Some 40% of the budget is devoted to research, with the remainder split half and half between advisory and education services (Table 2.). They operate in partnership with all sectors of the agriculture and food industry and with rural development agencies.

Teagasc is a client-based organisation employing approximately 1,200 staff at 51 locations throughout Ireland. The staff includes 216 research scientists, 51 specialists and specialist advisers and 116 research technicians and technologists, 171 support staff and approximately 175 Walsh Fellows (PhD students) at six dedicated centres. There are over 250 advisors based at 51 county and local offices<sup>11</sup>.

The Teagasc mission is: “*to support science-based innovation in the agri-food sector and the wider bio-economy so as to underpin profitability, competitiveness and sustainability*”, and its four aims are:

1. *Improve the competitiveness of agriculture, food and the wider bio-economy;*
2. *Support sustainable farming and the environment;*

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<sup>10</sup> The BETTER model is focussed on Beef and Tillage, while the monitor farms are Dairy programme focused. 36 of the 90 farms are cattle farms.

<sup>11</sup> [www.teagasc.ie/aboutus/](http://www.teagasc.ie/aboutus/)

3. *Encourage diversification of the rural economy and enhance the quality of life in rural areas;*
4. *Deliver value for public money.*

Ireland has committed itself to develop a science- and knowledge-based economy. In the context of agriculture, food and rural development, this is more specifically articulated as a ‘bio-based economy’.

The Department for Agriculture, Food and the Marine (DAFM) is the primary funding agency for research into agriculture and food through core funding provided to Teagasc and also through public good, competitive research programmes. Agricultural research and education is also carried out in universities (7) and Institutes of Technology. These institutes are linked through a research network, TecNet.

Agriculture and food research in the public sector is primarily undertaken by Teagasc with the balance of activity being undertaken by a wide variety of entities. Up until recently this activity was not well coordinated (Boyle 2014, pers. comm.) but it now requires co-ordination and co-operation between institutions. Some coordination of state funded research projects is achieved through the interdepartmental committee on Science, Technology and Innovation. The Food Institutional Research Measure (FIRM) and the Research Stimulus Fund operated by DAFM require and ensure cooperation and coordination in research among the research-performing organizations. There is only “some” research undertaken in the private sector (Buckley et al., 2007).

The interaction of Teagasc with the industry through the Joint Industry Programmes is important for increasing the relevance and impact of advisory programmes. A higher relevance is achieved through common agreed programme objectives and a feedback system through industry staff and farmer representatives. In particular for dairy farmers, links into geographical regions are supported by the historical cooperative structures.

Irish cooperatives have a long tradition, mainly in the dairy and milk processing sector (the first co-operative creamery was opened in 1889). In 2006, there were approximately 1,040 co-operatives registered with the Registrar of Friendly Societies (FORFAS, 2007). They aim to “bring people together to collectively generate or provide services for the purpose of advisory services, industry working groups, training and education, as well as research and development. The Irish Co-operative Organisation Society (ICOS) promotes this type of co-operative endeavor through the ICOS Skillnet education programmes. ICOS is also represented on the board of Teagasc”<sup>12</sup>. Well-known cooperatives are Kerry and Glanbia. Connacht Gold (now Aurivo), for example, is a co-op with a diversified business dealing in food and dairy ingredients, agribusiness, livestock marketing, property management and timber processing. They employ in excess of 700 people and have over 14,000 farmer shareholders<sup>13</sup>.

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<sup>12</sup> [www.icos.ie/members/advisory-education/](http://www.icos.ie/members/advisory-education/)

<sup>13</sup> [www.connachtgold.ie/](http://www.connachtgold.ie/) [www.aurivo.ie](http://www.aurivo.ie)

**Table 1: Overview of organisations creating the AKIS in the Republic of Ireland**

<b>Status of the organisation</b>	<b>Type of organisation</b>	<b>Organisation</b>
<b>Public sector</b>	Government Departments	Department of Agriculture, Food and the Marine
	Government Agencies	Teagasc (Agriculture and Food Development Authority) Bord Bia – Irish Food Board Forfás - policy advisory board for enterprise, trade, science, technology and innovation Food Safety Authority Environment Protection Agency Irish Cattle Breeding Federation Animal Health Ireland Enterprise Ireland - government organisation responsible for the development and growth of Irish enterprises IDA Ireland – agency responsible for overseas investment Shannon Development - government owned regional development company dedicated to promoting and developing the Shannon Region Health Research Board Higher Education Authority Sustainable Energy Ireland
	Local/regional agencies	51 Teagasc county and local offices County & City Enterprise Boards (CEB) and Local LEADER development Companies VEC Vocational Education Committees (Local Authorities)
<b>Research and Education</b>	Universities & Higher Education Institutes	National University of Ireland, Dublin - Agricultural, Veterinary, Food and Environmental Sciences National University of Ireland, Cork - Food Science Research Trinity College Dublin - Nutrition research University of Limerick - Food Technology Dublin City University - Sensory Technology National University of Ireland, Galway - Diagnostics & Cereal Research National University of Ireland, Maynooth – Plant Biotechnology Waterford Institute of Technology Dundalk Institute of Technology Cork Institute of Technology Athlone Institute of Technology Tralee Institute of Technology Galway Mayo Institute of Technology Blanchardstown Institute of Technology
	Vocational/Further Education	4 Teagasc colleges 3 Private colleges (subvented by Teagasc) 13 local Teagasc training centres (Regional Education Centres) VEC Vocational Education Committees (Local Authorities)

<b>Status of the organisation</b>	<b>Type of organisation</b>	<b>Organisation</b>
	Research Institutes	7 Teagasc Research Centres COFORD Council for Forest Research and Development Institutes of Technology
	Research Foundations	Science Foundation Ireland RELAY (national dissemination service responsible for communicating the results of publicly funded food research to the Irish food industry)
<b>Private sector</b>	Food chain actors	Commercial advisors of input supply, service and food processing companies (but only a fraction of their time is spent on advice) Veterinarians AHI Animal Health Ireland Farm Relief Services (FRS)
	Private agricultural consultants	169-250 independent advisors, represented by Agricultural Consultants Association of Ireland
	Cooperatives	Irish Milk Quality Co-operative Society Irish Co-operative Organisation Society (ICOS) Over 40 breed societies (e.g. cattle, sheep, horses) Animal Health and Artificial Insemination co-operatives Approx. 30 dairy co-ops, 9 fishing and food co-ops, over 40 marts IFAC Accountants Tax Advisors (also a farmer-based organisation)
	Other	Advisors employed by banks
<b>Farmer based organisations &amp; NGOs</b>	Farmers' circles/groups	90 'BETTER'/monitor demonstration farms (organised by Teagasc and partners) 800 Discussion groups (supported mainly by Teagasc)
	Land manager representative bodies	Irish Farmers' Association (IFA) Macra na Feimre – Irish Young Farmers ICMSA Irish Creamery Milk Suppliers Association ICSA The Irish Cattle and Sheep Farmers' Association
	Charitable trusts, foundations, NGOs	Irish Shows Association (national representative body of Agricultural Shows) National Ploughing Championships Grain and Feed association The Fertilizer Association of Ireland Irish Grain and Feed Association

In addition to the actors outlined above, there are other broader-based rural development type extension services, including LEADER local action groups, local development groups, and community/ rural development companies, which are more or less linked to agriculture depending on the respective region and local issues. The boards of LEADER groups, for example, have farming interests represented on the boards as a statutory requirement, and many also have Teagasc representatives on their boards. County Enterprise Boards (CEB) – as part of

the broader Enterprise Innovation System provide direct grant-support to new and existing enterprises and promote entrepreneurship, capacity building and women-in-business at local level, to micro enterprises (<10 employees) in the commercial sphere. Farming interests are represented on their boards, among others (Phelan, 1995).

The press is not listed separately above, but its role in the AKIS should not be underestimated. The BETTER farms are covered in the press, as well as regular articles/features on topics around agriculture. Phelan (1995), referring to data from the PhD thesis by Kinsella (1995), finds that the press (newspapers) were among the most frequently used sources of information for viable and potentially viable farm households in two counties in the Republic of Ireland (n=212). Teagasc was the second most used source. The use of Teagasc was associated with the more commercial farming sector. Phelan interpreted the findings to portray a strong dualism “whereby professionals support the development of the ‘resource-rich’ sector while the ‘resource poor’ sector relies mainly on non-professional sources (other farmers, media and family members) for their information and may use professional sources only to avail of grants and subsidies” (Phelan, 1995 p8).

An impressionistic network analysis of the Irish AKIS suggests that there are some strong and some weak connections between many of the key stakeholders (Boyle, 2012). Examples for strong connections are Teagasc advisors-stakeholders and Teagasc research-External research) while weak connections exist between external research-stakeholders and Teagasc advisors-External advisors (Figure 2 in Section 4.5). There is also scope for enhancing the linkages between the Teagasc extension service and the technical services provided by input suppliers. The knowledge network has improved through joint programmes, formal alliances and Memorandums of Understanding (MOU), but more work can be done to improve the network for agricultural knowledge exchange.

Table 2 provides an overview of the sources of financing of organisations creating the AKIS. The basic structure of the table was derived from Birner et al. (2009). Definite figures are difficult to obtain, mainly due to the dynamic nature of the whole system, inconsistent allocation or calculation of what an ‘advisor’ means. This figure can be interpreted to mean number of employees with an advisory role (including both full and part time staff), full time equivalents of staff providing advice, or only those employees that spend the majority (>50%) or all their time on advisory activities. Similarly, the sources of financing will not be stable across the years, and they will vary within a group of AKIS actors (e.g. independent consultants). In particular the cooperative sector is dynamic, with organisations merging, splitting up or restructuring being a regular occurrence.

**Table 2: Sources of financing of organisations creating the AKIS**

Provision of service				Source of financing in percent									
Status of the organisation	Type of organisation	Number of org.	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		
<b>Public sector</b>	Agency of the State: Teagasc	1	300		60%					30%+2% <sup>14</sup>		8% <sup>15</sup>	
	Local/regional agencies	36	8										
	Other (specify)												
<b>Research and Education</b>	University	7	0										
	Research Institute	7	0										
	Other education bodies (specify)	4	0										
<b>Private sector</b>	Upstream industries	30+	50								50		
	Downstream industries	20+	50								50		
	Independent consultants & Private agricultural advice companies	169 - 250 <sup>16</sup>	1-3 <sup>17</sup>		5-80 <sup>18</sup>					25-100 <sup>19</sup> 1-75 <sup>20</sup>			10-100 <sup>21</sup>
	Farmer-owned adv. comp.	0	0										
	Other (specify)												
<b>Farmer based org.</b>	Farmers' cooperative	14+	0-15										
	Chambers of agriculture	0	0										
	Farmers' circles/groups												

<sup>14</sup> Fee for extension paid by farmers + by entrepreneurs

<sup>15</sup> Contract/subsidy from NGO

<sup>16</sup> Lower number provided by Tom Kelly (pers. comm), higher number provided by Michael Brady. 169 is the number of advisors registered as FAS private operating bodies.

<sup>17</sup> Number of advisors per consultant/consultancy

<sup>18</sup> Only 6 respondents of 28 finance their services via contracts with the national state

<sup>19</sup> Fee for extension paid by farmers

<sup>20</sup> Fee for extension paid by non-farmers. Only 8 of 28 consultants have this source of financing.

<sup>21</sup> 6 respondents have this source of financing: Application for clients for Rural Development Grants (farm diversification, new start up companies etc); Legal advice; Third level education and research services; Litigation services from solicitors; Client Funded

### 3. History of the advisory system

Until about 1980, the Irish AKIS was mainly operated by agricultural colleges and by County Committees of Agriculture (Kelly, pers. comm.). The Department of Agriculture funded colleges, and also counties to provide local advisors, and encouraged basic agricultural training in the schools.<sup>22</sup> With this structure, it was difficult to ensure consistent and high-quality advice aligned to national policies throughout Ireland. The idea of a state-supported agency to ensure the adoption of new methods by farmers was widely accepted (Keenan, 1965). In 1980, a new semi-state organisation, the national advisory and training body (ACOT), was set up to provide training and advisory services for all farmers. It took over the functions and personnel of the six five state colleges, and also the state funding of the 10 private colleges (Kelly, pers. comm.). Following a 1981 review, ACOT initiated the Certificate in Farming, a comprehensive training programme for young entrants to farming. This has recently been replaced by the Vocational FETAC Certificate in Agriculture, Level 6, which places emphasis on the development of business and management skills and in developing proficiency in dairy, drystock or crop production.

In 1988, Teagasc was established as the national agency with overall responsibility for the provision of research, training and advisory services to the agriculture industry. It subsumed the training functions of ACOT, so that benefit could be derived from the co-ordination and integration of the training service with the research and advisory services (Kirley, 2008).

Since 1980 five private and one Teagasc college have closed due to reduced demand between 1990 and 2006. Despite the continuing decline in farm numbers and increased off-farm employment opportunities, the demand for places on formal agricultural education courses in Teagasc colleges has recovered and outstripped supply in recent years. Enrolments increased by 80% from 2006 to 2009/10 (Browne, 2011). This trend continued to date with an overall increase in enrolments more than doubled (+144% 2006 to 2013/14, Boyle pers. comm.) The national certification of all courses and the upgrading of some courses to third-level status were aimed at ensuring that an adequate number of well-trained young people will take up careers in farming over the coming decades. At present a number of progression pathways are available to students to progress from vocational programmes to degree level programmes through the Institutes of Technology and University College Dublin (Kelly, pers. comm.).

In 1987, it was decided to operate a basic charge for a standard annual advisory contract (all advice was previously free), and to offer a variety of advisory packages in addition to the basic service. A strategic decision was taken to set charges at a level which would ensure contact with the maximum number of farmers. Current income for fee-paying clients accounts for 30% of the overall cost of the advisory service. It is believed that charging has led to a more business-like relationship between farmer client and adviser, and to the development of services that are focused on the needs of the client. Successful advisers are more confident about the value of their service to farmers, and willingness to pay places value on the service received. However, Phelan (1995) noted that the introduction of charges resulted in a concentration on farmers who could pay, namely the more commercially oriented farmers.

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<sup>22</sup> [http://www.teagasc.ie/aboutus/past\\_training.asp](http://www.teagasc.ie/aboutus/past_training.asp)

Due to funding cuts in the late 1980s, the number of advisors fell from over 600 in 1980 to 350 in 1993, and resulted in the discontinuation of some services and the non-replacement of staff who retired. Additional funding throughout the 1990s led to a recovery in advisory staff numbers to around 450, plus 100 advisers contracted to support delivery of the Rural Environment Protection Scheme (REPS). To date, advisor numbers are now reduced from this to 250 in Teagasc.

Food research and development is now an equal partner in a consumer-driven agri-food programme, as opposed to its earlier days on the periphery of a production-driven agricultural programme. Staff engaged in food research increased from 6% of total research staff in 1961 to 43% in 1998. About half of this increase occurred since 1994, driven by large EU funding. The growing interest in food research reflects the buoyancy of the food industry, with Irish food companies emerging as global players. In 1987, the establishment of the Teagasc National Food Centre (NFC) at Dunsinea created a one-stop shop for food research, consultancy and training, making food safety and wholesomeness a core activity in research. The NFC has established food quality systems that have enabled hundreds of companies to meet market specifications. It has been responsible for developing technologies to control the pathogen *E. coli* 0157 and for establishing a national purity database for use by Irish companies. Smaller food sectors have also benefited, with technology to increase the shelf life of mushrooms and to improve the performance of flours in pizza bases. Teagasc also support upstream innovation in dairy products through its support for a subsidiary company (formed with industry shareholding) called Moorpark Technology Ltd.

With agriculture under environmental scrutiny, Teagasc has prepared codes of good practice for farming, in order to ensure that agriculture does not cause pollution of soil, water and air. Highlights here include the evaluation and development of improved slurry-spreading technologies, the development of a blueprint for environmentally compatible dairy farming and for hardwood farm forestry, and the establishment of technical/economic basis for organic sheep/cattle systems. There is an acceptance that Teagasc supports best practice in each of the major sectors and supports this with regular reference materials and science based manuals (Kelly, pers. comm.).

## 4. The agricultural advisory service(s)

### 4.1 Overview of all service suppliers

The Republic of Ireland has retained a strong, largely publicly funded advisory service integrated into its research and education functions based on a model of recovering 33 per cent of its cost from farmers (Kelly et al., 2013a). Teagasc – the Agriculture and Food Development Authority – is the national body providing advisory services to the agriculture and food industry and rural communities. Public funded and private funded services coexist. In addition, the role of wider rural professionals and organisations providing specific product, commercial advice and services to support and influence innovation and change is important.

### 4.2 State involvement in advisory services: public policy, funding schemes & financing mechanisms

#### Financing mechanism

In the Republic of Ireland, the state largely finances agricultural advisory services in the form of a subsidy to the cost of advice. This is done at the national level through Teagasc and then passed down to Teagasc county and local offices, and advisors. Around 75% of Teagasc's yearly budget comes from the Irish exchequer and EU funding, with the balance generated from earned income. Some 40% of the budget is devoted to research, with the remainder split half and half between advisory and education services.

Farmers can become Teagasc Advisory Service members in order to avail themselves of a variety of services (<http://www.teagasc.ie/areaunits/advisoryservices/>) including club packages, options planning for the future, farm partnerships services or a profit monitor. Advice is offered on a range of themes (see 4.4). Farmers are encouraged to join at the higher fee level and benefit from its three components, the research demonstration farms, the BETTER commercial farms and discussion groups.

There is a recognition that Government no longer needs to provide the sole source of finance for all of the services offered by a public advisory service, but it does need to support the provision of public goods which otherwise would not be provided due to market failures, e.g. advice in remote areas, or to small enterprises.

*“The range of services provided by Teagasc reflects a mixture of public-good and mixed public-private-good provision which led to a mixed-funding model. Overall, there is a direct cost recovery of about one-third from individual farmers. This rate of funding varies depending on the “public good” nature of the service. The contribution from farmers ensures a focus on the immediate service needs of farmers while also allowing a development agenda to be pursued. This, in turn, provides a semi-commercial focus for the public extension agency. It allows the users have choice, and when supported by focused targeted development schemes, ensures that contact with a dispersed sector such as farming can be maintained. This also provides opportunities for the coexistence of private and publicly-funded providers in the extension space” (Teagasc, 2011).*

The model for funding both public and private advisers is to pay the farmers for an action and to allow the farmer to choose the service provider. This worked in REPS, AEOS (Agri-

Environment Options Scheme) and more recently in DEP, BTAP and STAP schemes. The DAFM expect Teagasc to provide additional (non-commercial) support outside its own interest (Kelly, pers. comm).

### **Public policy**

The Governmental Policy Priority is to support a sustainable, competitive, multifunctional agriculture, food and forestry sector, while also maintaining the maximum number of family farms in rural areas. The Government's Food Harvest 2020: A Vision for Irish Agri-Food and Fisheries (2010) sets growth targets which are to be supported by increasing the competitiveness of Irish agriculture and food.

Other key documents that set out national policy objectives include: Action Plan for Jobs 2012; Government for National Recovery 2011-2016. Programme for Government (2011); Food Research Ireland (2011); Stimulating Sustainable Agricultural Production through Research & Innovation (2011); Department of Agriculture, Food and the Marine Statement of Strategy 2011-2014; Building Ireland's Smart Economy: A Framework for Sustainable Economic Renewal (2008); Innovation Ireland: Report of the Innovation Taskforce (2010); and Government Statement: Public Service Reform Plan (2011).

Public policy measures include the Dairy Efficiency Programme (DEP) and the Beef Technology Adaption Programme (BTAP) which were promoted by DAFM for incentivising group participation among farmers and served as a significant milestone in the development of discussion groups. Group participation is expected to facilitate peer-to-peer learning. DEP and BTAP measures are seen as a key activity of technology transfer. For example, Hennessy and Heanue (2012) find discussion group members in the DEP have higher gross margins than non-members, but non-members could increase their gross margins if they join discussion groups and overall, the findings confirm positive returns to discussion group membership.

### **4.3 Methods and Human resources**

In 2013, there were over 250 Teagasc field advisors<sup>23</sup> (down from 600 in 1980). During the same period, the number of agricultural consultants increased from 100 to 250. These consultancies have an average of 1.6 advisors (all respondents to the survey had between 1-3 advisors, see detail in Section 7). Although private consultants have grown in numbers, they remain dependent on public funding (via environmental or other schemes) (Kelly et al., 2013a). The ratio advisors/farmers has decreased (i.e. an advisor today covers fewer farms). At the same time, there are fewer farm visits; which decreased from 60,000 in 2000 to 20,000 in 2012 with more work being done through groups (Kelly et al., 2013b).

Teagasc client services are organised around club packages (office), advice on technology (visits), facilitation of business and technology discussion groups and Environment Protection Schemes (e.g. REPS, AEOS). While technology advice and discussion group services increased from 2011 to 2012, scheme based environmental advice declined. There is reduced potential for private consultants to develop businesses and clients due to the cessation of some of the

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<sup>23</sup> The number given in the survey was 300 advisors.

environmental schemes, and these consultants are looking to increase their role in providing advice on public goods (environment).

In terms of educating young farmers and supporting them in the period after takeover of the farm, Teagasc and Teagasc advisors are crucial. In theory, this teaching role could also be delivered privately, however, the private advisor in small units do not have the tradition of providing education. There is an overlap of advising/interpreting and teaching (e.g. interpretation of Irish Cattle Breeding Federation reports, soil sample results, e-Profit Monitor). These are compulsory parts of young farmer training and also essential advisory tools.

The extension approach “has evolved hugely over recent years from an exclusive emphasis on the imparting of knowledge to farmers to a focus on implementation support” (Boyle 2012, 3). The primary vehicle for this shift in emphasis has been the establishment of Discussion Groups (DGs). These groups have been supported by policy measures such as the Dairy Efficiency Programme (DEP) and the Beef Technology Adoption Programme (BTAP) (O’Loughlin, 2012). Over 12,000 farmers are now involved in Discussion Groups that are being facilitated by Teagasc, and an additional 2,500 are being facilitated by private consultants (Boyle, 2012).

According to Teagasc<sup>24</sup>, BETTER farms are:

*“Well managed commercial farms where research recommendations are applied to the main farming system and the results measured and demonstrated at local level. The outcome and benefits of the research is evaluated in terms of practicality, impact on efficiency and improvement in profitability. The results are benchmarked against the research demonstration farms, other BETTER Farms and farms in the National Farm Survey. The results from these farms are published and demonstrated at regular farm walks and demonstrations”, The BETTER Farm programme is seen as “a critical part of the knowledge transfer process in the drystock advisory programmes and is being expanded into all the major enterprises”.*

while discussion groups are:

*“where like minded farmers who wish to develop or expand their enterprises, come together on a regular basis on the farms of the members of the groups. The members share critical performance information on all of their farms and the performance of the farm being visited is discussed and evaluated by the members attending. This has been shown to be the best method of encouraging and facilitating the adoption of new technology and practices and is a vital component in the BETTER Farm programme”.*

According to Boyle (2012), farmers with advisory contact showed much higher levels of adoption of some practices than farmers without such contact. Examples are given in Table 3.

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<sup>24</sup> [http://www.teagasc.ie/advisory/better\\_farms](http://www.teagasc.ie/advisory/better_farms)

**Table 3: Technology adoption by Irish farms 2009 with and without advisory contact (Teagasc National Farm survey) (selected items)**

<b>Practice</b>	<b>% of farms adopting – advisory contact</b>	<b>% of farms adopting – no advisory contact</b>
Milk recording	51	19
Use of ‘Herd Plus’	37	10
Use of BVD vaccination	42	22
Regular re-seeding	38	16
Regular soil testing	72	49
Profit Monitor	12	0.3
Completion of cash-flow budgets	6	1
Visit to research farm in last 5 years	29	14

#### **4.4 Clients and topics / contents**

Agricultural advice can serve two functions; a development function and a service function. While the former supports public goods and covers advice on farm occupational health and safety, biodiversity, EU schemes, climate change mitigation and water quality, the latter focusses on private goods and includes accountancy services, veterinary and agro-chemical advice, legal advocacy and cross compliance advice (Kelly et al., 2013a).

Advice is provided on the following themes and topics<sup>25</sup>:

- Herd and flock management
- Business and financial planning
- Farm management
- Grassland management
- Breeding
- Nutrition and ration formulation service
- Advice on farm buildings and paddock layout
- Department of Agriculture schemes/ Rural Environment Protection Scheme
- Options planning for the future
- Alternative enterprise development
- Environment
- Soil and grass analysis.

The main farms covered are dairy and cattle farms. Young farmers and new entrants are specifically targeted in order to ensure that an adequate number of well-trained young people will take up careers in farming and possess the right skill set.

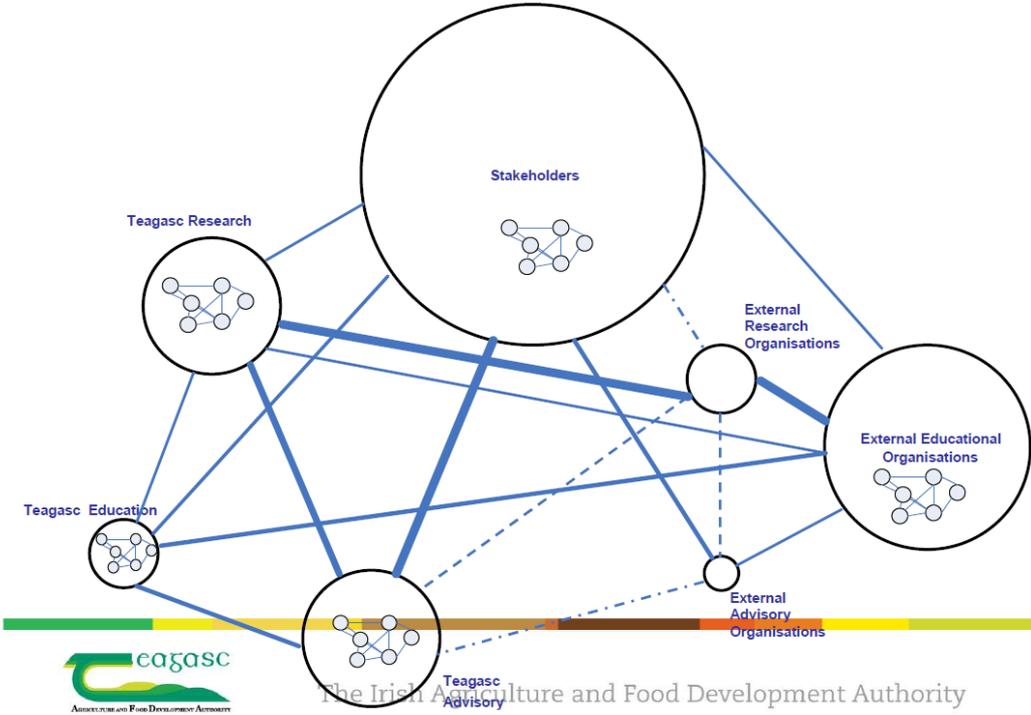
With an average farm size of 32 ha, farms in Ireland are small compared to other European countries. Advice is available to ‘small-scale’ farmers through the same channels as to larger commercial farms. The main differences are the nature of the contact with the advisor and the kind of advice delivered. For the larger, more intensive and commercially oriented dairy farms, advice focusses on production, processing or marketing. Beef farms tend to be smaller than the

<sup>25</sup> [www.teagasc.ie/areaunits/advisoryservices](http://www.teagasc.ie/areaunits/advisoryservices)

average farm, and are often not commercially viable. Those farms with lower stocking densities tend to focus more on agri-environmental schemes (REPS) and to receive advice on completing their application. In order to be eligible, they need to prepare a whole farm plan with an approved advisor. At the height of the REPS, there were up to 40,000 farmers enrolled in this scheme. It is not uncommon that a farmer will draw on advice from two advisors, one from Teagasc, the other a private consultant (Meredith, pers. comm. 2013).

**4.5 Linkages with other AKIS actors / knowledge flows**

According to Boyle (2012), there are strong linkages between the Teagasc Research arm and external research organisations (mainly universities), and between Teagasc Advisory and stakeholders (farmers etc.). There are also substantial linkages between these two Teagasc arms, and between external research and external education organisations (universities and colleges). There are weaker links between stakeholders and external advisory organisations (reflecting the dominance of Teagasc in this respect) and between stakeholders and Teagasc Education, while other linkages are weak or virtually non-existent (Figure 2).



**Figure 2: Impressionistic view of the linkages between the Irish AKIS (Boyle 2012)**

**4.6 Programming and Planning of advisory work**

Framed by the context of the national policy documents outlined in Section 4.2, Teagasc’s work is governed by its mission and goals according to the Statement of Strategy 2012–2015, as well as the Foresight 2030 (Teagasc 2030), an exercise designed to establish a broadly shared vision for the Irish agri-food and rural economy in 2030 and its knowledge requirements, with a view to strengthening the strategic capabilities of Teagasc and its relevance to its stakeholders.

Teagasc compiles an annual Level 1 Business Plan which communicates the focus and intentions for the year ahead. This plan outlines brief highlights of objectives, activities, targets and performance indicators which, when achieved, will contribute to the objectives outlined in the Teagasc Statement of Strategy 2012 – 2015, the Teagasc Change Programme 2009-2013, Teagasc 2030, and key national policy documents. The Level 1 business plan is derived from Level 2 plans prepared by Teagasc's Operations, Knowledge Transfer and Research directorates. Level 2 programme plans, in turn, are an amalgamation of 48 Level 3 department / regional business plans.

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

### **5.1 Organisations forming FAS**

In implementing the Farm Advisory System (FAS), Ireland has chosen to allow a strong involvement of the private advisory sector, resulting in a mixed set-up of public and private bodies. The network of private advisors started to be built when the Rural Environment Protection Scheme (REPS) was introduced from 1994 onwards. The REPS created the need for specialised external support and attracted private advisors. The focus of these advisors now extends beyond REPS, and they now compete with but also complement advice provided by Teagasc. The FAS was fully integrated into pre-existing advisory services, and covers other priorities such as REPS and suckler cow welfare.

The Department for Agriculture, Food and the Marine is the coordinating body. The Minister for Agriculture and Food has designated 'Planning Agencies' as approved Single Payment Scheme Farm Advisory Agencies with effect from 1st January 2007 following attendance by the advisor at a Single Payment Scheme Cross-compliance training course in 2007 (Department for Agriculture Food and the Marine, 2013). These 'planning agencies' include Teagasc advisors, private consultants and consultancies. The list comprised a total of 572 entries (April 2013). 224 of the approved advisors are working in Teagasc.

Private operating bodies: Ireland is one of the countries where small private consultancy companies have slowly emerged to provide direct whole-farm or technical advice. These small companies range from one-man units to associations of 3-5 advisors, and typically have a focus on rural environmental protection schemes. Ireland thus has 169 private operating bodies and 1 public operating body (Teagasc). The number of advisers that Operating Bodies could mobilise for farm advice is said to be 441 as of 2009 (ADE (Analysis for Economic Decisions) Consultancy, 2009). According to Tom Kelly (pers. comm.), the capacity of private consultancy has grown on the back of EU funded environmental schemes, while private technical consultancy is small and very dependent on Teagasc support either directly or indirectly; the current system is assumed to prevent widespread market failures in the provision of technical support and public goods.

The FAS accreditation of the private consultancy companies as operating bodies is undertaken through open, published tenders. Teagasc advisers, as public service providers were required to undertake the same compulsory FAS training (Kelly, pers. comm.).

Similar to the approaches to providing agricultural advice generally, FAS advisors employ a range of methods from one-to-one on/outside the farm, small group advice, a telephone helpdesk and internet. There is no advice offered via a dedicated website tool (ADE (Analysis for Economic Decisions) Consultancy, 2009).

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

Teagasc holds farm walks on demonstration farms to discuss and highlight cross compliance issues, in particular concerning SMRs and GAEC. This is part of a consultancy, as requested by farmers, and it is fully paid by farmers as part of a contract fee. Also, Teagasc and some private FAS bodies provide public meetings or seminars on all SMRs and GAEC (for example, training

courses on animal welfare schemes or environmental schemes). A key feature is the link between support payments and attendance at training events, leading to a very high coverage of FAS. Approximately 60,000 or 50% of all farmers in Ireland are in the Rural Environment Protection Scheme (REPS), while approx. 54,000 farmers are in the suckler cow welfare scheme. They are required to attend relevant FAS training, e.g. animal welfare, the bovine identification and registration of SMR for the suckler cow welfare scheme (ADE (Analysis for Economic Decisions) Consultancy, 2009).

In a draft paper on key roles of an advisory service, Kelly (2009) assesses that “over the last 30 years the emerging strategies of the advisory service in ACOT and in Teagasc have been quite successful in offering a valued service to the state, farmers, the industry and the public. Changes like enterprise specialisation, charging a fee for service and new extension techniques have been deployed and adapted by staff against a background of a bureaucratic and hierarchical public service model.” He suggests that there are many areas where private consultancy could be offered such as dairy herd expansion, milk quality, and new environmental schemes.

A survey questionnaire to all independent farm advisors in Ireland (see Section 7 for detail) was completed by 33 agricultural consultants. The results yielded insights into their view of both the advisory system in general and the way the FAS is organised in Ireland. Statements ranged from open criticism (“The Irish FAS advisory model is a joke”) to concerns about farmers not being able to access advice on certain topics (see selection of comments in Annex 2).

These comments draw attention to the very different perceptions of the quality of advisory services in general and the FAS in particular. While from Teagasc’s point of view, sufficient advice and training is provided to those needing it, private consultants complain about unfair conditions (state aid to Teagasc) and farmers not being able to access certain advice. The private advisors’ comments can be interpreted as reflecting a dependency that has been created by the prolonged role of private consultants in servicing a public environmental scheme after it has finished (Kelly, pers.comm.). Private advisers in small units do not have the tradition of providing training, and it could be argued that it is against the logic of service business models: Why train the farmer how to do something if you want to make money from providing the service? Some consultants cooperate with Teagasc and have very good business models.

Without an in-depth study of farmers’ perceptions on the type and quality of advice and training they receive, no balanced judgement can be made regarding these competing claims. Based on hearing both sides, it appears that misunderstanding, misinterpretation and generalisations (e.g. on level of charges) are also cause for some of the conflicting views. It seems appropriate to invest efforts to explore the challenge how Teagasc and the private consultants can co-operate and work together so that the AKIS works better, and what criteria and indicators would describe ‘better’.

## 6. Summary and Conclusions

Ireland is unique in having a substantial component of its AKIS within a single organisation, Teagasc. Teagasc undertakes research, offers extension services, agricultural education and support structures. This gives the Irish AKIS a coherent core that is lacking in other countries with AKIS where roles are dispersed over a wider range of actors. Teagasc activities are complemented by private agricultural consultants and veterinarians, private research entities, universities and Institutes of Technology, DAFM and other government departments, various public agencies and numerous other actors (Table 1, Figure 1). Teagasc has been successful in establishing farmer-run demonstration farms (BETTER farms and Monitor Farms) and organising a large number of farmers in discussion groups to enhance peer-to-peer learning. Its 51 local offices make the organisation accessible to farmers.

The role of Teagasc is unlikely to change in the near future. Private agricultural consultants may become more important but this trend seems to be strongly influenced by government policy and the existence of schemes that require regular farmer advisory services. National regulations regarding the implementation and (access to) financing for FAS also plays a role in the viability of the small consultancies.

Over the years, the Teagasc advisory service has contained a strong public good programme. Despite the introduction of fees in 1987 and the application of charges, the majority of farmers continue to use this service. Kelly (2009) noted several benefits of fee-based services for Ireland, including that such services focused on client needs, increased adviser confidence, involved more business-like relationship, and achieved cost recovery for specific services thus avoiding unfair competition claims from private sector, and an improved status of the service. This is in contrast to some negative impacts, which included the perception that the service was only for commercial farmers; a tendency of advisers to resort to schemes to achieve targets while ignoring development work; adviser ownership of clients; and struggles by some advisers to adjust to changes.

Previous research on the Food Innovation System (FIS) in Ireland – which would partly overlap with the AKIS – found that the range of actors works well to ensure that research is conducted along the spectrum from basic to applied research (Buckley et al., 2007). Buckley et al. also noted a considerable change in the FIS in recent years, for example, additional research centres have initiated food research programmes, while increased multi-disciplinary activity has seen diverse specialist areas enter the system. They conclude that the Irish FIS is not yet functioning as a system. “Whilst it has quite distinct boundaries and a function, the system does not function as a coherent whole, largely due to barriers in terms of feedback systems and interactions” (ibid, p418). This conclusion, taken together with the observation by Boyle (2012) on both weak and strong linkages within the AKIS, suggests that there is scope for improvement in terms of knowledge and information flows to further enhance innovation in Irish agriculture.

## 7. Acknowledgement of partners and reflection on methodology

An online survey was carried out as part of the PROAKIS WP3 research in July-August 2013. The invitation to participate in the survey was sent to advisors on the list of Cross Compliance FAS Accredited advisors held by the DAFM (Department for Agriculture Food and the Marine, 2013), with the exceptions of Teagasc advisors on this list. Teagasc advisors were covered by having a Teagasc representative completing the questionnaire. A total of 36 (34 complete and 2 incomplete) responses was received. Assuming there is a total of 250 private advisors, the return rate is 13%.

35 responses came from agricultural consultants and consultancies (private organisations) and one from Teagasc, a public organisation. Four responses had been submitted by farmer-based organisations but upon investigation they also appeared to be consultancies. All consultancies in the sample have between 1 and 3 advisors (average 1.6).

The majority of private consultants are registered with the Agricultural Consultants Association. The Managing Director of the Association explained that there is a large overlap between both groups but the questionnaire was circulated to their membership in order to capture the population of advisors as well as possible.

In addition to the literature review, information and comments were received from the following people:

- Kelly, Tom (Teagasc) – personal communication 13 June 2013 and 18 February 2014, email August 2013, March 2014
- Meredith, David (Teagasc) – personal communication, 9 August 2013
- Boyle, Gerry (Teagasc) – email March 2014
- Heanue, Kevin (Teagasc) – personal communication 13 June 2013 and email August 2013
- Brady, Michael (Agricultural Consultants Association) – personal communication 13 June 2013 and email July 2013

## 8. References

- ADE (Analysis for Economic Decisions) Consultancy, 2009. Evaluation of the implementation of the Farm Advisory System: Final report. Contracted by EC, p. 141.
- Birner, R., Davis, K., Pender, J., Nkonya, E., Anandajayasekeram, P., Ekboir, J., Mbabu, A., Spielman, D.J., Horna, D., Benin, S., Cohen, M., 2009. From Best Practice to Best Fit: A Framework for Designing and Analyzing Pluralistic Agricultural Advisory Services Worldwide. *The Journal of Agricultural Education and Extension* 15, 341-355.
- Boyle, G., 2012. Enhancing Irish Agricultural Productivity Through Technology Adoption: A Critique of the Irish Agricultural, Knowledge and Innovation System (AKIS), in: Heanue, K., Macken-Walsh, A., Maher, P. (Eds.), *Teagasc Best Practise in Extension Services - Supporting Farmer Innovation*. Teagasc, Aviva Stadium, Lansdowne Road, Dublin 4, pp. 1-6.
- Browne, P., 2011. The Challenges Facing the Teagasc Education and Training Programme, National Conference on Agricultural Education: Supporting Economic Recovery, Dublin Castle, 10 February 2011.
- Buckley, M., Henchion, M., O'Reilly, P., 2007. Interactions in Ireland's Food Innovation System, 1st International European Forum on Innovation and System Dynamics in Food Networks, officially endorsed by the European Association of Agricultural Economists (EAAE), Innsbruck, Austria, February 15-17, 2007.
- Department for Agriculture Food and the Marine, 2013. List of CCFAS Approved Advisors EU Agri-Mapping Project, 2007. Agri-Food Research in Europe: country reports. Prepared for the European Commission.
- FORFAS, 2007. Ireland's Co-operative Sector in: *The National Policy and Advisory Board for Enterprise, T., Science, Technology and Innovation* (Ed.), Dublin.
- Government of Ireland, 2012. Household Budget Survey 2009-2010. Stationery Office, Dublin, Ireland.
- Hennessy, T., Heanue, K., 2012. Quantifying the Effect of Discussion Group Membership on Technology Adoption and Farm Profit on Dairy Farms. *The Journal of Agricultural Education and Extension* 18, 41-54.
- Keenan, P.J., 1965. Evaluating agricultural advisory work in Ireland. *Sociologia Ruralis* 5, 238-266.
- Kelly, T., 2009. The evolving roles and value of the Advisory Service (Draft for discussion only), p. 12.
- Kelly, T., Brady, M., Bolger, P., 2013a. Evolution of Advisory Services in Ireland, Knowledge Transfer Conference 2013 'Future of Farm Advisory Services, Delivering Innovative Systems'. Teagasc, Dublin, pp. 16-18.
- Kelly, T., Brady, M., Bolger, P., 2013b. Evolution of Advisory Services in Ireland - Presentation, Knowledge Transfer Conference, Dublin.
- Kirley, T., 2008. A century of advisory services for farmers, in: Miley, M. (Ed.), *Growing Knowledge – Fifty Years of Research and Development in Irish Farming and Food*. Teagasc, Dublin, pp. 167-181.
- O'Loughlin, L., 2012. Development of Discussion Groups and Mobilising Farmer Participation, in: Heanue, K., Macken-Walsh, A., Maher, P. (Eds.), *Teagasc Best Practise in Extension Services - Supporting Farmer Innovation*. Teagasc, Aviva Stadium, Lansdowne Road, Dublin 4.
- Phelan, J.F., 1995. Are traditional extension services dead or have they a role in rural development? *European Journal of Agricultural Education and Extension* 2, 7-14.
- Teagasc, 2011. Strategic Review of the Teagasc Advisory Programme and Staffing Requirements 2011-2015 (draft). Authority meeting, 6 April 2011. Teagasc, p. 51.

## 9. Appendix

### Appendix 1: Websites of selected organisations in the Irish AKIS

Name of organisation	Website
Animal Health Ireland	<a href="http://www.animalhealthireland.ie">www.animalhealthireland.ie</a>
Bord Bia– Irish Food Board	<a href="http://www.bordbia.ie">www.bordbia.ie</a>
County and City Enterprise Boards	<a href="http://www.enterpriseboards.ie/index.aspx">http://www.enterpriseboards.ie/index.aspx</a>
Department of Agriculture, Food and the Marine	<a href="http://www.agriculture.gov.ie/">http://www.agriculture.gov.ie/</a>
Dublin City University - Sensory Technology	<a href="http://www.dcu.ie/biotechnology/index.shtml">http://www.dcu.ie/biotechnology/index.shtml</a>
Enterprise Ireland	<a href="http://www.enterprise-ireland.com/">http://www.enterprise-ireland.com/</a>
Environment Protection Agency	<a href="http://www.epa.ie/">http://www.epa.ie/</a>
Food Safety Authority	<a href="http://www.fsai.ie/">http://www.fsai.ie/</a>
Forfas - Policy advisory board for enterprise, trade, science, technology and innovation	<a href="http://www.forfas.ie">www.forfas.ie</a>
Health Research Board	<a href="http://www.hrb.ie/">http://www.hrb.ie/</a>
Higher Education Authority	<a href="http://www.hea.ie/">http://www.hea.ie/</a>
IDA Ireland	<a href="http://www.ida.ie/">http://www.ida.ie/</a>
Irish Cattle Breeding Federation	<a href="http://www.icbf.com">www.icbf.com</a>
National University of Ireland, Cork - Food Science Research	<a href="http://www.ucc.ie/en/CollegesandDepartments/ScienceEngineeringandFoodScience">http://www.ucc.ie/en/CollegesandDepartments/ScienceEngineeringandFoodScience</a>
National University of Ireland, Dublin - Agricultural, Veterinary, Food and Environmental Sciences	<a href="http://www.ucd.ie/agfoodvet/index.html">http://www.ucd.ie/agfoodvet/index.html</a>
National University of Ireland, Galway - Diagnostics & Cereal Research	<a href="http://www.nuigalway.ie/science/">http://www.nuigalway.ie/science/</a>
National University of Ireland, Maynooth	<a href="http://sciencefaculty.nuim.ie/">http://sciencefaculty.nuim.ie/</a>
Shannon Development -	<a href="http://www.shannon-dev.ie/">http://www.shannon-dev.ie/</a>
Sustainable Energy Ireland	<a href="http://www.sei.ie/">http://www.sei.ie/</a>
Teagasc (Agriculture and Food Development Authority)	<a href="http://www.teagasc.ie">www.teagasc.ie</a>
Trinity College Dublin - Nutrition research	<a href="http://www.science.tcd.ie/">http://www.science.tcd.ie/</a>
University of Limerick - Food Technology	<a href="http://www.ul.ie/~ls/">http://www.ul.ie/~ls/</a>
Science Foundation Ireland	<a href="http://www.sfi.ie/">http://www.sfi.ie/</a>
Irish Milk Quality Co-operative Society	<a href="http://www.milkquality.ie/">http://www.milkquality.ie/</a>
Irish Milk Quality Co-operative Society	<a href="http://www.milkquality.ie/">http://www.milkquality.ie/</a>
Irish Co-operative Organisation Society	<a href="http://www.icos.ie/">http://www.icos.ie/</a>
Irish Farmers' Association	<a href="http://www.ifa.ie/">http://www.ifa.ie/</a>
Irish Young Farmers	<a href="http://www.macra.ie/">http://www.macra.ie/</a>

## **Appendix 2: Responses of independent farm advisors in Ireland**

Selection of free text responses of independent private farm advisors in the survey yielding insights into their view of both the advisory system in general and the way the FAS is organised in Ireland. Although there was no question on respondents' evaluation of the current system, several used the comment box at the end of the questionnaire to express their concerns:

*Direct funding to be provided from CAP to private agricultural advisors for each individual farmer (subject to a requirement of provision of this agricultural support). There are a large number of farmers who require this advice and support but who are unable to receive it (monetary issues, lack of availability of resources and also lack of companies approaching them offering a service). Current state organisations (who are receiving funding) are not delivering this service.*

*I feel that Farm Advisory Services have been seriously neglected in Ireland for several years with the result that many advisors are struggling to survive financially. A proper structure needs be put in place with farmers targeted in order to improve Husbandry, Production and Financial Viability of farm units. This deficit has been highlighted in 2013 as poor planning has led to a severe fodder and financial crisis on many farms throughout Ireland.*

*Provision of one to one agronomy services [is] expensive for a public authority to provide, but once advice is relevant, commercial farmers are willing to fund these services themselves.*

*Self-employed agricultural consultants are at a major disadvantage compared with state/semi-state advisory services who are subsidised at all levels of their work - equipment, stationery, transport, communications, service training, PR, health and pension benefits etc. For FAS training and briefings, private consultants are the only people in the room not being remunerated for our time - all state and semi-state counterparts are. Sometimes these extra expenses incurred are immediate impediments to recruiting more staff to expand advisory services. Would a level playing field, in this regard, be too much to ask for? i.e. reduced EU taxpayer subsidisation of national/state advisory services.*

*The farmer Advisory Service in Ireland is unfair to many farmers in my opinion, as huge State Aid is paid to one Advisor (Teagasc), which means that they have a competitive advantage over the private advisors (...)*

*The FAS in Ireland is not being utilised properly and any EU funding has been directed towards government advisory agencies exclusively. There is a major concern for the future of the advisory service in the medium to small farm holdings without receiving some support to access advice. Indeed many of my colleagues in the more full time farmer regions feel this concern is even greater due to the very tight margins and very high input costs on these farms.*

*The Irish FAS advisory model is a joke.*